



universität
wien

MASTERARBEIT

Titel der Masterarbeit

„Challenges and Opportunities of Sino-Japan FTA“

Verfasserin

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angestrebter akademischer Grad

Master of Arts (MA)

Wien, 2011

Studienkennzahl lt. Studienblatt:

A 066 864

Studienrichtung lt. Studienblatt:

Wirtschaft und Gesellschaft Ostasiens UG 2002

Betreuerin ODER Betreuer:

Univ.-Prof. Mag. Dr. Rüdiger Frank

Acknowledgements

It is a pleasure to thank all of those people who have given me their long-lasting support and encouragement which were invaluable for the successful completion of this thesis.

Firstly, I owe my deepest gratitude both to Professor Dr. Sung Hoon Park for all his suggestions and the time he spent helping me formulate the general direction and content of the initial design of my thesis, and to Professor Dr. Rüdiger Frank for helping me develop my thesis and giving me kind suggestions on the final structure.

I must thank Gillian Cheng for spending so much time on listening and advising me when I encountered difficulties. I am also very grateful to Danuta Fehrmann and John Newman for helping me to improve the quality of my dissertation.

My sincere thanks go to many friends for advice, encouragement and continuous support always so appreciated. I will never forget the beautiful times we have experienced together and very appreciate all your generous support and help during my studies in Austria.

Last but by no means least, I would like to thank my family and close relatives for their incredible patience and deep understanding. I am particularly indebted to my parents for their never-ending encouragement and ongoing support and trust. Without their support and love, I would have found it more difficult to complete my thesis.

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List of Acronyms

AFTA: ASEAN Free Trade Agreement

APEC: Asia-Pacific Economic Cooperation

ASEAN: Association of South East Asian Nations

CCP: Chinese Community Party

C-J-K FTA: China-Japan-Korea Free Trade Agreement

EAFTA: East Asian Free Trade Area

EPA: Economic Partnership Agreement

EU: European Union

FDI: Foreign Direct Investment

FTA: Free Trade Agreement

FTAA: Free Trade Area of Americas

GATT: General Agreement on Tariffs and Trade

GDP: Gross Domestic Product

JSEPA: Japan Singapor Economic Partnership Agreement

LDP: Liberal Democratic Party (Japan)

MS: Market Share

NAFTA: North American Free Trade Agreement

ODA: Official Development Aid

OECD: Orgaisation for Economic Co-operation and Development

RCA: Revealed Comparative Advantage

SEZs: Special Economic Zones

TCD: Trade Combining Density Index

TSC: Trade Specialization Coefficient

UN comtrade: United Nations Commodity Trade Statistics Database

UNCTAD: United Nations Conference on Trade and Development

WTO: World Trade Organization

WWII: World War II

1. Introduction

Since the late 1990s, trade liberalization has been pursued and achieved by multilateralism under the General Agreement on Tariffs and Trade (GATT)/World Trade Organization (WTO) (Yoshimatsu and Ziltener, 2010: 1058-1081). However, with the slow progress of WTO multilateral negotiations and rapid development of regional economic integration, a growing number of countries and regions actively take part in concluding regional trade arrangements such as Free Trade Agreements (FTAs) and customs unions.

As a result of increasing FTAs in other parts of the world, East Asian countries started to feel that they are discriminated against in many markets. To overcome such disadvantage and to secure markets for their exports, East Asian countries have become active in forming FTAs to promote economic and other types of cooperation in East Asia (Urata, 2005: 5). The remarkable expansion of FTA activity in the Asia-Pacific has made considerable impacts upon the region's international political economy, has brought important changes to the macro-structure of international economic relations in the region and has become a core strategic aspect of many Asia-Pacific countries' trade policies (Dent, 2010:202).

After the 1997 Asian Financial Crisis, the East Asian countries realized the necessity of strengthening regional economic cooperation. As a result, Southeast Asian countries actively established FTAs and the 10+3 East Asian economic cooperation mechanism was also established on the first Summit Meeting among ASEAN countries, China, Japan and South Korea in December 1997.

1.1 East Asian FTA trend

Alongside multilateralism, Feridhanusetyawan (2005: 55 and 82) argues, Asia began emphasizing FTAs as a trade policy instrument in the late 1990s and the region is today at the forefront of world FTA activity. According to Urata's (2005) empirical research of *Trends in the RTA/FTA Architecture of the Asian-Pacific Region*, the ASEAN Free Trade Area (AFTA) was the only major FTA before Japan and Singapore signed JSEPA in 2002. The FTAs

involving ASEAN that have received most attention are those with China, Korea and Japan respectively. Besides AFTA, some ASEAN member countries actively began FTA negotiations and signed bilateral FTAs with other countries in recent years (Urata, 2005: 2). For instance, Singapore signed FTAs with countries such as New Zealand, Japan, Australia, the USA, the EFTA, and began negotiations with countries including Korea and India. Thailand is currently under negotiations with the U.S. and Japan. The Philippines and Malaysia began negotiations with Japan in 2004 (Urata, 2005: 2).

Compared with ASEAN countries in Southeast Asia, the economies in Northeast Asia including China, Japan, Korea and Taiwan had not began to focus on FTAs until recently, and few FTAs have been enacted so far, which include Japan-Singapore, Korea-Chile, China-Hong Kong and China-ASEAN (Urata, 2005: 3).

The region's three largest economies and ASEAN's more developed countries have become key players of FTA activity, while smaller neighbors have also jumped on the bandwagon, with less intensity (Kawai and Wignaraja, 2010: 6). The numbers of concluded FTAs include Singapore (21), the PRC (12), Japan (12), India (12), Thailand (11), and Malaysia (11), with many more FTAs under negotiation.¹ It is noteworthy that ASEAN—with one of the oldest trade agreements in Asia—is emerging as the major regional hub linking ASEAN members with the region's larger economies (Kawai and Wignaraja, 2010: 6). In addition, there is a high degree of cross-regional orientation among some of the region's stronger economies, which indicates that Asia has a strong preference to maintain open trading relations with the rest of the world rather than become inward-looking (Kawai, 2005:29-55).

There are four main reasons for the proliferation of FTAs in East Asia. First, according to Kawai and Wignaraja (2010:5) European and North American economic regionalism's expansion into central and Eastern Europe, a monetary union in the euro zone, the success of the North American Free Trade Agreement (NAFTA), and incipient moves toward a Free Trade Area of the Americas (FTAA)—motivated Asian countries to adopt FTAs. Leaders of East Asian countries were concerned for their export markets and feared that North America and Western Europe might “dominate rule-setting in the global trading system and their FTAs

¹ Free Trade Agreement Database for Asia, <http://www.aric.adb.org/>

bring negative effects on East Asia.” (Kawai and Wignaraja, 2010: 5) Policy makers have realized “the need for stepping up the pace of integration to improve international competitiveness by exploiting economies of scale and strengthening their bargaining power through a collective voice on global trade issues.” (Kawai and Wignaraja, 2010: 5)

Second, the financial crisis in the late 1990s in East Asia increased the awareness on the part of East Asian countries of the need for regional cooperation such as FTAs to avoid another crisis and promote regional economic growth, because East Asian economies could not get as much assistance as they hoped from the countries outside the region to overcome the problems caused by the financial crisis (Urata, 2005: 5). Kawai and Wignaraja (2010:5) explain that “because the measures taken by regional initiatives to strengthen the international economic system or by national efforts to strengthen individual economies’ fundamentals could not meet the need, a number of countries have begun to jump on the bandwagon of FTA initiatives in the region out of fear of exclusion.”

Third, slow progress on multilateral trade liberalization under the WTO was also one important factor that led to the proliferation of FTAs in East Asia (Urata, 2005: 4). According to Urata’s (2005) research on the proliferation of FTAs in East Asia, many countries, including those in East Asia came to realize the benefits of trade liberalization for promoting economic growth, as it led to rapid economic growth in the past. Faced with the increasing difficulty in pursuing trade liberalization on a global scale as well as divergence on pace and extent of trade liberalization under the WTO principles, many countries have opted to form FTAs with like-minded countries to pursue trade liberalization (Urata, 2005: 4).

Moreover, Urata (2005: 5) points out that many countries including those in East Asia opt for FTAs, because they realize that the GATT/WTO rules cannot adequately deal with newly emerging international economic activities such as foreign direct investment (FDI), service trade, mobility of labor, and others. Liberalization of border measures such as tariffs, which are main focus of the GATT/WTO, cannot provide foreign as well as domestic companies with a level playing field. It is necessary to go deeper beyond the border measures and to set up rules covering domestic systems such as competition policy.

1.2 Sino-Japan trade relations

Since China restored diplomatic relations with Japan in the 1970s, bilateral relations between the two countries have become more and more close and intensive. Japan and China's competitive advantage in each other's import markets is a convincing explanation for the fast increase in bilateral trade (Hilpert and Haak, 2002: 32). The nodes of economic contacts between the two countries range from bilateral trade in goods and services to Japan's FDI in China, its transfer of technical and management know-how, its official development aid (ODA), and the migration of labor from China to Japan (Hilpert and Haak, 2002: 32).

Cost-driven and probably more export-oriented trade contributed considerably to the dynamic growth of Chinese exports to Japan in the 1990s (Chan, Noel and Zhu, 1999:136-139). In recent years, the economic relationship between Japan and China has deepened. According to UNCTAD Stat, Japan's imports from China reached US\$ 153 billion in 2010, while exports to China amounted to US\$ 149 billion or about 19 per cent of its total exports. China has emerged as Japan's second largest trading partner after the U.S. and Japan has become China's largest trading partner. Moreover, a larger proportion of Japan's imports from China are now composed of manufactured goods, reflecting progress in industrialization in China, and Japanese exports to China have been dominated by machinery and equipment (Hilpert and Haak, 2002:32).

Table 1 shows the development of Sino-Japanese trade since the year after China opened its doors (1980) until 2010 in absolute volume values. It can be seen that over the last 30 years Sino-Japanese trade has surged in both directions. From 2000 to 2005, Japanese exports to China increased from 30 billion to 80 billion US dollars in five years. In contrast, at the beginning of China and Japan's bilateral trade, China's trade with Japan fell into deficit. In fact, during the last 30 years China and Japan's trade balance most of the time fell into deficit. The 2007-2008 Global Financial Crisis resulted in the stagnation of Japanese and Chinese (08-09) exports. But in 2010 a strong rebound occurred in both countries.

Table 1: Japan's and China's bilateral trade 1980-2010 (US\$ millions)

Year	Japan's Trade with China	China's Trade with Japan
------	--------------------------	--------------------------

	Export	Import	Balance	Export	Import	Balance
1980	5109	4346	763	4032	5169	-1137
1990	6145	12057	-5912	9210	7656	1554
1995	21,991	36,017	-14,026	28,467	29,004	-537
2000	30,382	55,107	-24,725	41,654	41,510	144
2005	80,074	108,478	-28,404	83,986	100,408	-16,422
2006	92,770	118,526	-25,756	91,623	115,673	-24,050
2007	109,271	127,922	-18,651	102,062	133,951	-31,889
2008	124,901	143,230	-18,329	116,132	150,600	-34,468
2009	109,727	122,574	-12,847	97,911	130,937	-33,026
2010	149,464	153,155	-3691	121,096	176,736	-55,640

Source: UNCTAD Stat <http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx>

In contrast with the growth in trade, the performance of Japanese investment in China has been disappointing (Hilpert and Haak, 2002:32). According to Hilpert and Haak (2002:45), the high tariffs and trade barriers to China's market and Japan's weak competitiveness in labor-intensive industry have compelled Japan to shift capitals to China.

As Table 2 shows, Chinese exports to Japan concentrate on miscellaneous goods, electrical and electronic goods, textiles and apparel, agricultural and fishery products and machinery precision equipment. Compared with Japanese exports, Chinese exports to Japan is comparatively high in agricultural and fishery products, textiles and apparel, footwear, toys, and miscellaneous goods.

Japanese exports to China focus mainly on electrical and electronic goods, and machinery and precision equipment. In contrast with Chinese exports, Japan's bilateral exports to China are much higher in automobiles and accessories, steel products and chemicals. In addition, Japan's bilateral exports to China are also comparatively high in machinery and precision equipment, electrical and electronic goods, petroleum and fuel Oil and rubber.

Table 2: Export trade volume between China and Japan in 2010 (US\$ millions)

Commodity/Sector (HS Code)	China Export to Japan	Japan Export to China
Agricultural & Fishery Products (01-24)	8,422	526
Petroleum, Fuel Oil (27)	2,032	2,058
Chemicals (28-39)	7,609	19,152
Rubber, Tires (40)	459	1,485

Textiles, Apparel (50-63)	22,476	3,426
Footwear (64)	2,274	21
Steel, Steel Products (72-83)	1,959	7,879
Electric & Electronic Goods (85&)	27,019	32,155
Machinery, Precision Equipment & Arms (84,90,91,93)	24,559	43,190
Automobiles, Parts & Accessories (87)	2,855	15,032
Transportation Equipment (86,88,89)	638	316
Toys etc. (95,96)	2,463	477
Miscellaneous Goods	34,844	12,553

Source: UNCTAD Stat <http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx>
and UN comtrade <http://comtrade.un.org/db/default.aspx> (calculated by author)

According to the statistics above, the competitive advantages of both countries' bilateral trade exports do not overlap. In other words, the trade relationship between China and Japan is strongly dominated by complementarity rather than competition.

As Hilpert and Haak (2002:44) allege two particular structural characteristics contribute to the trend of Japanese prominent increase of its bilateral trade with China: First, low wages and the promise of a large and growing market in China is a great attraction for Japan. Second, the high tariffs and other trade barriers of China's import market can only be overcome through manufacturing and service investment. In fact, with the growth of Japanese manufacturing investment in China, Chinese exports to Japan have also increased.

However, as manufacturing imports from China are increasingly driving out industrial and agricultural products 'made in Japan', a series of protectionist measures were implemented by the Japanese government to curb surging Chinese manufactured imports, most notably in the field of textiles and apparel (Zhang, 1998:121-138). Later, the protection measures spread to agricultural products. Import safeguards against three agricultural products from China, namely scallions, shiitake mushrooms and rushes were introduced and the monitoring of other sensitive products was taken up (Hilpert and Haak, 2002:47). As a result, China retaliated with penal import duties on Japanese-made automobiles, cellular phones and air conditioners, which mark the turn from a co-operative to an adverse bilateral trade policy (Hilpert and Haak, 2002:47).

In general, Japan's specialization in capital- and technology-intensive products and China's specialization in labor-intensive products contribute to the complementary nature of their bilateral economic relationship. According to Hilpert and Haak (2002:47-48), Japan and China's competitive advantages in each other's import markets are not merely derived from the differing factor endowments, but also from economies of scale and product differentiation as well as from the increasing human capital-intensity in China's export products. It can be concluded that the trade interdependence between Japan and China will intensify in future.

1.3 Research Questions

The aim of this paper is not to evaluate the economic significance of this trade pact. Rather, the primary objective here is to analyze what kinds of challenges and opportunities does the Sino-Japan FTA bring to the two countries' major industries? Moreover, how to deal with these challenges and reduce the impacts caused by Sino-Japan FTA? The paper will put forward some possible solutions for the two countries and hopes to enable them to minimize the losses caused by the conclusion of bilateral FTA, and identify certain criteria and provide a reference for other countries seeking to establish FTAs.

1.4 Chapter Outline

Section 2 will investigate the international context and a variety of research results of East Asia experts concerning the Sino-Japan FTA.

Section 3 intends to draw out the general outlines of impacts caused by the conclusion of the Sino-Japan FTA on both countries and emphasize the obstacles to the conclusion of the FTA. After introducing the structure of Sino-Japan bilateral trade and industries, the comparative advantages of their major industries, the level of their markets openness, etc., the author tries to identify the challenges and impacts caused by this bilateral FTA on major industries of both countries by utilizing market share (MS), revealed comparative advantage (RCA), trade combining density index (TCD) and trade specialization coefficient (TSC). In addition, through citing empirical results of some scholars and analyzing the non-economic obstacles for the conclusion of Sino-Japan FTA, this part will illustrate the benefits and positive impacts

of Sino-Japan FTA on both countries and even the entire region, and summarize the noticeable factors hindering the Sino-Japan trade and economic cooperation.

Finally, based on the analysis results above, some general and possible methods and practical solutions for agricultural and service industries to mitigate the impacts caused by the Sino-Japan FTA and promote the process of the regional economic integration will be examined in section 4.

2 Literature Review

A Free Trade Agreement (FTA) is an agreement signed by two or more countries or separate custom territories for free trade to cut and cancel tariffs and non-tariff barriers. With the development of FTA, its scope expanded from the original trade in goods to aspects of services trade, investment, intellectual property, and environmental protection, etc.

According to Professor Dent (2008:184), the first period of rapid FTA growth occurred over 1860-1914, which saw a deepening of internationalized business and economic activity generally and is often referred to as the ‘proto-globalization’ era. The most recent period of intensified FTA activity occurred from the early 1990s onwards, the end of the Cold War with ‘contemporary’ globalization being the main instrumental factor behind this trend. In addition, while the WTO negotiations are at a stalemate, many countries, particularly developed countries, were in favor of establishing FTAs to expand international trade. Asian countries also promoted negotiations on FTA and increased the number of established ones in recent year (Honma, 2006:7-8).

2.1 FTA become a main solution for regionalization

Since the mid-1980s, “with the enlargement of multilateral trade negotiations’ contents and the growth of WTO members, until the Doha Round in 2001, the number of WTO members has increased from 123 in the Uruguay Round to 149, which added complexity and difficulty to further talks.”²(Xu et al. 2009: 5) Due to a series of disagreements on agricultural trade, the

² WTO 多边贸易谈判的内容不断扩大成员数目增多, 到 2001 年多哈回合谈判时, 成员数已从乌拉圭回合时

Doha Round had to break down. Under these circumstances some WTO members, including the United States, began to promote regional economic integration and conclude bilateral FTAs.

