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國際學碩士學位論文

**The Evaluation of Korea's FTAs  
on Export Performance**

수출 다변화를 중심으로 본  
한국 FTA의 수출성과 분석

2014年 8月

서울대학교 國際大學院

國際學科 國際通商 專攻

朴海旻

# **The Evaluation of Korea's FTAs on Export Performance**

Thesis by

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Graduate Program in International Commerce

For the degree of Master of International Studies

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Graduate School of International Studies

Seoul National University

Seoul, Korea

# 수출다변화를 중심으로 본 한국 FTA의 수출성과 분석

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이 論文을 國際學碩士 學位論文으로 提出함

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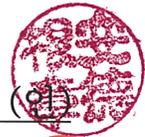
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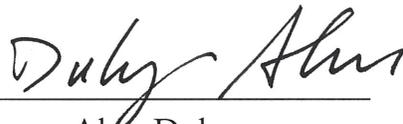
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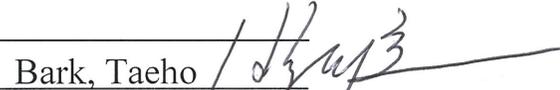
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## **ABSTRACT**

# **The Evaluation of Korea's FTAs on Export Performance**

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The international trade is crucial driving force in world economic development in a globalized era and the FTA is leading the trend of international trade. The export has successfully led the Korean economy and it is still one of the most important factors for economic growth. However, the export structure of Korea lacks a stability involving potential risk. First of all, Korea has concentrated on a few markets that around 70% of its export heads to U.S. China, EU, ASEAN and Japan. Secondly, Korea's export is heavily relying on a few products. Lastly, there exists a large export gap between the Large Enterprise (LE) and the Small and Medium Enterprise (SME). The biased export structure in Korea is vulnerable to unexpected shocks such as a financial crisis, a price fluctuation and a sudden fall in market demand which arise from recent global economy. The instability could cause a crisis to Korean economy. Therefore, Korea, whose export leads the economy,

needs to pursue a stable growth by diversifying the export structure.

Korea has successfully diversified its export markets through FTAs. For example, Korea's export weight to FTA partners increased after the effectuation of agreements. In Korea-Chile FTA case, Korea's export increased not only to Chile but also to Latin America which is the anchoring effect of FTA. In addition, the domino effect of FTA is observed in Korea's FTAs with Singapore and ASEAN that also increased the export weights. Korea's FTAs with Asian countries showed positive effect of the product diversification while others had different results because the specific aims or strategies, as well as the economic conditions, decided the trade pattern of products. Meanwhile, the export gap between LE and SME became larger after the FTAs. In comparison to LEs, SMEs are having such difficulties for FTA utilization

Korean government needs to provide specific FTA information and education to SMEs and it also needs to simplify the process of issuing the certificate of origin so that SMEs could take advantage of FTAs. Moreover, Korea needs to promote mega FTAs by stages and avoid from the offsets among existing FTAs. All different regulations and strict, complex standards of each FTA need to be simplified through mega FTAs such as RCEP and TPP which are in progress. SMEs have to enter EU and U.S. markets that provide many opportunities to take advantage of Global Value Chain rather than avoiding a competition. SMEs, which are flexible in terms of production by their small scale, also have to challenge the new commodities. In accordance with the government's support, SMEs could lead Korea's export

diversification through FTAs that contributes to the stable economic growth.

**Keywords:** Market Concentration, Product Specialization, Exporter Limitation,  
Stable Export Structure, Export Diversification, FTA Utilization

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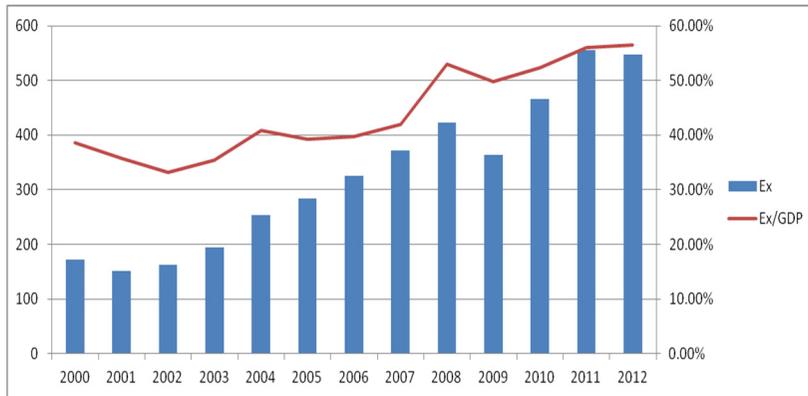
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## **CHAPTER I. INTRODUCTION**