The drift in the direction of bilateralism has important consequences for countries involved in such an arrangement (Avila, 2004:1). FTAs can help the member states benefit from mutual preferential access and accelerate the economic growth. More significantly, as Avila (2004:1) states, lowering trade barriers on merchandise trade can lead to cooperation in other important commercial areas. Market access in services and investment can likewise improve. Exchanges in technology and human resource development are further enhanced. Trade liberalization and facilitation encourages closer economic linkages and leads to deeper integration.

Moreover, according to Bagwell and Staiger (1993)³ the effect of an FTA will be to reduce the volume of trade between the home country and nonparticipants once it is fully implemented. Once an FTA is completed, tariff levels between the home country and nonparticipants will be no higher.

FTAs affected almost foreign economic policies of all countries, including China and Japan. Since the end of the 1990s, both China and Japan began to adjust their foreign economic policies, actively participated in the East Asian economic integration, and implemented FTA strategies to reduce negative influence caused by trade and investment transference.

Since the 1990s the regional economic integration accelerated its development. With the establishment of EU and NAFTA, the East Asian countries realized it is necessary to strengthen the regional economic cooperation, so that their status in the international economic system can be improved and the international division of labor will be enlarged. The outbreak of the 1997 Asian Financial Crisis led to the proposal of the ASEAN+3 cooperation mechanism. Since then East Asian economic cooperation made substantial steps. In 2001, the East Asian Vision Group proposed the establishment of East Asian Community, one of whose tasks was to build the East Asian Free Trade Area (EAFTA). In November 2004, the 8th ASEAN+3

的 123 增至 149 个, 致使谈判变得复杂而艰难。

³ Cited by Philip I. Levy, A political-Economic Analysis of Free-Trade Agreements, The American Economic Review, 1999, Vol. 87, No.4, p. 506

Summit declared the construction of East Asian Community will be a long term goal for East Asian regional cooperation, and an experts group will be set to study the EAFTA problems.

With the development of East Asian regional cooperation and integration, more and more East Asian countries shifted their attention to bilateral FTAs. By 2008, China, Japan and South Korea each signed FTAs with ASEAN. China, Japan and South Korea have started preparations for the negotiations, planned to conclude the Japan-Korea FTA in 2005, started in December 2003, but had to be suspended in 2004 due to the considerable divergences on the rules of origin and agricultural products as well as political conflicts. In that case, as the biggest two powers in East Asia, the FTA between China and Japan has become a global focus and the key factor for the accomplishment of regional economic integration in East Asia.

2.2 Research status and selected research results

From political and political economy perspectives, a variety of scholars have conducted researches on bilateral FTAs between developed and developing countries, especially between China and Japan, and most of them focus on the effects and determinant factors of the conclusion of bilateral FTAs.

Ishikawa (2006:2) explains the significant interdependent trade relationship between China and Japan. “Japan is very competitive in higher value added items. For instance, Japan imports finished products and China imports key components from Japan. Trade between Japan and China is complementary and Japan and China need each other.” Some East Asian experts strongly believe the cooperation between China and Japan is inevitable in the process of East Asian regional economic integration. Z.b. Zhang (2006:39) focuses on the trade problems of China-Japan-Korea FTA in agricultural products and emphasizes that “the cooperation between China and Japan is not only compatible with the desire of the ASEAN countries, but also with the fundamental interests of the two countries. ASEAN countries need Japan’s capital and technology as well as China’s huge consumer market. Meanwhile Sino-Japan cooperation

can also bring a stable environment for the economic development people are longing for, eliminate all uncertainties, and enhance foreign investors' confidence to invest in the region.”⁴

Park's (2003) study has confirmed Zongbin Zhang's (2006) view. “The establishment of bilateral FTAs between mutually complementing countries would bring more economic gains than those between competitive countries.” (Park, 2003:171) China is Japan's second-largest trade partner, and Japan is China's third-largest trading partner. Japan has the competitive advantage of capital and technology; in contrast, China has the competitive advantage of huge market and cheap labor costs. Due to the strong complementary factor, the cooperation between China and Japan complies with the fundamental interests of the two countries. “China would benefit more from forming an FTA with Japan. Japan would also contribute more to an increase in real GDP by forming an FTA with China rather with its competitive partner, Korea.” (Park, 2003:170-171)

In addition, “the unique status of the two countries in East Asia determines their significant role in the East Asian financial cooperation. Whether the regional economic integration in East Asia can be fulfilled successfully, the key factor is the cooperation between China and Japan.”⁵ (Z.b. Zhang, 2006:40) Therefore, the cooperation between China and Japan is not only beneficial to their own economic development and prosperity, but also for the whole of East Asia's.

In contrast with the previous absolute support and keen anticipation for Sino-Japan FTA, some scholars take a cautious attitude toward the conclusion of Sino-Japan FTA and are also worried about the negative impacts caused by this bilateral FTA on some Chinese and Japanese industries. Gao (2004: 106) expounds “if China and Japan sign an FTA, it may bring side effects on some industries in a short period, such as Japan's agricultural and textiles industries, China's automobile industry.”⁶ Xu et al. (2009: 138-164) also point out in their book *The Study of Sino-Japan FTA Problems* “if China and Japan conclude an FTA, it will

⁴ 中日合作不仅符合东盟国家的愿望,更符合中日两国的根本利益。东盟国家需要日本的资本和技术,同时又需要中国的庞大市场。同时中日合作能给本地区带来人们渴望已久的稳定的发展环境,消除各种不确定因素,增强外地投资者对该地区的信心。

⁵ 中日两国在东亚地区的独特地位决定了两国在以后东亚金融合作中必将发挥重要作用。东亚区域经济一体化能否顺利推进,关键在于中日两国的合作。

⁶ 中日两国缔结 FTA,也许会在一段时间对一部分产业带来负面效应,例如日本的农业和纺织业,中国的汽车业。

bring challenges and impacts on China's agricultural, textile and garment, mechanical and electronic, automobile, steel and iron, chemical, and services industries....it will bring challenges to China's attraction for foreign capitals and its investment overseas.”⁷

In fact, sensitive industries, such as agricultural, textile and garment, and services are always the toughest issues in the FTA negotiations. “It is impossible for developed countries to reduce or withdraw agricultural export and domestic subsidies on the products that the developing country partner is exporting, as the subsidies would have to be removed for all the products, which would then also benefit non-FTA partners.” (Khor, 2010: 8) In fact, China and Japan's agricultural problem is even more complex. As L.q. Chen (2008: 10) argues, “agriculture is one of the major factors affect the establishment of Sino-Japan FTA. Japan's agricultural is a fairly sensitive area..... China is a large agricultural country and its agriculture industry is also a problem restricting China's economic development. In the process of the establishment of Sino-Japan FTA, if Japan is always reluctant to open the agricultural products market, the comparative advantage of China's agricultural products cannot be given full play.”⁸ However, “if China and Japan fully implement the trade liberalization of agricultural products, almost all the sub-sectors of Japan's agricultural industry will have been dramatically impacted.”⁹ (Li, Han and Jin, 2010: 110)

Moreover, according to Khor (2010: 11), before the Uruguay Round was launched, many developing countries had tried to resist the inclusion of new areas like trade in services, because they believed “agreements in these areas would be against their interests as they would not have the capacity to gain from them, whilst their countries and their local companies would stand to lose.” However, Yoon and Kim (2006: 29) suggest it should be necessary to include services trade into the framework of FTA between China and Japan, even with South Korea, because it could develop trade in services and satisfy the demands caused by the trade in goods. In addition, “the stronger competition associated with regional services trade, with similar

⁷ 如果中日缔结 FTA, 将给我国农业, 纺织服装业, 机电产业, 汽车产业, 钢铁产业, 化学产业, 服务业, 带来影响和挑战.....它将给我国吸引外资和境外投资带来挑战。

⁸ 农业是影响建立中日自由贸易区的主要因素之一。日本农业是一个相当敏感的领域.....中国是一个农业大国, 农业问题也是制约经济发展的一大问题。在自由贸易区构建的过程中, 若日本一直不愿开放农产品市场, 中国农产品的比较优势将无法发挥。

⁹ 如果中日 FTA 全面推行农产品贸易自由化, 日本农业的几乎所有部门都将受到重大冲击。

cultural background, can reduce costs and prices, increase efficiency and innovation, and broaden the range of service being offered. It can also reduce the fragmentation of services markets. More productive services sectors can also be the foundation for the better performance of other sectors, notably the manufacturing sectors, as this increasingly relies on support and inputs from efficient and cost-effective producer services. FTA on services between China, Japan and Korea might help them in strengthening their respective comparative advantage in services.” (Yoon and Kim, 2006: 29-30)

Referring to industries such as automobiles, chemical and textile, Ishikawa (2006: 16-17) claims, an FTA between China and Japan will have no impact on automobile exporters from Japan to China, but the importers from China to Japan will depend on the strategies of automakers and parts manufacturers. A comprehensive FTA could improve China’s business environment. Conversely, the conclusion of Sino-Japan FTA would be beneficial to Japanese chemical and textile industries. According to Ishikawa (2006: 26-28), an FTA could increase imports of raw materials from Japan due to the reduction of cost of procurement of materials from Japan and make Japan’s textile exports to China easier.

In general, as Ishikawa (2006: 30) argues, Japan’s import tariff is already very low except for agricultural products and China’s import tariff is still relatively high in spite of tariff reductions it committed to after entering the WTO. Because many products are already traded without imposition of tariff, the effects of FTA would be more limited than generally predicted and the Japanese side would see greater benefit, especially, the items in which relationship of division of labor is already established. “For example, in sectors in which Japanese companies have already moved their bases of production to China, such as apparels and sundry goods for daily life, or for labor-intensive goods, there is little likelihood that export from Japan to China will increase even if China’s import duties are eliminated under a free trade agreement.” (Ishikawa, 2006: 3). By contrast, Xu et al. (2009: 117-118) firmly believe the conclusion of Sino-Japan FTA will “further eliminate and reduce the hindrances and costs in the bilateral economic trade and help the two countries give full play to their complementarity and growth potential.”¹⁰ Furthermore, with each being an important

¹⁰ 进一步减少和消除两国经贸往来中的障碍, 降低成本, 使两国间的互补性和增长潜力得到更充分的发挥。

consumer market for the other, the participation of two countries in establishing an FTA also means “the expansion of the exports of their comparative advantage products and increase of the economies of scale.”¹¹(Wang, 2006:118)

However, no matter whether the Sino-Japan FTA brings more positive or negative effects, the two Asian powers have to first overcome a number of economic and non-economic obstacles before they conclude an FTA. According to Ishikawa (2006:2), one of the reasons that Japan has never touched upon FTA with China is “its fear for devastating effect to agriculture and some manufactures in Japan by intrusion of cheap Chinese products.” Besides, Gao (2004:126) also mentions the aspects, such as policy, politics, economy, history and security, which lead to the lagging of Sino-Japan FTA.¹² Generally, during the process of FTAs between developing and developed countries, many developing countries “that had hoped to obtain significant expansion of market access to the major developed countries have been disappointed in the results of the negotiations. A major reason for this is that there are structural, legal and political impediments that prevent the developed country from opening its market beyond a certain limit, in respect of its sensitive products.” (Khor, 2010: 7)

Referring to the non-economic challenges, Wang (2006:118-119) alleges “the United States is one of the major external factors for the integration of China, Japan and Korea.”¹³ Chiharu (2007:21) also argues that one of the most important aspects Japan fears in the negotiation with China about Sino-Japan FTA is the United States attitude and response. Moreover, besides the U.S. factor their low mutual trust level is also another major constraint for the conclusion of an FTA between China and Japan, and even with South Korea (L.q. Chen, 2008: 10). Since Japan’s historical crime is still not clearly and sincerely acknowledged by the Japanese government, the political trust degree between the two countries is still relatively low. In addition to the historical and the U.S. factors, the political factor also plays an important role in China and Japan’s bilateral relationship. According to N.l. Zhang et al. (2006: 23), with the increase of its significance in the process of East Asian regional cooperation “China has

¹¹ 扩大优势产品的出口，增及规模经济效益。

¹² 中国和日本在 FTA 问题的滞后是有政策，政治，经济，历史，安全等多种因素造成的。

¹³ 美国是中日韩一体化的重要外部影响因素。

become a threat for Japan's leadership in East Asia". Conversely, it is also impossible for China to "accept Japan as a leader in the regional economic cooperation."¹⁴

However, Sino-Japan FTA is "not a simple bilateral problem. It cannot be separated from the regional environment. The process and prospects of East Asian economic integration to a great extent influence the Sino-Japan FTA."¹⁵(Xu et al., 2009: 174) In 2010 six old ASEAN members firstly achieved internal trade liberalization, and then each of China and South Korea has also established FTAs with ASEAN. Japan will establish FTA with ASEAN in 2012. With the rapid development of regionalization, some scholars suggest a good solution to accelerate the trade and economic cooperation between China and Japan, even the entire region—China-Japan-Korea FTA. "If China, South Korea and Japan sign an FTA, it will undoubtedly accelerate and achieve the establishment of East Asian economic integration."¹⁶(Xu et al., 2009: 188) As Ma (2009: 97-98) argues "with the trend of global regional collectivization, the economic association between the three neighbor countries--China, Japan and South Korea is trend driven."¹⁷

China, Japan and Korea's economic complementarity provides the material premises of China-Japan- Korea FTA. "China has the advantage of low labor costs and is rich in natural resources. Japan and South Korea have advantages in finance, technology, high and new technology industries in particular. The economy of the three countries is obviously complementary. Therefore, the establishment of China-Japan- Korea FTA can not only develop the comparative advantages of the three countries and realize their resources complementation, but also with the constant increase of the Chinese economy China's industrial structure adjustment and upgrading will be promoted, and its competitiveness in international markets will also be improved."¹⁸(Huang and Zhang, 2007: 37)

¹⁴ 中国威胁日本主导权但对于日本要发挥领导作用的想法,中国是难以接受的。

¹⁵ 中日 FTA 不单纯是一个双边问题,它不可能脱离地区环境。东亚经济一体化的进程及前景,在很大程度上影响着中日 FTA 问题。

¹⁶ 如果中日韩三国能够达成 FTA,无疑会加快和催生东亚经济一体化组织的建立。

¹⁷ 在全球区域集团化的潮流下,中国,日本和韩国这三个比邻而居的国家进行经济联合是大势所趋。

¹⁸ 中国具有劳动力成本较低的优势,且拥有丰富的自然资源,而日本和韩国具有资金和技术的优势,高新技术产业尤为发达,三国具有明显的经济互补性。自由贸易区的建立不仅可以充分发挥中日韩三国的比较优势,实现资源互补,而且随着中国经济的持续高速增长,中日韩自由贸易区的建立可以促进中国的产业结构调整与升级,提高在国际市场的竞争力。

Furthermore, as Wang (2009: 96) argues, China-Japan-Korea FTA could “further attract foreign investment, promote the development of economic and trade relations between the three countries, and realize the East Asian economic integration. Meanwhile, it could also accelerate the adjustment of their industrial structures, improve their international competitiveness, and enhance the defense capability against financial crisis.”¹⁹

2.3 Market Share (MS), Revealed Comparative Advantage (RCA), Trade Combining Density Index (TCD) and Trade Specialization Coefficient (TSC)

To better compare the international competitiveness and comparative advantage of some major industries between two countries, a number of scholars have undertaken several similar studies using the concept of market share (MS), revealed comparative advantage (RCA), trade combining density index (TCD) and trade specialization coefficient (TSC).

In fact, both RCA and TSC are often used to analyze trade data and comparative advantage. For instance, Utkulu and Seymen (2004: 2) use the RCA to examine Turkey’s relative competitiveness and compare the structure of specialization in trade *vis-à-vis* the EU/15. Similar research was also conducted by Serin and Civan (2008). By using revealed comparative advantage they study Turkey’s competitiveness and identify to which extent Turkey has a competitive advantage in some agricultural products. Leishman et al. (1999) also through applying the index of revealed comparative advantage hope to analyze the patterns of production and export of wool and better understand why the U.S., or any other country, is in the position it is regarding its wool industry. Batra and Khan (2005) using the RCA analyze the structure of comparative advantage enjoyed by India and China in the global market, individually and in a comparative framework. Sun (2003) and Zhong et al. (2005) examine the competitiveness of Chinese agricultural products in the Japanese and ASEAN markets, and analyze the factors affecting imports by applying the revealed comparative advantage. Fert and Hubbard (2002) estimate the competitiveness of Hungary’s agriculture *vis-à-vis* EU by applying four indices of revealed comparative advantage. It is remarkable that the four RCA indices are computed for Hungary’s agricultural products trade with respect to the EU by Fert

¹⁹ 进一步吸引外资, 促进三边经贸关系的发展, 实现东亚经济一体化。(中日韩 FTA) 促进三国产业结构的调整, 有利于提高国际竞争力, 增强防御金融危机的能力。

and Hubbard (2002) to better compare the comparative advantages between Hungary and the EU.

By adopting the index of reveal comparative advantage (RCA) and trade combining density (TCD), Shuai and Wang (2011) analyze the comparative advantages and complementarity of the agricultural trade between China and the United States since 1997 and indicate the good complementary trade relationship of agricultural products between the U.S. and China, and the U.S. high dependency on Chinese agricultural products. Suehiro (2001) uses the trade specialization coefficient (TSC) to study the evolving international division of labor in Asia and background factors since 1990s. By employing the same formula of trade specialization coefficient (TSC), Iwatsubo and Karikomi (2006) compare the competitiveness and division structure between Japan and China, and explore the impacts of exchange rate on trade between the two countries. Sugie (2004) compares the change in the distribution of Japan and the U.S. trade specialization coefficient (TSC) adjusted by skill intensity and intellectual intensity and concludes that Japanese manufacture will face certain challenges during the process of economic integration. In addition, economic integration will also cause competition and encourage efforts to improve domestic intellectual assets. In Ishikawa's (2006) analysis of *East Asia FTA and Trade between Japan and China in Major Industries*, he takes advantage of the index of trade specialization coefficient (TSC) to examine the bilateral trade between Japan and China in eight major industries (electric machinery and electronics, machinery, transportation machinery, steels, chemicals, textiles and food) and emphasizes the high complementarity of Japan and China's major industries and the benefits of conclusion of Sino-Japan FTA.

The dynamics of Chinese and Japanese comparative advantage in some major industries, such as, agricultural, services, automobile and FDI have been analyzed in several studies. Prominent among these are as follows. Li et al. (2010) study the agricultural trade relations between China-Japan-Korea and its impacts on the establishment of C-J-K FTA. By applying the index of revealed comparative advantage, they analyze the competitiveness and trade relations of China, Japan and Korea's agricultural industry and indicate the difficulty in reaching a consensus on the agricultural problem in their FTA negotiations.

By employing the revealed comparative advantage and trade specialization coefficient, Yoon and Kim (2006) study the comparative advantage and competitiveness of the services and manufacturing industries between Korea, China and Japan in a global context and suggest China's automobile, machinery and petrochemical industries will face severe challenges from more competitive Japanese and Korean industries. Meanwhile, Yoon and Kim (2006) also put forward the feasibility of establishing China-Korea FTA in the future. L.m. Chen (2008) and W.w. Zheng (2008) focus on the comparativeness of China and Japan's services industry by calculating revealed comparative advantage of Japan's services trade with respect to China's. It is notable that W.w. Zheng (2008) also employs market share (MS) to examine the comparative advantage and disadvantage sub-sectors of the two countries and suggests the Chinese government should make efforts to develop its services industry in order to bridge the gap with Japan. Gou (2010) uses the RCA index to introduce Japan's strategy of services trade and demonstrates the fact that the competitiveness of China's service industry is still less strong than Japan's.

Shen (2008) makes a comparative analysis of the competitiveness of the automobile industry between China, Japan and Korea by using the index of revealed comparative advantage. He concludes that with the increase of the RCA index of the three countries, it is predicable that the competition of the automobile industries between the three countries will become severe, especially in the sub-sectors, such as core technology, after-sale service, and so on.

Zhang (2005) compares the FDI modes of China, Japan and Korea by using the index of revealed comparative advantage and proposes that China should allot more FDI to service industries, and carry out equal favored policies for domestic and foreign-funded businesses, so that the competitiveness of domestic businesses will be raised.

2.4 The significance, methodology and theoretical basis of this paper

The rising of global trade protectionism leads to the strengthening of regional trade liberalization and proliferation of bilateral FTAs. With the rapid increase of bilateral FTAs between other countries, China and Japan are also speeding up adjusting their FTA strategies.

FTA has become an important method to avoid the risks caused by global trade protectionism and promote the development of their trade relations.

With the development of East Asian regional economic cooperation and bilateral trade between China and Japan, whether the Sino-Japan FTA should be concluded has drawn more and more attention in the world. Most Chinese and Japanese economic experts believe that the Sino-Japan FTA will speed up the economic development of both countries and promote the East Asian economic integration. For political, economic, and some other reasons, Japan has always taken an evasive attitude toward the conclusion of Sino-Japan FTA and Sino-Japan relations have also increasingly interwoven with regional interests, hindering the conclusion of an FTA for both countries. Thus, the study of the challenges and opportunities caused by the establishment of Sino-Japan FTA and how to overcome these challenges and obstacles has great theoretical and practical meaning.

If China and Japan can seize the opportunity and further deepen their bilateral trade and economic cooperation, it will improve their foreign trade environment, promote the upgrading of their domestic industrial structures, and strengthen East Asian regional economic integration. Moreover, the FTA negotiations between the two countries could also enhance their mutual trust and help them to reach a consensus on an international monetary system.

Most of the scholars previously mentioned focus on comparing the comparative advantage of China and Japan's major industries and analyzing the positive and negative effects caused by the establishment of Sino-Japan FTA. Most times they specifically describe the impacts on China and Japan's major industries and actively appeal the necessity of signing the bilateral FTA. How to solve the problems and promote the establishment of the FTA is seldom mentioned. Therefore, this paper intends to elaborate on the challenges and obstacles of the Sino-Japan FTA on the basis of the research results of overseas scholars, and in the meantime, introduce the possible solutions for the two countries to promote and accelerate the establishment of their bilateral FTA.

2.4.1 Methodology and Theoretical Basis

Prominent among the researches of the Sino-Japan FTA is Xu et al.'s study. Xu et al.'s (2009: 138-164) argument that "Sino-Japan FTA arouses side effects on China's agricultural, textile and garment, mechanical and electronic, automobile, steel and iron, chemical, and services industries and will also bring challenges to China's attraction for foreign capitals and its investment overseas"²⁰ comprehensively covers almost all the sensitive sectors which should be specifically discussed in their FTA negotiations. Therefore, based on Xu et al.'s study results and combining Ishikawa's (2006) method of comparing comparative advantages of China and Japan in eight major industries by adopting RCA, this paper will through comparing the comparative advantage and complementarity of China and Japan's six major industries in terms of market share (MS), revealed comparative advantage (RCA), trade combining density index (TCD) and trade specialization coefficient (TSC) make an empirical analysis of the main challenges caused by the conclusion of the Sino-Japan FTA for the agricultural, services, chemical, automobile, textile and garment industries as well as FDI in both countries .

In addition, influenced by Chiharu's (2007: 21) concept of "American influence" and Gao's (2004: 126) theory of Sino-Japan FTA's lagging aroused by non-economic obstacles, such as policy, politics, economy, history and security²¹, this paper will in the rest of the third part analyze political, economic, historical and regional backgrounds to better identify the significant factors hindering the conclusion of Sino-Japan FTA.

2.4.1.1 Market Share (MS)

MS refers to the percentage of a certain product taking in the global market for the same product. It is an important indicator to measure the international competitiveness of a certain commodity. Normally, market share is calculated as follows: Unit market share (%) = 100 * Unit sales / Total Market Unit Sales, revenue market share (%) = 100 * Sales Revenue / Total Market Sales Revenue²²

²⁰ 如果中日缔结 FTA, 将给我国农业, 纺织服装业, 机电产业, 汽车产业, 钢铁产业, 化学产业, 服务业, 带来影响和挑战... 它将给我国吸引外资和境外投资带来挑战。

²¹ 中国和日本在 FTA 问题的滞后是有政策, 政治, 经济, 历史, 安全等多种因素造成的。

²² Market Share, Wikipedia, http://en.wikipedia.org/wiki/Market_share#Methodologies

2.4.1.2 Revealed comparative advantage (RCA)

The revealed comparative advantage (RCA) is an index used in international economics for calculating the relative advantage or disadvantage of a certain country in a certain class of goods of services as evidenced by trade flows.²³ This comprehensive or advanced measure of RCA was presented by Błda Balassa (1965) and is expressed as follows: $RCA = (X_{ij} / X_{it}) / (X_{nj} / X_{nt}) = (X_{ij} / X_{nj}) / (X_{it} / X_{nt})$ where X represents exports, i is a country, j is a commodity (or industry), t is a set of commodities (or industries) and n is a set of countries. RCA measures a country's exports of a commodity (or industry) relative to its total exports and to the corresponding exports of a set of countries (Utkulu and Seymen, 2004: 9). If $RCA < 1$, it suggests that a country has a comparative disadvantage in the commodity (or industry); if $RCA > 1$, it suggests that a country has a comparative advantage in the commodity (or industry). It is notable that influenced by Fert and Hubbard's (2002) method to better compare the comparative advantages between Hungary and the EU, the RCA indices in some sections of this paper are computed for Japan's trade data with respect to China's.

2.4.1.3 Trade Combining Density Index (TCD)

The Trade Combining Density Index was first proposed by Brown in 1947, and perfected later by Kojima Kiyoshi and Yamazawa Ippei. The model can be illustrated as: $TCD_{ab} = (X_{ab}/X_a) / (M_b/M_w)$ where TCD_{ab} indicates the trade combining density index between country a and country b , X is exports, X_{ab} is the share of country a 's exports to country b as against the total export values of country a , (M_b/M_w) is the share of country b 's total imports against the world total import values. If $TCD_{ab} > 1$, it indicates a closer trade relationship between these two countries, and vice versa (Shuai and Wang, 2011: 121).

2.4.1.4 Trade Specialization Coefficient (TSC)

Trade Specialization Coefficient reflects the proportion of a certain industry's net exports to the total imports and exports of the industry in a country. It is jointly decided by the size of the import and export volume of the current year, domestic production and consumption, foreign

²³ Revealed comparative advantage, Wikipedia, http://en.wikipedia.org/wiki/Revealed_comparative_advantage

production and consumption (Mu and Zhang, 2010: 8). Trade Specialization Coefficient is also used as a tool to analyze the competitiveness of a certain industry in a country. The formula of TSC is as follows: $TSC_{ij} = (X_{ij} - M_{ij}) / (X_{ij} + M_{ij})$. In the formula, X_{ij} means the export value of product j in country i ; M_{ij} means the import value of product j in country i . The greater TSC value expresses the stronger export competitiveness of the country; the smaller TSC value expresses the weaker export competitiveness of the country; 0 means the competitiveness is near the average level. Trade specialization coefficient is always less than 1 and greater than -1.

3 Challenges and Benefits of Sino-Japan FTA

3.1 Trade structure and international competitiveness of major industries

Japan is a major agricultural and mining importer and manufacturing exporter. Its manufacturing exports represent by far the largest part of its total exports. According to Hilpert and Haak (2002:47), Japan's exports are highly concentrated in machinery and transport goods, which embody considerably more capital and technological know-how than other categories.

In contrast, the competitive advantage of China lies in agricultural and mining products. However, in the course of the opening and liberalization of its foreign trade, China's export trade pattern and international competitive advantages have changed from agricultural and natural resource-intensive goods to labor-intensive goods (Zhang, 2000: 53-57 and 216-222).

3.1.1 Market Share (MS) of major product groups

Since China implemented its open door policy, its economy developed rapidly and the market shares of most major industrial commodities have also been enhanced. In contrast, the market shares of Japan's major industrial commodities have declined.

Looking at the change to both China and Japan's export market shares in the last ten years, it is obvious to see that China has the export competitive advantage in agricultural products, office and telecom equipment, and textile and clothing. In contrast, Japan has the competitive advantage in iron and steel and automotive products. According to Table 3, in 2009 Chinese

textile and clothing export market shares were 28.3% and 34.0%; Japan had only 2.9% and 1.5%. In the world production of chemical products, China and Japan take the similar share and accounted for 4.3% and 4.2%, respectively. China's export market shares of agricultural products and office and telecom equipment were 3.5% and 26.2%, much higher than Japan's 0.7% and 5.9%. However, compared with Japan's 12.2% market share of automotive products, China's automotive products export market share was only 2.3%.

Table 3: Export Market Share of China and Japan's major product groups 2000-2009

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	Agricultural products	3.0	3.0	3.2	3.3	3.1	3.4	3.4	3.4	3.2	3.5
	Fuels and mining products	1.1	---	---	---	---	---	---	1.0	1.0	1.1
	Iron and steel	3.1	2.4	2.3	2.7	5.2	6.1	8.7	10.9	12.1	7.3
	Chemicals	2.1	2.2	2.3	2.5	2.7	3.2	3.6	4.1	4.7	4.3
	Office and telecom equipment	4.5	6.3	9.0	12.6	15.2	17.7	19.8	22.9	24.5	26.2
	Automotive products	0.3	0.3	0.4	0.5	0.7	1.1	1.4	1.9	2.3	2.3
	Textiles	10.3	11.4	13.5	15.9	17.2	20.2	22.3	23.5	26.1	28.3
	Clothing	18.3	18.8	20.6	23.0	24.0	26.9	30.6	33.4	33.2	34.0
Japan	Agricultural products	0.8	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.3	0.7
	Fuels and mining products	0.2	---	---	---	---	---	---	0.5	0.7	0.6
	Iron and steel	10.4	10.5	10.9	9.9	8.8	8.6	8.0	7.3	7.5	9.5
	Chemicals	6.0	5.1	5.0	4.9	4.9	4.8	4.6	4.4	4.1	4.2
	Office and telecom equipment	11.2	10.0	9.7	9.7	9.0	7.7	6.9	6.8	6.6	5.9
	Automotive products	15.2	11.2	14.9	14.2	13.7	13.5	13.7	13.4	13.9	12.2
	Textiles	4.5	4.2	4.0	3.8	3.7	3.4	3.2	3.0	2.9	2.9
	Clothing	---	---	---	---	---	---	0.1	0.2	0.2	1.5

Source: WTO International Trade Statistics, http://www.wto.org/english/res_e/statistics_e/statistics_e.htm

3.1.2 Revealed comparative advantage (RCA) of major industries

As mentioned previously, in order to compare the comparative advantages between China and Japan more directly, the RCA indices in Table 4 are computed for Japan's trade in major industries over the period 2000-2009, with China as the comparator. Namely, the RCA will be calculated: $RCA = RCA_{Japan}/RCA_{China} = (X_j \text{ Japan} / X_t \text{ Japan}) / (X_j \text{ China} / X_t \text{ China})$. If $RCA_{Japan}/RCA_{China} < 1$, it suggests that Japan's comparative advantage of the commodity/ industry is less strong than China's; if $RCA_{Japan}/RCA_{China} > 1$, it suggests that Japan's comparative advantage of the commodity/ industry is stronger than China's. The data selected are the major industries exports and total exports of Japan and China from 1999 to 2009.

As Table 4 illustrates, compared with Japan, China's agricultural products, fuels and mining products, office and telecom equipment, textiles and clothing have stronger international competitiveness. In recent years, the Chinese office communications equipment has gradually become a highly competitive industry. Compared with the Japanese agricultural industry, Chinese agricultural industry still has stronger comparative advantage, although it has a downward trend in the past ten years. In contrast, Japan's iron and steel products, chemicals and automotive products have stronger competitive advantage. However, with the development of China's automobile industry, the gap of this industry between the two countries is becoming smaller.

Table 4: Revealed comparative advantages of Japan's major industries with respect to China's (2000-2009)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Agricultural products	---	0.020	0.314	0.194	0.431	0.249	0.273	0.192	0.019	0.364
Fuels and mining products	---	---	---	---		---	---	0.459	1.014	0.967
Iron and steel	1.733	2.752	6.160	3.317	3.188	1.697	1.263	0.659	1.054	2.432
Chemicals	1.491	1.468	2.864	1.777	3.461	1.750	1.783	1.067	1.478	1.852
Office and telecom equipment	1.276	1.012	1.419	0.682	1.133	0.516	0.475	0.293	0.458	0.430
Automotive	---	27.127	45.546	26.594	35.072	14.674	13.270	6.816	10.106	9.790

products										
Textiles	0.982	0.235	0.387	0.213	0.406	0.200	0.195	0.125	0.191	0.188
Clothing	---	---	---	---	---	---	0.007	0.004	0.008	0.008

Source: WTO International Trade Statistics, (calculated by author)

http://www.wto.org/english/res_e/statis_e/statis_e.htm

3.1.3 Market Opening Status

With the economic globalization and development of regionalism, countries have opened their markets, reduced trade barriers, and actively developed their foreign trade and economic relations. Therefore, tariff and non-tariff barriers reflect the degree of trade liberalization and market opening status of a country or a region. According to Avila (2004:7), the elimination of tariff barriers between bilateral partners entering into an FTA is “a central element of most FTAs. Member countries agreed to grant preferential tariff free market access to an extensive range of products, in most cases covering practically the entire range of bilateral merchandise trade.”

Since entering the WTO in 2001, China has continuously reduced its tariffs. However, compared with Europe and other developed countries the tariffs in China are still significantly high. In particular, the tariffs of non-agricultural products in China are at least 2.5 times higher than those in the EU and the U.S. The tariffs of the electrical machinery, transport equipment, and manufactures industries are about five times higher than the U.S. and three times higher than the EU's. On the contrary, it is remarkable that Japan has almost zero tariffs in the industries of non-electrical machinery, electrical machinery and transport equipment. However, the tariffs of agricultural products in Japan are higher than other countries and regions. For instance, the average tariffs of dairy products and cereals and preparations in Japan are 133 and 76.6, respectively. By contrast, China's agricultural products market is relatively open to imports.

Table 5: Tariffs of different industries in major countries and regions

Average	China	Japan	Korea	The U.S.	EU
Animal products	14.9	13.4	26.1	2.6	24.1
Dairy products	12.2	133.0	69.8	21.1	52.3

Fruit, vegetables, plants	14.9	10.4	64.1	5.5	10.3
Coffee, tea	14.9	14.5	74.1	3.7	6.6
Cereals and preparations	23.7	76.6	161.1	3.7	21.3
Oilseeds, fats and oils	11.0	10.7	44.7	4.7	5.1
Sugars and confectionery	27.4	46.2	32.2	15.0	26.4
Beverages and tobacco	23.2	16.4	42.5	16.4	21.8
Cotton	22.0	0.0	2.0	4.8	0.0
Other agricultural products	12.1	5.4	20.8	1.1	4.3
Fish and fish products	11.0	4.9	14.7	1.2	11.2
Minerals and metals	8.0	1.0	7.5	1.7	2.0
Petroleum	5.0	11.0	8.9	1.8	2.0
Chemicals	6.9	2.3	5.8	2.8	4.6
Wood, paper, etc.	5.0	1.0	2.8	0.4	0.9
Textiles	9.8	5.5	16.5	7.9	6.5
Clothing	16.1	9.2	28.4	11.4	11.5
Leather, footwear, etc.	13.7	8.6	12.1	4.3	4.2
Non-electrical machinery	8.5	0.0	9.5	1.2	1.7
Electrical machinery	9.0	0.2	8.9	1.7	2.4
Transport equipment	11.4	0.0	8.1	3.1	4.1
Manufactures, n.e.s.	12.2	1.1	9.8	2.1	2.5

Source: WTO Statistics Database, http://www.wto.org/english/res_e/statis_e/statis_e.htm

3.2 Challenges for Chinese and Japanese Agricultural Industry

Agriculture has been always a major issue in FTA negotiations for industrialized countries like Japan, because such countries are protecting agriculture heavily and facing difficulties in reducing the tariffs on agricultural imports to zero in a limited time period. Therefore, agricultural issues will be more serious in further negotiations on FTA with those countries who expect to export more agricultural products to Japan (Honma, 2006:7). In this section the author will try to find out the impacts of Sino-Japan FTA on both countries' agricultural industries through analyzing the structure of China and Japan's agricultural trade relations and comparing the comparative advantage of their agricultural products.