International trade has been one of the most important elements for the global economic development. As the telecommunication service and the transport system have been evolving rapidly, the significance of international trade has considerably increased in the globalized era. Specifically, it allows countries to escape from the resource constraint. It also provides opportunities to domestic firms to business with foreign companies and helps them to utilize the economies of scale. It makes business environment more competitive and consumers are better off through the wider range of choice as a result.

A country like Korea is well aware of the gains from trade and Korean economy has been developed rapidly through its export since 1970s. Although Korea is suffering from the lack of natural resources, the export led growth policy has been successful not even in a recovery from the Korean War but also in enhancing competitiveness around the world in certain products such as semi conductors, automobiles and ship building. The export has contributed substantially to its successful economic development and it still accounts around 57% of Korea's GDP. For the 9<sup>th</sup> country in the world, Korea's trade value passed over \$1trillion in 2011 which is more than 55times larger than that of in 1977. Moreover, Korea is recognized as an efficient exporter that became the 7<sup>th</sup> largest exporter in the world recently. The international trade is expected to have more importance in Korean economy in the future.

<Figure 1-1> Korea's Export Trend (2000-2012)



(Unit: Billion\$)

Ex = Export

Source: UN Comtrade

After the establishment of the WTO in 1995, the trend of FTA in the globalized era has expanded. The reasons for the expansion are trade facilitation, FDI attraction, enhancing competitiveness, technologic advance and foreign negotiation power etc. In response to this trend, since the export is the crucial factor of the economy, Korea is one of the countries who is eager to arrange FTAs and it also has successfully negotiated with Chile, Singapore, U.S., ASEAN, EU etc. and still seeking further negotiations with other countries.<sup>1</sup> The aggressive trade policy in Korea reflects its desire to strengthen its export capacity through FTA.

However, the structure of Korea's export includes biased pattern so that it could be easily exposed to potential risk. As the global economy is becoming

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<sup>1</sup> Refer to <Appendix 1>

unstable and the world market demand fluctuates, Korea's export could be volatile to external shocks and consequently cause an economic crisis. There are three features in terms of the biased pattern. First of all, Korea favors trade with large economies such as U.S, EU, China, ASEAN and Japan. A quarter of Korea's export is headed to China, which is the largest weight, and 70% of its export is toward the major markets such as U.S., EU, ASEAN, Japan including China. The Trade Intensity Index<sup>2</sup> (TII, if the trade intensity index takes a value above (below) unity the countries have greater (smaller) bilateral trade than would be expected based on the partner's share in world trade) also shows the biased trade pattern in Korea. According to the index, Korea's TII with China and ASEAN exceeds 2 and its TII with EU also goes beyond the unity.

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$${}^2 TII_{ij} = \frac{X_{ij} / X_i}{M_j / M_w}$$

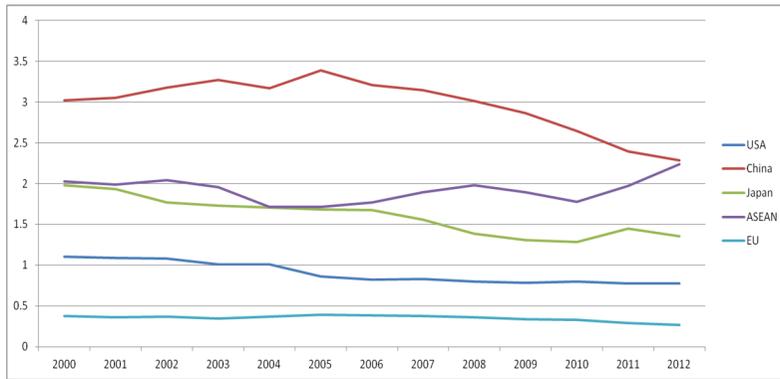
$X_{ij}$  = country i's export to country j