For Japan, the agriculture sector is the most sensitive sector in trade liberalization. According to World Bank Indicator, in 2008 agriculture accounted for only 1% of Japan's GDP and 4.2% of its total employment, but it remains heavily supported and protected from import competition. By contrast, the percentage of agriculture in China's GDP was 11%. According to OECD (2005: 52-53), "rice, wheat, other grains, meat, sugars, and dairy are the most heavily-supported commodities. Tariff-rate quotas are employed to shield these commodities from international competition, resulting in food prices that in Tokyo are on average 130% higher than the rest of the world."

For China, Japan is a major agricultural products importer. "The main exports from China to Japan are aquatic products, vegetables, livestock and poultry, fruits, nuts, cereal products, tea and condiments."²⁴(Zhang, 2006: 29) According to UNCTAD Stat, in 2009 China and Japan's average export shares of agricultural products in the region were 44.9% and 31.5%. China shows a high degree of dependence on agricultural exports within the region; Japan, though relatively low, showed a trend of sustained growth, from 29.9% in 2008 to 31.5% in 2009. According to Table 6, it is obvious to see that since the volumes of China and Japan's bilateral agricultural trade climbed to its climax in 2006, it decreased gradually in recent years.

Table 6: China and Japan agricultural bilateral trade (US\$ millions)

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Volume	7645	7658	8092	9691	10395	10753	10632	9710	9640
Balance	6185	5998	6172	7311	7495	7573	7072	6170	5940

Source: WTO International Trade Statistics, http://www.wto.org/english/res_e/statistics_e/statistics_e.htm

3.2.1 Trade Combining Density Index (TCD)

As mentioned previously, if $TCD_{ab} > 1$, it indicates a closer trade relationship between these two countries, and vice versa (Shuai and Wang, 2011: 121), namely, if $TCD_{JapanChina} > 1$, it means Japan and China have a close trade relationship.

²⁴ 中国对日本出口的主要产品有水生动物及其产品, 蔬菜及其制品, 畜禽及其制品, 水果, 坚果及其制品, 谷物及其制品, 茶及调味品等。

Table 7: Trade Combining Density Index between Japan and China

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
TCD _{JapanChina}	4.0	3.8	3.7	4.2	4.0	4.0	3,7	3,1	3,3

Source: WTO International Trade Statistics (calculated by author)

http://www.wto.org/english/res_e/statis_e/statis_e.htm

According to Table 7 the indexes of Japan-China's agricultural TCD were all above 3 in the last ten years. In other words, the trade complementarity of agriculture between the two countries is very strong.

3.2.2 Revealed comparative advantage (RCA) of agricultural products trade

The same as in part 3.1.2, in order to better compare the comparative advantages between China and Japan, the RCA indexes in Table 8 are also computed for Japan's trade change in the agricultural industry over the period 2001-2009, with China as the comparator. Namely, $RCA = RCA_{Japan}/RCA_{China} = (X_j \text{ Japan} / X_t \text{ Japan}) / (X_j \text{ China} / X_t \text{ China})$. If $RCA_{Japan}/RCA_{China} < 1$, it suggests that Japan's comparative advantage of agricultural products industry is less strong than China's; if $RCA_{Japan}/RCA_{China} > 1$, it suggests that Japan's comparative advantage of agricultural products industry is stronger than China's.

According to the change of RCA indexes, export RCA_{Japan}/RCA_{China} rebounded gradually since 2002 and reached 0.41 in 2009, which means Japan's comparative advantage of agricultural products export developed faster than China's. Although the import RCA remains almost unchanged, which means the growth of both countries' agricultural imports is almost the same, Japan's agricultural imports are still more competitive than China's.

Table 8: Revealed comparative advantage of the change of Japan's agricultural products trade with respect to China's (2001-2009)

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Export	0.23	0.18	0.19	0.24	0.25	0.28	0.31	0.34	0.41

Import	1.75	1.93	1.82	1.66	1.67	1.59	1.48	1.30	1.62
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Source: OECD Statistics (calculated by author)

http://www.oecd.org/document/0,3746,en_2649_201185_46462759_1_1_1_1,00.html

In order to observe the competitiveness of China and Japan's major agricultural products in detail, the author will use the index of revealed comparative advantage to compare the 24 major agricultural products between China and Japan. If $RCA < 1$, it suggests that China or Japan has a comparative disadvantage in an agricultural product; if $RCA > 1$, it suggests that China or Japan has a comparative advantage in an agricultural product.

Table 9: RCA (2005-2008 averages) of 24 Chinese and Japanese agricultural products

HS	Products	China		Japan	
		Export RCA	Import RCA	Export RCA	Import RCA
HS01	Live animals	1.66	0.16	0.76	1.48
HS02	Meat	1.55	0.02	0.18	2.44
HS03	Fish	1.56	0.27	0.41	1.58
HS04	Dairy products	2.05	0.13	0.17	2.51
HS05	Products of animal origin	2.10	0.12	0.08	2.37
HS06	Live trees and other plants	1.30	0.49	0.24	1.88
HS07	Edible vegetables	2.15	0.01	0.00	2.28
HS08	Edible fruit and nuts	1.88	0.24	0.06	2.06
HS09	Coffee, tea	2.16	0.06	0.07	2.40
HS10	Cereals	2.27	0.00	0.00	0.84
HS11	Products of the milling industry	1.88	0.27	0.23	0.85
HS12	Oil seeds	1.88	0.11	0.16	1.73
HS13	Lac, gums	1.31	0.12	0.33	2.01
HS14	Vegetable plaiting materials	2.21	0.01	0.05	2.55
HS15	Animal or vegetable fats/oils	1.49	0.37	0.80	1.40
HS16	Preparations of meat	2.17	0.03	0.04	2.60
HS17	Sugars	0.63	0.74	0.25	1.25
HS18	Cocoa	1.07	0.30	0.57	1.58
HS19	Preparations of cereals	1.62	0.43	0.18	1.78
HS20	Preparation of vegetables	2.11	0.02	0.02	2.35
HS21	Miscellaneous edible	1.28	0.44	0.80	1.32

	preparations				
HS22	Beverages	0.93	0.29	0.28	1.99
HS23	Residues and waste	2.10	0.04	0.13	1.81
HS24	Tobacco	1.44	0.39	0.22	1.59

Source: (Li et al., 2010:109-110)

Table 9 lists the RCA (2005-2008 averages) of 24 Chinese and Japanese agricultural products. Except for sugar and beverages, the RCAs of China's remaining 22 export products are greater than 1, of which nine are more than 2. RCA less than 1 indicates the comparative advantage of China's sugar and beverage products in the region is not very significant. In contrast, the RCAs of all Japan's agricultural export products are less than 1, and the RCAs of 22 the imported agricultural products are greater than 1, which strongly proves that Japan is a major agricultural products importer.

As Zhang (2006: 30-31) argues, "China has an export comparative advantage in corn, apples, pears, sesame seeds, carrots, garlic, ginger, onion, pepper, chicken, rice and pork, and an import comparative advantage in corn, soybean, apples, peaches, sesame, chicken, flour and grapes. Therefore, China's intra-industry trade is more active in corn, chicken, apples, sesame, onion and pork. In contrast, Japan has an export comparative advantage in pears, and an import comparative advantage in corn, soybean, sesame, rapeseed, ginger, beef, pork and chicken, flour, rice, oranges, carrots, strawberries, garlic, onion, and sweet pepper. As a result, Japan doesn't have intra-industry trade. The relationship of Chinese and Japanese agricultural products trade is complementary, especially the trade of maize, sesame, garlic, ginger, onion, pork and chicken."²⁵

As analyzed above it could be predicted that Chinese and Japanese agricultural products trade has a high complementary relationship. However, this complementarity is mainly dominated by the export of Chinese agricultural products to Japan, which means their complementary

²⁵ 中国出口比较优势较高的品种是玉米, 苹果, 梨, 芝麻, 胡萝卜, 大蒜, 生姜, 洋葱, 辣椒, 鸡肉等, 大米和猪肉也具有比较优势; 进口RCA指数较高的是玉米, 大豆, 苹果, 桃子, 芝麻, 鸡肉等, 面粉和葡萄等的进口RCA指数也较高。因此中国产业内贸易较活跃的品种是玉米, 鸡肉, 苹果, 芝麻等, 洋葱和猪肉的产业内贸易也较多。日本具有出口比较优势的只有梨一种, 苹果也略有优势。进口RCA较高的是玉米, 大豆, 芝麻, 油菜, 生姜, 牛肉, 猪肉和鸡肉等。此外, 面粉, 大米, 橘子, 胡萝卜, 草莓, 大蒜, 洋葱, 甜椒等的进口比较优势也较高。日本不存在产业内贸易产品。中日大部分贸易品种以互补关系为主。尤其是玉米, 芝麻, 大蒜, 生姜, 洋葱, 猪肉及鸡肉等互补性强。

relationship is mainly unilateral. In fact, the stronger the unilateral complementarity in a relationship is, the greater of the impacts on the partner's. In other words, promoting the establishment of an FTA will also become more difficult. Therefore, if an FTA between China and Japan will be established for the agricultural industry, almost all of the Japanese domestic agricultural products will be significantly impacted by Chinese products.

3.3 Challenges for Chinese and Japanese Services Industry

The services industries of China and Japan are very diverse in nature (Ahn and Lee, 2007:3). In fact, services have long operated in politically sensitive economic sectors and as such have been heavily regulated (Yoon and Kim, 2006: 14). According to Yoon and Kim (2006: 14-15), "in most countries of the world, governments own and directly or indirectly control the communications infrastructure and services. Other services industries such as banking and insurance are either owned or highly regulated by governments in most countries. One of the areas in which protectionism is particularly strong is telecommunications and information. In addition, information-intensive service industries, such as banking and insurance, also can't function without reliable, unrestricted communications links."

Compared with the exports of manufactured products, China's services industry has maintained a fairly low level. According to WTO International Trade Statistics, in 2009 the share of China and Japan's services trade were 4.4% and 4.2% of the world trade in services, respectively. "Joining the WTO compelled China to open its services industry to foreign competition, which leads to the competition between Chinese and foreign firms in many sectors. The Chinese government tried to implement different measures to strengthen the competitiveness of its services industry, such as personnel education, investment in infrastructure, legal support for services and so on." (Ahn and Lee, 2007:3)

According to Ahn and Lee (2007:5), "with a stable industrial structure Japan has a stable pattern of services industry. In its services industry, wholesale and retailing, real estate, public service and business service have the largest shares. Recently, telecommunications, social and business services have shown a relatively high pace of growth."

3.3.1 Trends of Services Industry

According to World Bank Indicators, in 2009 the services industry accounted for 49.5% of GDP in low income economies; 55.4% in middle-income countries; and almost 73.5% in high-income countries. Trade in services is thought to account for only about 11.5% of world trade, which decreased by 0.8% compared with 2008. Services activities in low-and middle-income countries have been expanding faster than GDP for the last two decades (Marchetti, 2004: 4). To compare the trend of the service economy between China and Japan, three indicators will be used: the proportion of services in terms of GDP, labor, and total trade.

In 2010 Japan's service industry accounted for around 70.6% of GDP. While quite low compared with Japan and other developed countries, the share of the services industry in China in terms of GDP is slightly above 46.0%. According to the World Bank Indicators, the services sectors in China and Japan accounted for approximately 36.0% and 70.0% of total workforce, and 5.8% and 5.5% of total trade compared with their peak 7.2% in 2007 (China) and 6.5% in 2008 (Japan).

Table 10: Proportion of services in terms of GDP, labor, and total trade

	China	Japan
Services, % of GDP	46.0	70.6
Employment in Services (2008)	33.2	70.0
Weight of service in trade	5.8	5.5

Source: World Bank Indicator <http://data.worldbank.org/indicator>

3.3.2 Market share of services exports

Market share of services exports is the proportion of one country's services exports revenue taking into account the world services export revenue. It reflects one country's services export general competitiveness or the change of its competitive position, and can be expressed as one country's services export trade volumes divided by the total service export volumes in the world. Thus, the increase of the market share of one country indicates the reinforcement of its

competitiveness. The following table is the services export market share of China and Japan during the period of 1999 to 2009.

Table 11: Services export market share of China and Japan (1999-2009)

(US\$ billions and percentage)											
Services export	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
China	24	30	32.9	39.4	46.4	62.1	73.9	91.4	121.7	146.4	129
Japan	60	68	63.7	64.9	70.6	94.9	107.9	122.5	127.1	146.4	126
World	1350	1435	1460	1570	1795	2125	2415	2755	3290	3780	3350
Market share											
China	0.7	0.7	2.3	2.5	2.6	13.8	3.1	3.3	3.7	3.9	5.2
Japan	5.3	5.3	4.4	4.1	3.9	21.1	4.5	4.4	3.9	3.9	5.1

Source: WTO International Trade Statistics, Trade by Region 2000-2010, http://www.wto.org/english/res_e/statis_e/statis_e.htm, (calculated by author)

As Table 11 illustrates, the market shares of services exports of China and Japan present a strong upward trend from 1999 to 2009, although Japan experienced a short decreasing period in 2001 and 2003. In contrast with the steady increase of Japan's services export volumes, China's services export volumes seem to have increased more dramatically. Before 2007, China's services exports lagged far behind Japan's. Since 2008 China has caught up with Japan with 146.4 billion dollars exports trade value and took the fifth place in the world service exports ranking. Since then, China took over Japan's leading position in services exports in East Asia and ranked the third among the leading exporters in world services trade. Compared with Japan the competitiveness of China's services exports is intensified more strongly, but in consideration of its weak development basis, China's general services exports are still relatively less competitive.

3.3.3 Comparative advantages of services industry

According to WTO Statistics, services were the fastest-growing components of world trade over the last three decades, particularly in the 1980s. Generally, advanced countries are the leading exporting countries (Yoon and Kim, 2006: 8-9). According to Table 12 of the services trade in 2009, the top six countries take 39.8 percent and 37.4 percent in both export and import of the global trade volumes, respectively. Japan and China are within the top six countries in both export and import. In these two countries, the import market shares slightly exceed the export market shares.

Table 12: Trade in Services of Top Five Countries (2009)

(US\$ hundred millions and percentage)

Rank	Country	Export	%	Rank	Country	Import	%
1	United States	474	14.1	1	United States	331	10.5
2	United Kingdom	233	7.0	2	Germany	253	8.1
3	Germany	227	6.8	3	United Kingdom	161	5.1
4	France	143	4.3	4	China	158	5.0
5	China	129	3.8	5	Japan	147	4.7
6	Japan	126	3.8	6	France	126	4.0

Source: WTO International Trade Statistics, http://www.wto.org/english/res_e/statis_e/statis_e.htm

Since there are no detailed trade statistics about services between countries as in the trade of commodities, Yoon and Kim (2006) make use of TSC (Trade Specialization Coefficient) and RCA (Revealed Comparative Advantage) to directly compare the competitive advantages of services sectors between the two countries. Here, the author will also adopt the same methods to compare the competitive advantage of services industry between China and Japan.

3.3.4 Trade Specialization Coefficient (TSC)

As discussed previously, the greater TSC value expresses the stronger export competitiveness of the country; the smaller TSC value expresses the weaker export competitiveness of the

country; 0 means the competitiveness is near the average level. Trade specialization coefficient is always less than 1 and greater than -1.

Table 13: Trade Specialization Coefficient (TSC) of Services Industry

	China					Japan				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
Total Service Trade	-0.057	-0.046	-0.030	-0.038	-0.101	-0.104	-0.081	-0.078	-0.067	-0.077
Transportation services	-0.297	-0.242	-0.160	-0.134	-0.328	-0.059	-0.065	-0.077	-0.071	-0.124
Travel	0.147	0.165	0.110	0.060	-0.048	-0.504	-0.399	-0.480	na	-0.420
Other commercial services	-0.061	-0.065	0.130	-0.031	-0.020	0.044	0.036	0.175	0.018	0.016
Telecommunications services	na	na	na	na	na	na	na	na	na	na
Construction	0.231	0.503	0.298	0.406	na	0.205	0.530	0.131	0.098	na
Insurance services	-0.858	-0.883	-0.844	-0.804	na	-0.369	-0.487	-0.508	-0.690	na
Financial services	na	na	na	na	na	0.305	0.346	0.265	0.156	na
Computer and information services	0.063	0.260	0.326	0.328	na	-0.365	-0.528	-0.578	-0.616	na
Computer services	na	na	na	na	na	na	na	na	na	na
Royalties and license fees	-0.943	-0.940	-0.920	-0.900	na	0.093	0.129	0.164	0.169	na
Other business services	0.239	0.182	0.141	0.913	na	0.079	0.029	-0.028	0.007	na
Personal, cultural and recreational services	na	na	na	na	na	na	na	na	na	na

Audiovisual services	-0.069	0.062	0.345	0.242	na	-0.834	-0.808	-0.785	-0.772	na
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Source: WTO International Trade Statistics, (calculated by author)

http://www.wto.org/english/res_e/statis_e/statis_e.htm

It is clear to see that China has been in a services trade deficit state for a long period. Generally, the TSC index of China's services trade has gradually increased in recent years. In labor-intensive sectors, such as travel, the TSC index is always greater than 0, which shows that the tourism industry in China has strong competitive advantage. However, the index of travel is also decreasing gradually, which means this competitiveness in the travel industry is diminishing. The TSC index of China's construction sector also has competitive advantage and shows a gradual upward trend. Computer and information services are also sectors with comparative advantage. In addition, the TSC index of China's transportation services was unstable during the last several years, which means that China's transportation services are facing a severe test. With an always less than 0 TSC index, the international competitiveness of China's insurance services needs to be strengthened.

Compared with China, Japan's general competitiveness of its services industry is gradually rising. According to Table 13, Japan has the competitive advantage mainly in capital-and technology-intensive services, such as financial services, and royalties and licenses services. The high competitiveness of financial services can be attributed to the Japanese government's emphasis on the financial sector. After World War II, Japan implemented a restrictive financial system in order to maintain the stability of financial markets. Since the mid-1970s Japan's economy has suffered from a low growth period, and Japan began to carry out financial liberalization. After the collapse of the bubble economy in the 1990s, Japan started to conduct a comprehensive financial reform. It is under the government's economic reforms for domestic financial market, so that Japan's financial industry has made considerable progress. However, Japan has a comparative disadvantage in transportation, travel, insurance services, and computer and information services.

In general, China's TSC index of services industry shows a downward trend; in contrast, Japan's TSC Index presents an upward trend. According to Table 13 the most competitive

sectors of China's services industry are construction and computer and information services. The average TSC indexes are 0.360 and 0.244, respectively. Although computer and information services are technology intensive industries, due to the abundant human resources and lower software development costs, China also has labor-intensive competitive advantage in this area. Therefore, Japan with its limited resources focuses mainly on developing core software and outsourcing non-core software. This has helped China to become the largest software supplier.

3.3.5 Revealed Comparative Advantage (RCA) of Services Industry

In this part, the RCA indexes in Table 14 are again computed for Japan's service trade over the period 2005-2009, with China as the comparator. Namely, the RCA will be calculated: $RCA = RCA_{Japan} / RCA_{China} = (X_j \text{ Japan} / X_t \text{ Japan}) / (X_j \text{ China} / X_t \text{ China})$. If $RCA_{Japan} / RCA_{China} < 1$, it suggests that a sector of Japanese services industry has less strong comparative advantage than that of Chinese; if $RCA_{Japan} / RCA_{China} > 1$, it suggests that a sector of Japanese services industry has stronger comparative advantage than that of China.

Table 14: Revealed comparative advantage of Japan's service trade with respect to China's

						2005-2009 averages	
	2005	2006	2007	2008	2009	China	Japan
Total Service Trade	1.459	1.340	1.044	1.000	0.976	0.095	0.163
Transportation services	1.593	1.336	1.285	1.212	1.371	1.035	1.337
Travel	0.290	0.350	0.239	na	0.266	1.245	0.376
Other commercial services	1.401	1.410	1.365	1.321	1.315	0.894	6.464
Construction	1.909	2.434	1.838	1.338	na	23.398	39.600
Insurance services	1.090	2.146	1.423	1.319	na	0.037	4.469
Financial services	na	na	na	na	na	na	5.382
Computer and information services	0.419	0.244	0.213	0.151	na	7.605	1.747
Royalties and license fees	77.056	73.142	64.846	44.975	na	0.620	37.169

Source: WTO International Trade Statistics (calculated by author)

http://www.wto.org/english/res_e/statis_e/statis_e.htm

The evaluation of the comparative advantage of service industry above shows that before 2008 the competitiveness of Japan's services industry was much higher than China's. Since 2008 the comparative advantage of China's services industry caught up and exceeded Japan's in 2009. According to Table 14, Japan has comparative advantage in five sectors: transportation services, other commercial services, construction, insurance services, and patent and licensing fees. China has comparative advantage in travel, computer and information services.

As Table 14 shows, China's tourism industry has comparative advantage. During 2005 and 2007, compared with China's insurance industry Japan has a comparative advantage in the insurance industry. However, in recent years the competitiveness of China's insurance services has improved and it has gradually become a competitive industry.

With the rapid development of China's computer and information services, Japan's computer and information services have changed from competitive to less competitive. However, Japan's royalties and license fees has an absolute export competitive advantage, although this relative comparative advantage is showing a steady downward trend, which means the competitiveness of China's royalties and license fees is improving. Japan shows an absolute competitive advantage in construction services. This is mainly thanks to the rapid development of its construction industry and strong domestic protection. Moreover, since China entered the WTO and continuously opened its construction market, a large number of Japanese construction enterprises were attracted to enter the Chinese market.

In general, because China and Japan have competitive advantage in different sectors of their services industry, the services industry of both countries will not be strongly impacted if they sign an FTA. If the two governments could develop their cooperation in services industry trade and make better use of their own competitive advantage, both of their services industries will benefit from their cooperation.

3.4 Challenges for Other Industries

China's chemical and automobile industries, and Japan's textile and garment industry are at a relative competitive disadvantage position. After the conclusion of a Sino-Japan FTA, they may also face severe imports impacts.

3.4.1 Chemical Industry

Both China and Japan's chemical industries do not have competitiveness in world markets. Moreover, China's chemical industry is even less competitive than Japan's.

According to Ishikawa (2006: 23) "trade of chemicals between Japan and China is in heavy surplus for Japan both in plastics and organic chemicals." Compared with European and U.S. companies, Japanese firms are concentrated on producing "downstream products", such as resins. In recent years, due to the high demand from electric machinery and automobile their focus shifted to "high value added products"—functional plastics.

In contrast with the Japanese chemical industry, "The Chinese chemical industry is at a disadvantage, especially organic chemistry. The major chemical export products from China to Japan are plastic and inorganic chemical products for wrapping and family use. Moreover, Japan is one of the main chemical importers for China. China's chemical trade with Japan is always in deficit."²⁶(Xu et al. 2009:144)

With the improvement in living standards and environment protection consciousness, the Chinese government is encouraging foreign capital to invest in the areas of synthetic material, fine chemical production, engineering plastic and environmental protection material. In 2008, China has reduced its resin products tariff to developed countries' level. "If China and Japan sign the FTA, the exports of Japan's environmental protection material will increase."²⁷(Xu et al. 2009:145)

²⁶ 中国化学产业尤其在有机化学方面处于劣势。我国对日出口主要是包装用和家庭用塑料等有机化学制品，而日本是我国化学品的主要进口地之一，我国对日化学品贸易为逆差结构。

²⁷ 如果中日缔结 FTA，日本对华环保材料的出口将增加。

Compared with the Japanese low tariff rate in the chemical industry, China's tariff rate is relatively high. Therefore, the conclusion of an FTA between the two countries is more beneficial to Japan. China has recently invested in its petrochemical industry, and tried to improve its high-tech and production capacity of high value added products. With the increase in Japan's exports caused by any Sino-Japan FTA, Chinese domestic production capacity will struggle to be fully utilized, in particular, the market space will be significantly squeezed, and Chinese domestic companies may face severe competition.

3.4.2 Automobile Industry

In contrast with the automobile industry in Japan, the competitiveness of China's automobile industry is very weak. China always has a trade deficit in the bilateral trade of automotive products with Japan. According to WTO International Trade Statistics 2010, Japan's automobile exports to China were 9.65 and 10.66 billion US dollars, and imports from China were 2.1 and 1.51 billion US dollars in 2008 and 2009, respectively.

“The automobile trade is dominated by Japan's almost one-sided exports to China, both in assembled vehicles and parts.” (Ishikawa, 2006: 15) According to UNCTAD Stat, with the rapid increase of China's automobile output, in 2009 the share of China's automobile exports in world vehicle production has risen by 816%. Nevertheless, the competitiveness and production capability of China's automobile industry is still weaker than that of Japan's, and the market share of major automobile manufacturers in world market is less than 2%. Furthermore, the Chinese automobile industry strongly depends on foreign capital, and is also lacking independent technology and brand.

Table 15: Revealed comparative advantage of Japan's automobile industry with respect to China's (2002-2010)

HS 2002	2002	2003	2004	2005	2006	2007	2008	2009	2010
87	12.703	11.983	10.485	9.680	9.533	8.650	8.082	7.660	7.898
8701	11.942	13.042	13.144	8.482	7.411	4.366	4.693	4.521	3.951
8702	17.041	23.812	17.308	10.472	7.023	4.648	5.586	6.491	5.493

8703	1022.435	558.415	248.063	120.478	92.592	66.045	71.092	93.485	84.710
8704	52.126	39.106	30.622	14.161	10.544	6.263	5.982	6.380	8.563
8705	2.726	3.988	4.105	3.199	1.297	0.742	0.564	0.670	0.734
8709	10.534	6.134	8.835	4.782	4.638	3.332	2.978	2.371	2.010
8716	0.008	0.143	0.185	0.211	0.196	0.101	0.244	0.125	0.184

Source: UN comtrade <http://comtrade.un.org/db/default.aspx>, (calculated by author)

As Table 15 shows, China's automotive industry has really improved significantly in the last couple years and all types of Chinese automobiles have an upward trend in the world automobile market. Some sectors, such as Special Purpose Vehicles (8705) and Trailers and Semi-Trailers (8716) have become more competitive than Japan's. In recent years, Chinese Tractors (8701), Public Transport (8702), Trucks (8704) and Goods Transportation Vehicles (8709) have gradually decreased their gaps with Japanese products and increased their position in the world market. In contrast, Japanese motor cars (8703) have an extremely strong competitive advantage.

“Japan's automobiles and components exports have stronger competitiveness than China's. If China opens its automobile market to Japan, it will bring big impacts on the Chinese automobile industry, and will also intensify the competition between the automobile manufacturers of Japan, Germany, the United States, South Korea and France in the Chinese market”²⁸(Xu et al. 2009:143). If China and Japan sign an FTA, the chain stores of European and American automobile manufacturers will increase the components imports from Japan. Therefore, automobiles imports from Europe and the U.S. will be replaced by Japanese and the trade deficit of China's automobile industry to Japan will be further enlarged. However, this opinion is challenged by Ishikawa (2006: 15) who asserts that because the automobile manufactures enforce the principle of “producing in the market where the products are sold”, even if an FTA is concluded, local production will not be replaced by exports from Japan.

Compared with the rapid development of China's automotive industry, Japan's automotive industry seems a little slack. However, most of the Japanese automotive products still have

²⁸ 日本的汽车及其零部件出口竞争力比中国较强，如果中日缔结 FTA，将会给我国汽车产业带来冲击，同时也会加剧日本在中国市场上与德国，美国，韩国和法国的竞争。

stronger competitiveness. As Ishikawa (2006: 15-16) argues, the conclusion of FTA could result in an exports increase in not mass-produced items from Japan; by contrast, for mass-produced items, “a division of labor may develop”. In addition, exports from Japan to China will feel no impact from an FTA and imports from China to Japan should depend on “strategies of automakers and parts manufacturers”.

3.4.3 Textile and Garment Industry

The textile and garment industry is a labor-intensive industry, which is also a comparative advantage China possesses over the United States, Europe, Japan and other developed countries. In the world textile and garment market, China has an obviously stronger comparative advantage than Japan. According to Xu et al. (2009:140), “China has taken more than half of Japan’s market share for a long period and become the main textiles importer for Japan.”²⁹

However, China’s textile and garment industry over-relies on the price advantage, and its design and fabric quality lag relatively behind. Recently, due to China’s constant adjustment of its trade policies as well as Japan’s weak domestic demand and high non-tariff barriers on China’s textiles and garment imports, China’s textile and garment exports declined gradually.

Compared with China’s textile and garment industry, “Japan focuses on using new and high technology to produce the goods with good appearance and multi-function. With competitive advantage in fabric and design, most of the Japanese textiles exports to China are artificial fiber and knitwear.”³⁰ (Xu et al., 2009:141)

If China and Japan sign an FTA, Japan’s domestic demands for high-end and low-end products will challenge competitive position of Chinese low price and quality textile products.

Meanwhile, China has also to face the competition from other countries in Japan’s market, such as Thailand, Malaysia, and the Philippines. Many industry manufacturers presume that the Sino-Japan FTA will increase Japan’s exports to China rather than exports from China to Japan

²⁹ 中国长期占据日本市场份额的一半以上，成为日本诚意和各类纺织品进口的主要来源地。

³⁰ 日本注重利用高新技术生产出外观美，功能多的产品....在对火纺织服装出口方面,日本技术含量较高的人造纤维，针织品具有明显优势。

(Ishikawa, 2006: 27). Therefore, Sino-Japan FTA will impact Chinese textile and garment industry exports.

3.5 Impacts on FDI in China and Japan

3.5.1 FDI in China

Due to active promotion by Chinese government, FDI in China has grown rapidly since 1978, especially in the 1990s. According to UNCTAD Stat, from the early 1990s to the late 2000s, FDI inflow to China has grown from about 40 million US dollars a year to more than 95 billion US dollars a year in 2009. During the same period, China's actual use of FDI grows from about 0.5 billion US dollars to more than 40 billion US dollars a year (Fung et al., 2002: 2).

There were three phases of the FDI development in China. The first phase was in the late 1970s and early 1980s; government policies were characterized by setting new regulations to permit joint ventures using foreign capital and setting up Special Economic Zones (SEZs) and Open Cities (Fung et al., 2002: 2). FDI in China was still in small-scale and in the pilot investment phase.

In the second phase from 1992 to 1998, the investing environment for foreign businesses was very favorable. Government policies began to focus more on linking FDI promotion to domestic industrial objectives. In this period, FDI began a large-scale and systematic investment stage.

The third stage is from 1999 until now. China adjusted its foreign investment strategy to further expand the area of foreign investment and with efforts to promote the diversification on investment areas and investment ways of FDI. Since China entered into WTO and adjusted its foreign investment strategy, foreign investors have also changed their strategy in the Chinese market from the processing type to the "production Base + Sale market" type. The investing motive shifted from searching for raw materials to searching for a market, and many new investing methods have also emerged.

FDI in China has changed its form from joint ventures to wholly foreign-owned enterprises, and the targets of their investment also changed from green field investment to merging with and acquiring local enterprises or listed companies. However, “due to cultural differences and the change of Chinese FDI policies, multinational corporations prefer to set up wholly foreign-owned enterprises, or obtain a controlling stake through increasing their investment in the joint venture, which could help them share the global supply chain, knowledge resource and other strategic resources of multinational companies.”³¹(Zhang, 2005:17)

Secondly, the investing sectors of FDI in China are concentrated in manufacturing industry. Both the investment in high-tech industry and third industry also keep increasing. “The fields of FDI in China developed from textiles, clothing, ports, light industry to automobiles, integrated circuits, telecommunication, finance, tourism, consulting, logistics, wholesale and retail, and public utilities.”³²(Zhang, 2005:17) Furthermore, multinational enterprises also implement diversified strategies, such as releasing more than one product, brand or service in the market, and systematic investing in different levels of production, distribution, and after-sales service.

Finally, from localization to globalization, the multinational corporations have taken China as an important part of their world markets and include it in their global production, supply and research systems. To meet local and global needs, they built production, purchasing and research and development centers in China.

3.5.2 FDI in Japan

As one of the world’s largest economies, Japan is relatively unwilling to introduce foreign capital into its market. According to Zhang (2005:17), “FDI in Japan began since 1990s after a long period of economic stagnation. In 1990, FDI inflow to Japan was only 1.8 billion U.S. dollars a year. In 1999 FDI in Japan increased to 12 billion US dollars, and then started to decline. During 2001-2003, annual average FDI in Japan was 7.3 billion US dollars.”³³ As

³¹ 由于合资双方在利益和文化上的差异，投资企业对中国市场由陌生到熟悉，中国的政策环境由紧到松等原因，跨国公司现在更倾向于建立独资企业，或通过增资扩股在合资企业中取得控股权，以便分享跨国公司的全球供应链、知识库等战略资源。

³² 投资领域涉及纺织，服装，港口，轻工等行业。汽车，集成电路，电信，金融，旅游，咨询，物流，批发和零售，公用事业等成为外商投资新热点。

³³ 日本自20世纪90年代经过长期经济景气停滞，才开始注意外国直接投资的作用，采取积极的外资引进

Table 3.5.2 shows, in 2007, FDI in Japan increased to a peak of 23 billion US dollars and accounted for only 5.3% of Japan's GDP.

Due to the legal system in favor of mergers and acquisitions, most foreign enterprises chose M&A as the main form of their investment in Japan. The EU and the United States are the major investment sources of Japan. In order to get the domestic enterprises out of their difficult position and renew its economy, the Japanese government has actively taken a series of measures to improve its FDI environment. In addition, Japan has also improved the living environment for foreigners, and allowed foreign enterprises to merge Japanese enterprises with its own stock. All of these helped the development of FDI in Japan.

FDI in Japan mainly focuses on the services industry. According to Zhang (2005:17-18), "since the 90s FDI in Japanese manufacturing and services industry has increased substantially.

Manufacturing FDI focuses mainly on electronic appliances, machinery, chemical, metal and food. The non-manufacturing FDI focuses mainly on financial insurance, communication, commerce, services."³⁴

3.5.3 Comparison of FDI in China and Japan

According to Table 16, China is the most attractive investment target in East Asia. The FDI in China reached 95 billion US dollars in 2009, 61.4% of the FDI in East Asia. In contrast, the FDI in Japan and South Korea were 7.7% and 3.8% of the FDI in East Asia in 2009, respectively.

Table 16: Inward foreign direct investment flows annual 2000-2009 (US\$ millions)

Year	1990	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Economy												
China	3,49	40,32	40,72	46,9	52,74	53,5	60,63	72,41	72,72	83,52	108,31	95,00
Japan	1,81	12,74	8,32	6,24	9,24	6,32	7,82	2,78	6,51	22,55	24,43	11,94
South	759	9,883	9,004	4,09	3,399	4,38	8,997	7,055	4,881	2,628	8,409	5,844

政策。自1997年开始日本的FDI持续增加, 1999年一度达到120 亿美元, 此后持续下降。2001-2003年期间, 日本的年均吸引外资73亿美元。

³⁴ 日本自90年代后期开始, 日本制造业和服务业的FDI大幅增长。制造业的FDI集中于电子电器, 一般机械, 计算机在内的机械类, 化工, 精油, 金属和食品。非制造业的FDI主要集中在金融保险, 通信, 贸易, 一般服务业。

Korea												
Eastern Asia	8,79	77,73	116,6	79,1	67,71	72,7	106,3	116,2	131,8	151,0	185,5	154,8

Source: UNCTAD Stat

http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx?sCS_referer=&sCS_ChosenLang=en

Although the levels of FDI in China and Japan are in different stages, the focus and relations between the two countries are still complementary, which indicates the economic cooperation of the two countries will not bring big impacts on their FDI industries. However, the Chinese government still worries that if China and Japan conclude an FTA, Japanese domestic exports caused by China's abolition of its tariff and non-tariff barriers will be replaced by Japan's FDI in China's manufacturing industry. In other words, "Japanese enterprises, which originally invested in China, are likely to produce the goods in land and then export them to China due to the trade barriers The mechanical, electrical, automobile enterprises will continue their production in China, but they may produce its core components and high technology material in Japan to prevent the loss of know-how. As a result, Japan's FDI in China may show structural fluctuations in short term."³⁵(Xu et al., 2009: 157)

Furthermore, Sino-Japan FTA will also bring "trade creation" and "trade diversion" effects. The enterprises outside the FTA area may directly invest in China to bypass the tariff barriers, which is beneficial to China to attract FDI. However, to enjoy the preferential tariffs within the area, the enterprise outside the area needs to meet the requirements of rules of origin, which are actually very complicated. Therefore, the enterprises outside the area may require China to open its market. For instance, Europe and the U.S. may pressure China to open its automobile, chemical, finance and insurance markets to change their unfair treatment in the competition with Japan in China.

Of course, Sino-Japan FTA can promote China's investment in Japan, but the impacts will be very small. Because either the scale or amount of Chinese investment in Japan is still in an initial stage, and cannot compare with developed countries such as the United States, the Netherlands, France and Germany, and even Asian countries like Singapore and South Korea.

³⁵ 原来围绕过贸易，壁垒而到中国投资的部分日本企业，很可能在日本国内增产后再出口到中国...汽车，机电等领域在中国的生产仍将会继续，但其核心零部件，高技术材料等很可能留在日本国内生产，以防止技术流失。因此，日本对华直接投资短期内可能会出现结构性波动。

For Chinese enterprises it is really not easy to invest in a country such as Japan, with a highly developed economy, higher investment costs and complicated business management.

3.6 Economic and non-traditional benefits of Sino-Japan FTA

For China, Japan is its third-largest trading partner and source of its FDI. For Japan, China is not only an important investing target, but also the second-largest trading partner. According to UNCTAD Stat, the total merchandise trade between China and Japan in 2008 and 2009 were 268.13 and 232.3 billion US dollars, respectively, far higher than the total trade volumes between Japan and the U.S. in 2008 and 2009 (217.64 and 155.89 billion US dollars). If China and Japan conclude an FTA, the economic cooperation and integration between the two countries could be strengthened and even regional integration activities could also be promoted.

China and Japan are in different stages of economic development, and their economic relationship is complementary. China has abundant labor and natural resources, a rapid economic growth rate and large consumer markets. In contrast, Japan has its comparative advantages in capital and advanced technology, but the domestic market is nearly saturated. Generally, FTA is an effective solution to promote the accumulation of human resource and know-how, and enhance the rate of return on investment. In addition, it is also often used to transfer resources from weak competitive industries to strong competitive industries, and improve the effectiveness of the distribution of resources, which could lead to an increase of GDP and income and bring long-term economic growth and competitiveness improvement. Therefore, the establishment of Sino-Japan FTA is beneficial to the economic development of both countries.

3.6.1 Economic Effects of Sino-Japan FTA

It is well known that trade creation and trade diversion will appear due to the formation of a free trade area or a customs union. In general, “the trade relations between two countries with different economic development levels are highly complementary and their economic cooperation will easily generate the effect of trade creation. By contrast, countries with similar

economic development levels have competitive relations and their bilateral FTA will bring a trade diversion effect.”³⁶(Ma, 2010:1)

As discussed previously, China and Japan are two countries with different economic development levels and have an economic complementary relationship. If China and Japan conclude an FTA, it may bring challenges to some industries in the short term, such as Japan’s agricultural industry, and China’s automotive and textile industries. However, some Chinese and Japanese experts are strongly convinced that Sino-Japan FTA will promote a sustainable development of Sino-Japan economic growth.

Table 17: Analyses of FTA’s effects on China and Japan’s GDP (%)

FTAs	Research Dept. of Foreign Economic Relations at the Development Research Center(DRC) of the State Council, P. R. China (2006)		Department of International Economics and Trade, Nankai University, Xue et al. (2004)		Research Institute for Asian Economy, Japan, by Chiharu (2007)		Mitsubishi Research Institute (2004)		A study on the Sino-Japan FTA Issues, Xu et al.(2009)	
	China	Japan	China	Japan	China	Japan	China	Japan	China	Japan
Sino-Japan	2.17	0.34	3.34	0.28	0.05	0.01	1.27	0.20	0.03	0.10
Japan-South Korea	-0.10	0.15	1.47	0.14	0.00	0.01	-0.03	0.04		
Sino-South Korea	0.83	-0.01	1.76	-0.07	0.04	0.00	0.38	-0.01		
C-J-K	2.9	0.48	3.83	0.42	0.09	0.02	1.63	0.23		
C-J-K-ASEAN	3.40	0.78	4.27	0.76	0.11	0.04	1.84	0.33		
Sino-ASEAN	0.78	-0.08	2.40	-0.05	0.02	0.00				
Japan-ASEAN	-0.25	0.35	1.49	0.38	0.00	0.01				
South Korea-ASEA	1.61	-0.04	1.61	-0.04						

Source: (Xu, et al., 2009:111-112)

³⁶ 经济发展水平差距较大的国家在经济上的互补性较强，容易产生正面的“贸易产出效应”。而经济发展水平相近的国家之间的相竞争性较强，则容易产生负面的“贸易转移效应”。

According to the results of China's Research Dept. of Foreign Economic Relations, Department of International Economics and Trade of Nankai University, and Mitsubishi Research Institute, under the Sino-Japan FTA China and Japan's GDP will increase 2.17%, 3.34% and 1.27%, and Japan's GDP will increase 0.34%, 0.28% and 0.20%, respectively. According to Chiharu, the increase of China and Japan's GDP caused by the conclusion of Sino-Japan FTA are only 0.05% and 0.01%, respectively. As the study of Xu et al. shows, if the conclusion of Sino-Japan FTA is accomplished, Japan's GDP increase (0.10%) is larger than China's (0.03%). Therefore, according to these academic study results, no matter which country's GDP growth is higher, the conclusion of the Sino-Japan FTA will surely bring positive economic effects to both countries.

“Sino-Japan FTA can enlarge the bilateral trade scale between the two countries. The exports of some Chinese industries will increase to different extents, such as agricultural products, livestock and poultry, textile and garment, etc. By contrast, Japan's livestock and poultry, textile and garment, automobiles, video, chemical exports will post a larger increase.”³⁷(Xu et al. 2009:113) This ascribes to Japan's technical advantage and China's huge consumer market. However, “the exports of Japan's electronics, constructions, communication and other industries will show negative growth, which may also be attributed to the trade diversion effect caused by Sino-Japan FTA.”³⁸(Xu et al. 2009:113-114)

According to Xu et al., although Sino-Japan FTA will increase bilateral trade volumes, it will still “constrain the outputs of some industries in both countries, such as automobiles, livestock and poultry, resource and energy, etc. This may be caused by China's relative backward technology and the fierce competition from European and American enterprises. In addition, compared with Japan, the output of China's chemical and electronics industries will suffer from a decline to some extent. However, the output of China's food and crop production industry will keep increasing, but that of Japan will decrease.”³⁹(Xu et al. 2009:114-115).

³⁷ 中日 FTA 会使双方贸易规模获得较大增长, 中国各个产业对日出口均有不同那个程度的增加, 尤其种植业成倍增长, 畜禽, 食品, 纺织服装等。相比之下, 日本的畜禽, 纺织服装, 汽车等交通工具, 食品, 化学等行业对华出口增幅较大。

³⁸ 日本电子, 建筑, 通信等行业对华出口会出现负增长, 这可能是因为中日 FTA 产生贸易转移。

³⁹ 中日双方的汽车, 畜禽, 资源与能源的产出会减少.....这可能是因为中国的生产技术相对落后, 而日本也将会面对来自欧美企业的竞争。在化学, 电子领域, 中国的产出会有一定程度的减少, 而日本会获得

Besides the economic effects on GDP brought by the Sino-Japan FTA, some non-traditional benefits are also very remarkable. Generally, under the regionalism framework the pursuit of non-traditional benefits is another direct power to promote an FTA.

3.6.2 Non-traditional benefits of Sino-Japan FTA

The success of EU and NAFTA has proved that coordination among the big powers is the key for the success of regional economic cooperation. As the major powers in East Asia, China and Japan's cooperation and the function of their leadership are considered as important prerequisites for the East Asian regional economic integration. The cooperation between China and Japan could on one hand reduce East Asia markets' interdependence on the markets outside the region and stabilize the regional economic development, on the other hand build a better international manufacturing network for the regional economic cooperation. If China and Japan establish an FTA, it could create new export and investment markets for both countries, optimize their economic and trade structures, and reduce their trade frictions with other countries caused by the large trade surpluses.

Moreover, Sino-Japan FTA can abolish tariff and non-tariff barriers and form division of labor according to their comparative advantages, which will improve the efficiency of the distribution of resources and reduce the competitiveness of related industries.

Thirdly, Sino-Japan FTA can also promote the development of their competitive industries, and expand the investment of regional member countries and even countries outside the region. For regional member states concluding FTAs with China and Japan means the abolition of tariffs and reduction of transaction costs, which is more favorable than direct investment. Therefore, horizontal direct investment among regional member countries will decrease, but vertical direct investment among FTA member countries will increase. Because Sino-Japan FTA could help the member states inside the region abolish tariffs and enlarge markets, but increase the tariff and non-tariff barriers for trade countries outside the region, the countries outside the region will intensify their direct investment and establishment of production bases in the two countries to bypass tariff barriers and expand their common market shares.

增长。在食品和种植业，中国的产出会保持增长，而日本则会减少。

At last, if Sino-Japan FTA is concluded, their different economic development levels and complementary trade relations can promote their strategic alliance within an industry, expand direct investment and technology transference, and improve the development of technology and competitiveness. Meanwhile, trade investment liberalization could also invigorate regional investment, attract the inflow of foreign capital outside the region, and improve the investment environment.

3.7 Non-Economic Obstacles

In addition to the concern of the severe impacts caused by the conclusion of Sino-Japan FTA, some interference of political, historical, and external factors is also the reason of the delay to Sino-Japan FTA negotiations. With reference to Gao's (2004) argument of five main hindrances for Sino-Japan FTA: policy, politics, economy, history and security and Chiharu's (2007) concept of "American influence", this part will focus on highlighting the main obstacles to the conclusion of Sino-Japan FTA: FTA strategy, political, historical and the U.S. factors.

3.7.1 Japan and China's FTA Strategies

According to Gao (2009: 7), FTAs can be broadly divided into two models. "One is the EU model, which includes both economic and political integration. The other is the NAFTA model, which focuses on economic integration only. Within the NAFTA model, again there are two different sub-categories. The first is the Economic Partnership Agreement (EPA) approach advocated by Japan, which seeks to conclude comprehensive agreements that include trade in goods, services, and sometimes even environment protection and intellectual property rights. The other approach is much narrower and focuses on trade in goods only. China has chosen to take the narrower model."

3.7.1.1 Japan's FTA Strategy

Solis gives a comprehensive analysis of Japan's FTAs strategy. She argues that it is mainly competitive dynamics that can best explain Japan's sudden change of approach to bilateral FTAs. "Japan has used its FTAs to meet three main challenges: 1) to restore or advance the

competitive advantage of internationally-oriented business sectors in selected overseas markets; 2) to disseminate a distinct Japanese approach to preferential economic integration different from both the American and Chinese FTAs; and 3) to hone its regional leadership credentials vis-à-vis China by reaching out to Southeast Asian nations, and inviting extra-regional partners to integration talks in order to balance China's influence.”⁴⁰(Solis, 2008)

In 2002, the Japanese formulated the “Japan's FTA strategy”, which detailed how analysis and elaboration of the signing of an FTA and the significance of Japan in the process of FTA negotiations must follow the standards and strategy.

Japan's EPA proposals are in large part designed as FTAs, but are also broader in scope, containing a variety of provisions on investment, industrial harmonization, and human resource development (EPA: Economic Partnership Agreement). In addition, in order to meet the requirements of the domestic protectionists, Japan's FTA strategy continues to protect some domestic sensitive sectors, which could help Japan avoid the sensitive sectors such as agriculture being concluded in FTAs.

However, due to the Asian Financial Crisis and rise of China, Japan has recently changed its FTA strategy. Japan is beginning to develop bilateralism and regionalism in concordance with the WTO multilateral trade system and plans to establish a framework before an FTA negotiation. In order to speed up FTA negotiations, the order of the negotiating partners will start from those countries which are already ready. East Asia is the main target of Japan's new FTA strategy. However, because the leaders in Tokyo are “caught up in the details and find it hard to make bold moves in the face of resistance from politically powerful sectors, like agriculture,” (Naoko, 2003:8) it is difficult for Tokyo to launch an FTA strategy and that also explains well why Japan has been slower than some countries in East Asian, such as China, in accomplishing trade talks with regional partners in Asia-Pacific.

Japan's FTA strategy in the early stages excludes China from the priority target, which leads to the loss of many opportunities to benefit from the trade and investment liberalization. China is Japan's second largest trading partner and investment destination in East Asia. During the

⁴⁰ Cited by Jose Guerra Vio, Japan's Regional Economic Integration Strategy: A nascent and Competitive FTA Diplomacy, Asian Journal of Public Affairs, Vol.3. No.2, p.12

long-term bilateral trade and investment cooperation, China and Japan have formed the industrial division on the basis of their complementarities and have a relatively deep and powerful level of economic integration. However, because of the impact of the “China threat” theory and the complicated bilateral relationship in political, diplomatic, security and other aspects, the future development of China and Japan’s bilateral cooperation is difficult to predict.

China is Japan’s long-term target also because of Japan’s five criteria of FTA strategy: (1) economic criteria; (2) geographic criteria; (3) political and diplomatic criteria; (4) feasibility criteria; (5) time-related criteria.⁴¹ Specifically, China does not meet the economic, and political and diplomatic criteria. Although China’s economic growth has boosted Japan’s economic development, Japan is not willing to see a strong China in regional politics. Thus, although Sino-Japan FTA is a win-win proposition for both countries, Japan still puts China after ASEAN, Australia and South Korea in its FTA strategy. Another good explanation of the “China threat” theory is Japan’s 10+6 proposal on the East Asia Summit. In 2006, Japan proposed the concept of East Asian EPA to establish an FTA including ASEAN, Japan, China, South Korea, India, Australia and New Zealand. It obviously indicates that Japan wants to balance the role of China in East Asian integration through the “10+6” cooperation mechanism. Moreover, to compete against China to become the new hub of regional integration in East Asia, Japan’s strategy when trying to sell its EPAs in South East Asia stresses “the higher quality of Japanese FTAs, especially on its binding obligations and their capacity to promote development.”⁴²(Solis, 2008)

3.7.1.2 China’s FTA Strategy

China’s FTA strategy starts from focusing on trade in goods. “Recently, however, China has shown some willingness to include the issues such as services and investment as part of the FTA package.”(Gao, 2009: 7)

⁴¹ Japan’s FTA Strategy (Summary), MOFA, <http://www.mofa.go.jp/policy/economy/fta/strategy0210.html>

⁴² Cited by Jose Guerra Vio, Japan’s Regional Economic Integration Strategy: A nascent and Competitive FTA Diplomacy, Asian Journal of Public Affairs, Vol.3. No.2, p.12

In 2001, China joined the WTO and then began to pursue its regional strategy by using FTAs. According to Li and Hai (2003:138-156), maintaining and expanding the export market and reducing adjustment costs for trade liberalization caused by being a member of the WTO are the two main reasons for Chinese active implementation of FTA strategy in East Asia. China began to be concerned about its export market because of the increase in FTAs and protectionist measures against Chinese exports by some developed countries, particularly in the form of antidumping charges. Therefore, China takes FTAs as a possible solution for the obstacles to expanding its exports. It should be noted that the decrease of further trade liberalization cost caused by its accession to the WTO impelled China to turn to FTAs.

Another notable geopolitical reason behind China's FTA strategy is that China considers FTA strategy as an important method to increase its economic and political influence in East Asia. Through establishing and maintaining a peaceful and stable relationship with ASEAN, China wants to concentrate its efforts on economic growth (Urata, 2005: 8).

According to Gao (2009: 8-10), the criteria for China to determine which countries shall be graced with the honor of becoming a member of the coveted FTA club are: first, the country has a good political and diplomatic relationship with China; second, the country has complementary economic structures and trade patterns with China; third, the country either has substantial domestic market or serves as an FTA hub in a particular region; fourth, the country shares common intentions on building FTAs with China.

However, it seems to be quite random when we take a look at the list of countries/regions which have negotiated or are negotiating FTAs with China. "The top three trading partners of China, i.e., the EU, US and Japan, are not on the list. Furthermore, there are only three countries among the top ten trade partners of China, i.e., each of ASEAN, Singapore and Hong Kong which have concluded FTAs with China. Of the remaining seven countries/regions, only another two, i.e., Australia and South Korea, have started or are about to start negotiations with China. Of the other countries/regions which have concluded or are negotiating FTAs with China, many only have negligible trade volume."(Gao, 2009: 8)

In fact, China is willing to accelerate the process of Northeast Asia integration, in particular, setting up FTA with Japan and South Korea. In contrast with Japan's concept of "10+6" cooperation framework, China alleges that the regional integration in East Asia should be steadily developed on the basis of "10+3" framework. Furthermore, China alleges that in order to accelerate the process of integration in Northeast Asia, the FTA between C-J-K should be previously completed.

3.7.1.3 Similarities and differences of Japan and China's FTA strategies

Through the analysis of Japan and China's FTA strategies above, three similarities of the two countries can be concluded as follow: 1. both China and Japan actively carry out FTA strategy and relevant policies; 2. both of them have paid attention to the compatibility of FTA policies and the WTO rules; 3. both of them take the ASEAN and other regional countries into the first consideration, and take the measures in and outside the region in parallel;

However, due to the rapid growth of domestic economic development, China urgently need stable raw material and export markets. Thus, China's FTA strategy seems more practical and flexible than Japan's. China attaches great importance to setting up the FTA cooperation with ASEAN, Japan, South Korea, Australia, New Zealand and India. Conversely, networks outside the region are relatively thin. In contrast with China's FTA strategy, Japan's FTA strategy pays more attention to EPA system and bilateralism, which includes not only trade, but also economic cooperation and investment relationship. However, due to Japan's over protection of the domestic agricultural industry, the selection criteria of its FTA/EPA partners have a lot of limitations.

Therefore, the differences in Japan and China's FTA strategies present two main aspects: 1) different proposals about regional integration and Sino-Japan FTA; 2) different focus of their FTAs.

Firstly, China has advocated that East Asian integration should be under the already-formed "10 +3" cooperation mechanism. In contrast, Japan has strongly proposed the "10 +6" system and wanted to pull Australia, New Zealand and India into this framework, which indicates its intention to eliminate the United States' doubt and balance China's power.

Referring to Sino-Japan FTA, China's attitude is very clear and positive. In January 2005, the Chinese Ambassador in Japan proposed the concept of establishing the Sino-Japan FTA at the Kansai financial forum; in May of the same year, the Vice Premier of China Wu Yi also expressed the opinion of starting Sino-Japanese FTA process as soon as possible during her visit to Japan. By contrast, Japan's attitude is relatively vague and negative. In the order of Japan's FTA negotiating partners, China is listed at the end of the "10+6" countries. Obviously, one of the reasons of this arrangement is to establish Japan's leading position in regional integration.

Secondly, the focus of their FTAs is also different. Japan is an economically highly-developed country. The tariffs of manufactured products are relatively low in Japan. However, Japan pays close attention to investment rules, intellectual property protection, and dispute settlement mechanisms in concluding FTAs with other countries. By contrast, China is still a developing country, and its economic scale and industrialization level lag far behind Japan's. Therefore, China concludes FTAs starting from the liberalization of trade in goods and gradually to trade in services and other fields.

In addition to the differences mentioned above, China and Japan's FTA strategies also expose their energy dispute. Japan is a country lacking energy resources and strongly relies on energy imports. With the rapid growth of its economic development, China's demand for energy is also continuously increasing. Therefore, both China and Japan consider the stability and diversification of energy supply as an important part of their FTA strategies.

“Japan attaches great importance to energy factors in formulating FTA strategies and policies. Many of Japan's FTA negotiating partners are energy-rich countries or areas, such as Indonesia, crude oil, natural gas and coal exporter to Japan; Brunei, crude oil and natural gas exporter to Japan; Australia, iron or coal and other important resources exporter to Japan; Gulf Cooperation Council, oil exporter to Japan. Many of China's FTA negotiating partners are also its energy exporters, such as Chile, copper exporter to China; Australia, iron ore exporter to China; Gulf

Cooperation, crude oil exporter to China; some ASEAN members are also China's mineral raw materials, oil, natural gas exporters.”⁴³(Xu and Zhao, 2008:64)

In summary, China and Japan have some similarities and common interests in their FTA strategies, which could provide certain opportunities for the conclusion of an FTA between them and even regional economic integration. However, there are still some differences and interests disagreements between the two countries, which will also act as hindrances to strengthening their trade relations and promoting regional economic cooperation. How to reduce and resolve divergences, deepen cooperation and promote regional prosperity and development will become a common issue for China and Japan.

3.7.2 Political Factors

China and Japan's social and political systems differ greatly in nature. The huge differences of the capitalist and socialist systems and constitutional monarchy and one party state ruled by the Chinese Community Party (CCP) lead to the unique political relations between the two countries. Japan is more afraid that China will take over its leading position in regional political and economic activities rather than that China will become a strong regional competitor. Therefore, the Japanese government does not adopt an active attitude toward political and economic cooperation with China. In fact, political trust takes an important place in the regional economic cooperation. However, due to the disagreements on maritime rights and Japan's refusal to apologize for its crimes during World War II, China still preserves its natural aversion to Japan. Therefore, the degree of Sino-Japan political trust is very low.

3.7.3 Historical Factor

In the pursuit of concluding an FTA with China, Japan confronts historical problems because Japan colonized part of China during WWII. Although both countries reiterated “learning from history and facing the future”, Japan's attitude toward historical issues still leads to an up and

⁴³ 在日本的 FTA 谈判对象中,很多都是能源丰富的国家或地区,如印度尼西亚对日出口的一半左右是原油,天然气和煤炭,文莱对日出口的主要是原油和天然气,澳大利亚是日本进口铁矿石,煤炭等资源的重要来源地,海湾合作组织则是日本进口石油的重要来源地。在中国的 FTA 谈判对象中,很多也是重要的能源资源产地,如中国铜矿砂进口来自智利,铁矿石进口来自澳大利亚,原有进口来自海湾合作组织,东盟一些成员也是中国矿物性原料,石油,天然气进口的来源地。

down foreign relationship between the two countries. In particular, “a large proportion of people in China and to lesser extent in South Korea remember the sad experiences under Japan’s occupation and thus do not have a good impression of Japan, which makes cooperative agreement such as FTA with Japan difficult to be realized.” (Urata, 2005: 82). From “the textbook issue” in 1982 to former Prime Minister Junichiro Koizumi’s visit to the Yasukuni Shrine Sino-Japanese, relations regarding the historical issues have been set back over and over again.

The Yasukuni Shrine is the issue most discussed and is most symbolic of the difficulties between Japan and its largest neighbors, China and South Korea (Armstrong, 2010: 28). Both of the Japanese former Prime Ministers Abe and Fukuda gave a clear message that they did not visit the Shrine in order to mend Sino-Japan relations. “Recognition of the implications of shrine visits is now clear and even if future leaders do seek to increase political tensions for domestic political reasons, it would appear these actions would be taken in a manner so as to minimize the damage to Japan–China relations.”(Armstrong, 2010: 28)

3.7.4 The U.S. Factor

The United States take an important role in the process of signing Sino-Japan FTA. The U.S. does not expect the global liberalization process to be replaced by the proliferation of bilateral and regional agreements, in particular, economic integration in East Asia. The "Asia-Pacific Free Trade Zone" program proposed by the United States also aims to integrate the signed bilateral agreements in East Asia and prevents the possible intention of signing bilateral agreements.

In addition, with the rapid growth of China’s economy and its rising influence in East Asia, the United States considers China as a major threat to its interests. Under these circumstances, the United States certainly does not want to see an alliance between Japan and China. Therefore, the United States will do everything possible directly and indirectly to influence the conclusion of Sino-Japan FTA.

Japan's foreign economic policy is always affected by the United States. In the early 90s, former Malaysian Prime Minister Mahathir Mohamad proposed the establishment of an East Asian

Economic Caucus, which was strongly opposed by Japan and the United States. As a result, this idea ultimately failed to be realized. After the 1997 Asian Financial Crisis, Japan proposed the "Asian Monetary Fund" concept, which was an opportunity for Asia to strengthen its financial cooperation. However, still due to U.S. opposition, this proposal was not achieved.

Nowadays, the United States is searching for open markets for its pursuit of economic prosperity and the Sino-Japan FTA is consistent with its interests. Therefore, the United States will support the economic cooperation between China and Japan to some extent. However, either a restrictive or a supportive policy toward China by the United States strongly affects the process of Sino-Japan FTA.

4 Practical Solutions for Challenges and Obstacles

The formation of an FTA is an intermediate goal and deeper economic integration like the EU is an ultimate goal. The motive behind the policies is potential benefits in both economic and non-economic aspects from these arrangements (Urata, 2005: 10). However, there are still various obstacles and political pressures as mentioned previously to the conclusion of the Sino-Japan FTA. In particular, non-competitive sectors have to face fierce competition after the conclusion of Sino-Japan FTA. Therefore, in this section the paper intends to study the possible solutions and practical policy adjustments to overcome the challenges and obstacles for the establishment of Sino-Japan FTA. In the first part, the author makes some suggestions as to how to solve the non-economic problems and mitigate the impacts of Sino-Japan FTA on chemical and automobile industries and FDI. In the remaining two parts, specific solutions for the agricultural and services industries will be discussed.

4.1 General suggestions to promote the Sino-Japan FTA

4.1.1 Promote mutual trust level

Since the Asian Financial Crisis, China, Japan and South Korea realized that it is necessary to speed up the East and Northeast Asia integration process, in particular the China-Japan-Korea FTA. However Japan's improper treatment of historical issues greatly hurt Chinese national

feelings and had a significant negative impact on the political trust basis between China and Japan, which hinders the economic cooperation between the two countries. Although under the APEC and the “10+3” mechanism the economic and trade cooperation between China and Japan has achieved some progress, compared with the expected results this progress still seems too small. Therefore, China and Japan should support each other to enhance their political mutual trust, strengthen coordination and cooperation, and maintain peace and stability in Northeast Asia. As long as both sides keep their long-term exchange and cooperation, Sino-Japanese relations can be greatly improved. Moreover, the improvement of political relations and mutual trust could promote Sino-Japan FTA and economic integration in Northeast Asia as well.

4.1.2 Establish regular consultation mechanisms

The establishment of stable consultation mechanisms to coordinate FTA strategies in Northeast Asia is very significant for Sino-Japan FTA negotiations. The consultation mechanisms could include a yearly Leaders Summit between China, Japan and South Korea. Although Chinese and Japanese leaders meet and consult regarding political, diplomatic and economic issues every year at the APEC Summit and the East Asian Summit, it is still necessary to hold a Summit only for China, Japan and Korea’s leaders to discuss how to improve and promote economic and trade cooperation between the three countries, in particular, speed up their FTA negotiations.

Secondly, a multi-sectoral consultative conference could also be held between China and Japan. Although some Chinese and Japanese governmental departments, such as customs, finance, technology and trade have already started to hold regular meetings and consultation, the consultative mechanism still has limited influences. Therefore, if a multi-sectoral consultative conference can be held and specific issues in various fields can be coordinated and consulted, government efficiency could be effectively improved and the cooperation process will also be greatly accelerated. Meanwhile, it could also oversee the feedback from each department, and coordinate the problems of various departments. If the consultative mechanism could be established, both China and Japan can easily deal with the problems, such as trade friction, security issues, territorial disputes, and historical issues.

4.1.3 Adjust trade policies

For Chinese government, it is necessary to “modify the strategic policy of ‘export fetishism’, and realize the balanced trade that pays equal attention to export, import, and sale in domestic market.”(Zhang and Wang, 2010:3) As Zhang and Wang argue (2010: 3), the strategy of “export fetishism” was one of the reasons for the increase of economic frictions between China and other countries. Due to the deterioration of Chinese trade conditions, and the growth of financial burden and the dependence on foreign resources, China should pay more attention to the export and import markets. For instance, China “should stabilize export, and keep the balance of the trade benefit and domestic demands.” (Zhang and Wang, 2010: 3)

4.1.4 Strategic alliances in manufacturing industries

As discussed previously, China’s chemical and automobile industries are in a disadvantageous position compared with Japan’s absolute advantage, and the Sino-Japan FTA is more beneficial to Japan’s chemical and automobile industries. Therefore, both China and Japan should accelerate their industrial structure adjustment before they start their FTA negotiations.

Strategic alliance between Chinese and Japanese enterprises in manufacturing industries is considered a feasible countermeasure to mitigate the impacts caused by the conclusion of Sino-Japan FTA. Due to the similar production structure of some manufacturing industries if China and Japan conclude an FTA, both Chinese and Japanese governments have to make efforts to inhibit production overcapacity and ease fierce competition. Therefore, if a strategic alliance between Chinese and Japanese enterprises is established, the intra-regional products structure can be integrated, intra-industry trade can be expanded, and the destruction caused by excessive competition can also be avoided.

4.1.5 Transition period for sensitive industries

A system including re-employment, job training, social security settlement, compensation programs and regional development policies could also be set up, so that the damages of sensitive industries caused by Sino-Japan FTA could be mitigated. Another possible way to deal with the necessary structural adjustment is to “implement scheduled trade liberalization in

sensitive sectors as a part of FTA agreement.” (Urata, 2005: 11) In other words, a transition period could be left for some sensitive industries, such as Japan’s agricultural industry, if they have to be appropriately excluded or postponed in the process of FTA negotiations. It could help China and Japan make necessary adjustments to industrial structure and reduce concerns in the process of FTA negotiations.

4.1.6 Promote investment and trade liberalization

China and Japan should expand new investment areas, promote trade products diversification and expand intra-industry and intra-enterprises trade.

China and Japan could draft a regional investment agreement, such as an agreement for the agricultural industry. If a regional investment agreement for agricultural industry is concluded, Japanese peasants could work on agricultural production and processing in China. Therefore, China could also provide Japan with high-quality and low-cost agricultural products, and Japan could offer appropriate industrial markets for Chinese agricultural products.

Moreover, Japan’s investment in China is very unitary and focuses mainly on labor-intensive industry, which contributes to China’s absolute comparative advantage of this industry. With the improvement of China’s trade condition, “Japanese investment should be encouraged in the industries of infrastructure, agriculture, the third industry, financial insurance, and science and research.” (Zhang and Wang, 2010: 3)

China and Japan should also gradually reduce their tariffs and liberalize their trade markets. The trade between China and Japan has concentrated on industries, such as iron, steel, chemical, mechanical and electrical equipment commodities for a long period. Trade tariffs hinder the expansion of bilateral trade and could even reduce trade volumes because of the development of import substitution industries in import countries. If trade liberalization could be finally achieved through Sino-Japan FTA, investment efficiency could also be further enhanced. As a result, bilateral trade will be complemented without hindrance.

4.2 Specific Solutions for Agricultural Industry

“Despite the difficulties, the agricultural sector should be included in the list of tariff reductions for China-Japan FTA.” (Honma, 2006: 6) The liberalization of agricultural trade in both countries is an essential obstacle for the conclusion of Sino-Japan FTA. Although Sino-Japan FTA can bring more benefits to China’s agricultural industry, Japan’s protection of agriculture should still be removed, because it could not only promote FTA but also increase its own economic growth.

One of the reasons for the difficulty of agriculture liberalization is “its negative impacts on employment. It is important to recognize that protection of the agriculture sector does not ensure employment of farmers alone, but also the workers engaged in the agriculture sector such as construction workers building irrigation systems and workers at farmers’ cooperatives.” (Urata, 2005:81)

In addition, Japanese agricultural association is very powerful. If the government proposes to open agricultural markets, it will arouse strong domestic opposition (Ahearn, 2005: 12). With the popularity of the idea that “Japan should stop wasting resources on crops that can be imported more cheaply, policy reforms to help move Japan away from considerable agricultural protection have been slow to materialize. However, due to opposition from influential members of the LDP’s (Liberal Democratic Party) ‘farm tribe’ and the absence of a substantive reform plan to make Japan’s farm sector more efficient, agriculture is bound to continue to be a major stumbling block for concluding economically meaningful FTAs/EPAs.” (Ahearn, 2005:12)

Therefore, with the consideration of a decline in output and employment, Japan hopes to postpone its agricultural market opening time or keep the agricultural sector out of FTA negotiations. In contrast, the Chinese government insists that agricultural trade is an inevitable problem in the process of Sino-Japan FTA. In the following, the author will propose a series of measures to solve the agricultural trade conflicts caused by Sino-Japan FTA.

4.2.1 Strengthen agriculture cooperation

As discussed previously, China and Japan's agricultural trade relations are more complementary. In their bilateral trade relations, China exerts its advantage of land and labor resources, and Japan takes advantage of its high technology and rich capital, which promotes the intra-industry trade between the two countries.

Agricultural cooperation between China and Japan fully reflects the rational distribution of their resources and utilization of their industrial complementarity. China has a vast territory, with abundant natural resources and cheaper labor resources, and Japan has advantage in breeding, processing, allocating and technology aspects. Through agricultural cooperation, Japan could get needed agricultural products from China and reprocess them to meet domestic quality and health standards. Furthermore, with the deepening of Sino-Japan agricultural cooperation the exports of Japanese crop varieties, food processing machinery and agricultural production facilities to China will also increase.

4.2.2 Promote the development of intra-regional trade

Although the competitiveness of China's agricultural industry is much stronger than Japan's, the competitiveness of China's land-intensive products still lags behind that of the United States, Canada, Australia and other countries outside the region. With the growth of economic development and farmers' income, the competitiveness of China's labor-intensive products will further decline. Therefore, it is necessary to adopt intra-industry division and regional trade creation to promote agricultural production and trade cooperation between the two countries.

China and Japan should not only acknowledge each others' competitive agricultural products, but also expand the intra-regional trade of complementary products. "Most of the intra-industry trades of agricultural products between the two countries engage in processing agricultural products."⁴⁴(Zhang, 2006:6) Thus, China and Japan should take advantage of Japan's high technology and China's cheap labor and establish an intra-industry division system. Meanwhile, through a technology transference and production sharing system the two countries could

⁴⁴ 两国农产品产业内贸易大部分是加工农产品。

diversify their agricultural cooperation and production, promote the development of intra-regional trade and improve the competitiveness of the regional agricultural products against that of the countries outside the region. For example, “Japan can maintain the self-sufficiency rate on some competitive products, such as, rice, vegetables and fruits, while importing complementary products, such as corn and soybean from China, so as to improve the degree of its agricultural trade dependence within the region.”⁴⁵(Zhang, 2006:6)

4.2.3 Establish coordination and consultation mechanisms

China and Japan have a similar agricultural environment and both are less competitive in the world agricultural products market. Thus, the two countries should try to strengthen their bilateral exchange and cooperation on agricultural products. They could establish a joint committee for agricultural trade, which serves to prevent trade disputes and strengthen exchange and cooperation on products’ quality, production volumes and prices. Meanwhile, it can also promote the conclusion of multilateral agreements on agricultural trade volumes, reduce blind production and avoid economic losses caused by trade issues.

Furthermore, China and Japan can establish a consultation mechanism for Quality Supervision, Inspection and Quarantine. It could help the two countries reduce standard differences in Veterinary and Plant Inspection and Quarantine, improve the agricultural trade regulations, and enhance the foundation of sharing information and communicating. In the consultation mechanism a warning system for inspection and quarantine could also be included. Therefore, the trade friction of imports and exports could be reduced, and quality inspection and quarantine could be avoided, and agricultural trade development within the region could also be smoothly promoted.

China and Japan can also set up a joint production and reserve mechanism to alleviate concerns among Japanese. However, all of these measures must be built on the basis of a good political environment between the two countries.

⁴⁵ 日本可以在保持大米，蔬菜和水果等具有竞争力品种一定的自给率，同时从中国进口玉米和大豆等互补性品种，提高区域内农产品贸易依存度。

4.2.4 Relocate the agriculture functions

Globally, the agricultural industry is no longer a pillar industry of the national economy for countries which completed industrialization. If China and Japan conclude an FTA, the competitive advantage of Japan's manufacturing industry could compensate Japan for its agricultural disadvantage. Japan's agricultural protection policy cannot fill the gap of its domestic demand and supply, and also fails to increase its international competitiveness of agricultural products. It seems to be a good method for Japan to make use of inter-regional division of labor and China's abundant natural resources to overcome its shortage of natural resources and domestic supply of agricultural products. The repositioning of agriculture functions can achieve the coexistence of the two countries' agriculture industries and promote a stable development of agricultural trade within the region.

In future bilateral agricultural trade between China and Japan, China should improve its products' quality, safety standards and business operation strategy, and carry out market diversification and brand strategy. It is necessary for Chinese enterprises to strengthen and improve the ability of industry self-regulation and coordination ability, improve the professional quality of employees and keep up with the world trade and import-export markets.

Moreover, "Chinese government should promote the standardization and certification system of the agricultural products. Through recording the inspection and quarantine of planting and breeding bases, Chinese agricultural products could well deal with the technical trade barriers in other countries and gain a better reputation in the international markets."⁴⁶(Zhang, 2006:33)

4.2.5 Establish agricultural production and processing base

China has competitive advantage in labor-intensive cultivation and breeding industries. However, because Japan very strictly protects its agricultural market, Chinese agricultural exports to Japan increased only very slowly and the proportion in its total commodities exports has also gradually declined.

⁴⁶ 各级政府部门共同推进农产品认证和农产品标准化体系建设, 推广“公司+基地+标准化”的管理模式, 通过对种植, 养殖基地实施检验检疫备案, 使农业化学品的使用处于可控状态, 从而全面应对国外相关技术性贸易壁垒, 树立我国农产品在国际市场上的良好声誉。

Japan's high technology and abundant capital are what China needs for the improvement of the quality of its agricultural products and the expansion of its export channels. China's low cost labor resource is also a main force for Japan's investment in the Chinese market. Thus, if Japan could build planting and breeding bases in China and sell the processed products in its domestic markets, its domestic production losses could be greatly compensated. Moreover, if the investment and trade cooperation could be supported by both governments, it will relieve the bilateral agricultural trade disputes and bring benefits to farmers on both sides.

4.2.6 Adjust agriculture policies

According to Urata (2005: 82-83), for the Japanese agricultural industry "a more forward-looking, pro-active agriculture policy, specifically rice policy, can be considered by providing subsidy to full time farmers with large cultivated land. With this policy, cultivated land will be integrated so that farmers can improve productivity. Besides, the market will be liberalized and, as a result, not only consumers do not have to bear all the burden, but also one big obstacle for FTAs will be removed. It should be noted that Japan's Ministry of Agriculture, Forestry, and Fisheries have been carrying out structural reforms to strengthen the competitiveness of Japanese agricultural sector."

In fact, liberalizing Japan's agricultural sector will help Japan to achieve sustainable economic growth. The conclusion of Sino-Japan FTA will be smoother if this view is widely accepted by most Japanese. Of course, as Urata (2005: 83) suggests, it is necessary to "minimize the resultant unemployment and adjustment costs when liberating the agriculture sector. For example, a possible approach will be to liberalize competitive sectors first and, then, deregulate less competitive sectors after some interval. Many FTAs have such schemes of sequential liberalization for different sectors, depending on their competitiveness."

4.3 Specific Solutions for Services Industry

Recently, the services sector has become the largest sector in many developing countries, and it is the area "where local firms have larger participation and are better able to compete, as compared with the manufacturing sector."(Khor, 2010:16) In addition to the measures

suggested in the last two parts, such as strengthening strategic alliances and cooperation, holding regular consultative conference, developing intra-regional trade, establishing coordination and consultation mechanisms, etc., the two governments should also “focus on development of the domestic economy, training local entrepreneurs, and restructuring social imbalances. Meanwhile, the upgrade of technology and techniques should also be done by the local firms including through importing modern technology,” (Khor, 2010:16)

For Japan, liberalizing its labor market to foreign workers faces strong opposition because it will bring negative impacts on domestic employment and Japanese society. It is often claimed that the number of crimes committed by foreigners is rising, which gives an impression that foreign workers would cause security problems (Urata, 2005: 83).

Cooperation between two governments in regulating the services industry is very necessary. According to Ahn and Lee (2007:13), “coordination and harmonization in regulation of services industries can enlarge related regional markets, thereby helping develop the related service industries as well. For example, cross-licensing in accounting services and harmonization in the auditing system can integrate the market for accounting in the region. Since China and Japan are in different stages of economic development, a step-by-step approach will be a feasible one.”

Both China and Japan should make great efforts to develop the services trade and exert the government’s promotion function in the services trade. The Japanese government’s leading function contributes a lot to the success of its services industry’s development. By contrast, although China’s services trade has seen a rapid growth in recent years, its general quality level is still not high and the competitiveness is also very weak. Thus, the Chinese government should give appropriate protection to its services industry, so that the impacts brought by Sino-Japan FTA on Chinese services industry will be alleviated.

However, liberalization of services market does not mean the opening up of all sectors at the same time. Both governments should implement an opening-up policy for different sectors of the services industry according to their developing status, which can ensure their survival and further development after the establishment of Sino-Japan FTA. However, once the technology

level, production ability and service quality of an industry have been obviously improved, the protection of this industry should be removed correspondingly.

For instance, China has comparative advantage in labor-intensive services. After confirming the focus of the services industry, Chinese government could give priority to the sectors with traditional competitive advantages, such as tourist services, project contracting, and the labor export industry. Furthermore, “China should actively provide tax, credit and other financial incentives to promote the development of telecommunications, financial and other knowledge-intensive services sectors. Information, computer and other newly-emerged industries should also be given some policy support, so that their competitiveness can be enhanced.”⁴⁷(Zheng, 2008:44)

4.4 Prospect: China-Japan-Korea FTA

According to the analyses of economic effects of Sino-Japan FTAs in Table 17, if the China-Japan- Korea FTA is established, the GDP growth in the case of China-Japan-South Korea FTA will be higher than in the case of any two of the three countries signing an FTA. Moreover, if China, Japan and Korea together conclude an FTA with ASEAN, the GDP growth in 10+3 model is even higher than that in 10+1 model. In other words, under the situation of uneasily concluding an FTA between China and Japan, to sign an FTA with Korea respectively and then conclude an FTA between the three countries on the basis of Korea as an axis will also be a good policy.

China, Japan and Korea are major exporters and investing targets for each other. With the growth of restriction of discriminatory regionalism and expansion of regional markets, economic interdependence and trade cooperation between the three countries is continuously strengthened (Park, 2003:178). Their close trade relationship and high economic complementarity as well as the compatibility of their cultural values serve as a stable material and spiritual basis for the establishment of China-Japan-Korea FTA. However, compared with Europe and North America, because the institutional cooperation between China, Japan and

⁴⁷ 因此我国应积极提供与产业政策结合的税收, 信贷等财政优惠政策, 促进电信, 金融等知识密集型服务行业的迅速发展。此外, 对于信息和计算机等新兴行业应给予一定的政策扶持, 使其提升竞争力。

Korea is still relatively weak, and the scale and area of their intra-regional trade and investment are also constrained, the formation of inter-regional markets between the three countries is relatively slow. After the Asian Financial Crisis, the economic ties among the three countries have been restored, and their governments' attitude toward regional economic cooperation has also seen a great change. If the three countries throw away their national sentiment and cooperate with each other in various fields, it will create greater trade flows, expand their trade markets and create more business opportunities, and "the gains from free trade would be distributed advantageously to China and Korea, which currently have a relatively large proportion of intra-regional trade, a strong dependence on intra-regional imports of intermediate inputs, and high tariff rates." (Park, 2003:179).

Considering different trade development levels and historical reasons between the three countries, it may be easier to establish an FTA between Japan and Korea first, and then cooperate with China to expand the economic development space for other regional members. In contrast to a China- Korea FTA, the Japanese and South Korean governments have already negotiated on a Japan-South Korea FTA, but "because the problems of agricultural product market access and the Japan-Korea trade deficit, the two countries have failed to reach a consensus on the signing of an FTA."⁴⁸(Liu, 2008:69) Recently, the relationship between Japan and South Korea has been improved and the Japanese government also wishes to resume the FTA talks with South Korea.

By contrast, according to Park (2003:179) if bilateral FTAs are established between any of the three countries, it would be more recommendable for Korea to sign an FTA with China than with Japan, "in terms of the expansion of real GDP and personal income." Liu (2008) also holds a supportive stance for the establishment of a China-Korea FTA first. "South Korea hopes to expand the market and raise its position in international market through the establishment of East Asia economic cooperation. China has carried out the all-round opening-up policy for a period. Recently, it even more actively takes part in the wave of trade liberalization, economic globalization, and regional integration."⁴⁹(Liu, 2008:69) With the rapid development of the

⁴⁸ 但是因为农产品市场准入和日韩贸易赤字方面问题而一直未能达成一致意见。

⁴⁹ 韩国希望通过建立东亚地区的经济合作，来扩大市场，提高国际市场地位。中国一直以来就推行全方位的开放战略。近年来更是积极地融入到贸易自由化与经济全球化，区域化的浪潮中。

trade relationship between China and Korea, China has become the largest trading partner and main investing target of South Korea. If China and South Korea start China-Korea FTA negotiations, it will promote the Japan-Korea FTA negotiation and the development of East Asian regional economic integration as well. But it is likely to have some negative effects on Japan (Park, 2003:179). As Ishikawa (2006:12) suggests, some Japanese businessmen worry about the damage caused by the conclusion of an FTA between China and another country (South Korea in particular) ahead of one with Japan. As Japanese firms have to confront various problems in business environment, such as “copied products, opacity and changes in investment legislation.”

To avoid any one of the three countries is negatively affected by the bilateral FTAs between the other two countries, it needs to actively promote the conclusion of China-Japan-Korea FTA and strengthen the institutional cooperation between the three countries.

In summary, a bilateral FTA signed by any two of the three countries cannot reach the best economic outcome offered by a China-Japan-Korea FTA. If the China-Japan-Korea FTA can be concluded, they will have a regional unified market with 1.5 billion consumers and 11 trillion U.S. dollars GDP. Therefore, a C-J-K FTA is an ideal solution to enhance free transaction of goods, services, technology and capital in the region, deepen the economic interdependence between member states, promote the development of intra-regional trade, and intensify bilateral and regional economic cooperation.

5 Conclusion

As discussed previously, due to the high complementarity of China and Japan’s economic and trade relationship, the conclusion of Sino-Japan FTA will bring more benefits than challenges to both countries. For China, Japan is the ideal cooperation partner. Strengthening the economic cooperation with Japan could provide the necessary capital, technology and human skills for China’s modernization and industrialization. Meanwhile, due to the massive consumption of China’s energy industry, a close cooperation with Japanese energy and environment protection areas could also benefit Chinese economic development. For Japan,

China is a huge fast-growing market with abundant natural resources and cheap labor. “Japan can utilize Chinese resources for the manufacture of low-cost products for the world market. Furthermore, the increasing supply of low-cost Chinese products improves Japan’s international terms of trade.” (Hilpert and Haak, 2002:33) Therefore, as Hilpert and Haak (2002:33) assert “by virtue of complementary economic patterns, both Japan and China can enhance their welfare if they increase bilateral trade and intensify their economic integration.”

However, with the spread of the “China threat” theory, Japanese leaders are wary of China’s growing prominence within East Asia in global affairs. Compared with China’s active attitude toward the conclusion of Sino-Japan FTA, the Japanese government seems more passive and indifferent. With the rapid development of bilateral trade and investment, interdependence and vulnerability do exist between the two countries. This increased vulnerability of one country towards the other and the unresolved political, economic, historical and security issues complicate and hinder the smooth development of signing the Sino-Japan FTA.

Under the circumstances of fast development of East Asian regional economic integration, bilateral cooperation between China and Japan plays a key factor and also determines the position of East Asia the world in the future. “Economic relationship underpins the relationship between China and Japan.” (Armstrong, 2007: 28). Hence, the factors constraining the development of the Sino-Japan FTA are also the restrictive factors for the development of Sino-Japan relationship. Moreover, due to the resistance and difficulties, the unlimited delay of Sino-Japan FTA also seriously affects the development of their economic and trade relationship

In order to overcome economic challenges and non-economic obstacles, the two countries need to deepen mutual understanding among the people at all levels and strengthen cooperation in areas such as energy, environmental protection, information and communication technology, and intellectual property rights protection, etc. Leaders’ meetings between the two countries should also be held annually to increase their mutual understanding and policy makers should establish close communication links, such as discussing the issues on the content and the roadmap of Sino-Japan FTA. “Bureaucrats, business people, academics, students, and others should also increase their exchange.” (Urata, 2005:11). Moreover, the two countries should strengthen their coordination and cooperation, and strive to maintain peace and stability of the

Northeast Asia. If China and Japan could exchange and cooperate for a long period, the relationship between the two countries could be improved, and a good political atmosphere and a solid economic foundation for Sino-Japan FTA could also be created.

As stated in Section 3, about the conclusion of Sino-Japan FTA, Japan is wary of the U.S. attitude and reaction. In other words, the attitude of the United States affects the process of Sino-Japan FTA. Nowadays, Japanese enterprises' dissatisfaction with the slow promotion of FTA by the Japanese government and the effects of the ECFA between mainland and Taiwan are stimulating the Japanese government to change its attitude toward its FTA policy with China and South Korea. Moreover, the impact of Japan's "March 11" earthquake on the Japanese economy did also play an important role in its FTA policy adjustment. Under these international circumstances and the slow but sure decline of the United States' relative influence, China and the United States should strengthen and deepen their cooperation. As a result, the need of Sino-Japan FTA negotiations will also be strengthened correspondingly.

Finally, the author puts forward an ideal model of the future regional multi-lateral FTA: the China-Japan-Korea FTA. Considering the various difficulties in concluding Sino-Japan FTA, the possibility of allowing Korea and China or Japan establish an FTA first, and then sign with the third to establish a China-Japan-Korea FTA should be considered. However, an FTA signed between any two of the three countries cannot reach the best outcome of an FTA between the three countries. Therefore, even though there will be many future hindrances during the establishment of this C-J-K FTA, the three countries should use their best endeavors to promote the process of C-J-K FTA and bring an unprecedented prosperity to the three countries. If the China-Japan-Korea FTA is established, a situation of three pillars, North America, Europe, and East Asia can be formed, which is more beneficial to the world economic balance.

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Abstract (English)

The present paper deals with the positive and negative impacts of a Sino-Japan FTA on both countries' major industries, and elaborates on how to reduce the negative impacts and promote economic cooperation between the two countries, and even cooperation in the entire region.

After introducing the research results of overseas East Asian experts on the effects of a Sino-Japan FTA and/or a China-Japan-Korea FTA, the paper goes on to analyze the structure of Sino-Japan bilateral trade and the comparative advantages of their industries, the comparative advantages of their major industries, the level of their market openness, etc. By using some economic formulas the author intends to examine the challenges and impacts caused by a bilateral FTA on the major industries of both countries, such as agricultural, services, chemical, automobile, textile and garment industries, and also the FDI. Meanwhile, the benefits of a Sino-Japan FTA and the noticeable factors hindering the development of Sino-Japan trade and economic cooperation will also be highlighted.

How to reduce the negative impacts caused by Sino-Japan FTA on both countries' major industries? How to promote the process of a bilateral FTA as well as regional economic integration? These questions will be mainly discussed in the last part. Moreover, the author gives a general overview of the future bilateral and multi-lateral FTAs in Northeast Asia, and puts forward an ideal model for the future regional economic integration: the China-Japan-Korea FTA.

Zusammenfassung (German)

Die Masterarbeit behandelt die positiven und negativen Auswirkungen eines FTA (Freihandelsabkommen) zwischen China und Japan auf die wichtigsten Industrien der beiden L änder, und erl äutert wie man die negativen Auswirkungen verringern und die wirtschaftliche Zusammenarbeit zwischen den beiden L ändern, sowie in der ganzen Region fördern kann.

Nachdem die Forschungsergebnisse von Ostasien-Experten in Übersee über die Auswirkungen eines FTA zwischen China und Japan und eines FTA zwischen China, Japan und Korea präsentiert werden, analysiert die Arbeit die Handelsstruktur zwischen China und Japan und die vergleichsweisen Vorteile ihrer Industrien, das Niveau ihrer Marktöffnung, usw. Durch den Einsatz einiger wirtschaftlicher Formeln untersucht die Autorin die Herausforderungen und Einflüsse in den Bereichen der Landwirtschaft, Dienstleistungen, Chemie, Automobil, Textil und Bekleidung, und FDI (ausländische Direktinvestitionen), die sich in beiden L ändern im Falle eines Abschlusses eines bilateralen FTA ergeben. Mittlerweile werden die Vorteile eines FTA zwischen China und Japan, aber auch die Probleme, die die Entwicklung der Handels- und Wirtschaftskooperation zwischen China und Japan hindern könnten, erkennbar.

Wie kann man die negativen Auswirkungen eines FTA zwischen China und Japan auf die wichtigsten Industrien der beiden L änder verringern? Wie kann man den Prozess eines bilateralen FTA, sowie die regionale ökonomische Integration fördern? Die Fragen werden hauptsächlich in den letzten zwei Teilen diskutiert. Weiters gibt die Autorin einen allgemeinen Überblick über die zukünftigen bilateralen und multilateralen FTAs in Nordostasien und stellt ein ideales Modell für die zukünftige regionale ökonomische Integration vor: das FTA zwischen China, Japan und Korea.

Curriculum Vitae

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Education

Since 10/2005	University of Vienna Master: East Asian Economy and Society Bachelor: Transcultural Communication (Chinese, German, English)
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Chinese	Native
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