$X_i$  = country i's total export

$M_j$  = country j's total import

$M_w$  = world total import

<Figure 1-2> Trade Intensity Index



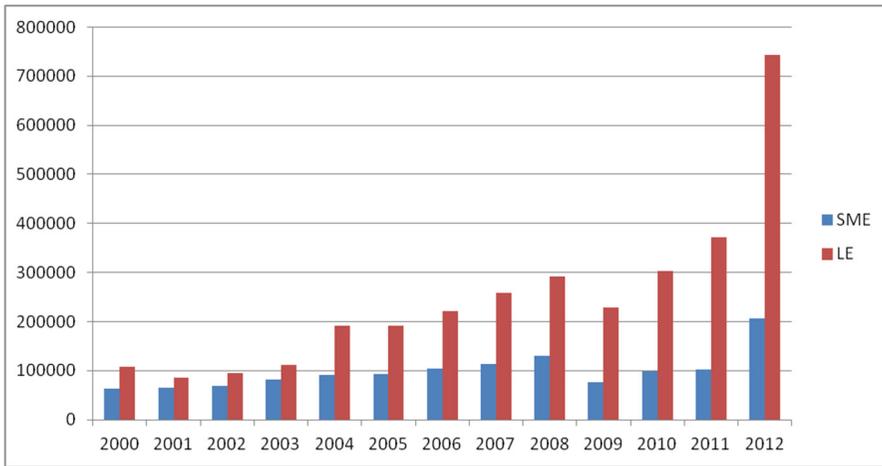
Source: UN Comtrade

Secondly, Korea's export is highly depending on a group of commodities that is consisted of manufactures with low skill and technology intensity. It is not a surprising phenomenon according to Ricardian theory that a country specializing in such product which has a comparative advantage. However, since the technology is advancing fast in globalized era, the market demand changes rapidly by the substitutable or advanced products and competitors in the relevant sector are increasing fast from the expansion of technologic transfer could be a threat to Korea's position. The export from this group has been a driving force of enormous economic development in Korea and this export pattern could also be observed in other developing countries as well which lack the natural resources. The leading exporting item classified by SITC 3-digit was Petroleum oils and oils obtained from bituminous minerals (other than crude); preparations, n.e.s., containing by weight 70% or more of petroleum oils or of oils obtained from bituminous minerals, these

oils being the basic constituents of the preparations (9.99%). Thermionic, cold cathode or photo-cathode valves and tubes (e.g., vacuum or vapour or gas-filled valves and tubes, mercury arc rectifying valves and tubes, cathode-ray tubes, television camera tubes); diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices; light-emitting diodes; mounted piezoelectric crystals; electronic integrated circuits and micro assemblies (8.55%), Motor cars and other motor vehicles principally designed for the transport of persons (other than motor vehicles for the transport of ten or more persons, including the driver), including station-wagons and racing cars (7.74%), Ships, boats (including hovercraft) and floating structures (6.9%), Telecommunications equipment, n.e.s., and parts, n.e.s., and accessories of apparatus (5.35%), Optical instruments and apparatus, n.e.s. (5.03%) were the followings that have exceeded 5% of Korea's export in 2012.

Thirdly, in Korea, 99.9% of business is composed of the Small and Medium Enterprise (SME) in terms of the number of business and 86.8% of the employee is working at the SMEs. Due to the conglomerates-supportive growth policy by the government, Korean economy is mostly driven by the Large Enterprise (LE) and highly relying on its performance. In addition, 67.7% of the export was made by the LE. Moreover, the leading products mentioned above are mostly exported from the LE. The SMEs' sales to the LE are increasing while their direct exports are decreasing due to the biased economic policy in Korea.

<Figure 1-3> Export from SME & LE



(Million\$)

Source: The Small and Medium Business Administration

In this context, the purpose of this paper is to analyze Korea's biased export pattern. Another objective is to investigate the role of FTA as a possible solution for export diversification by comparing before with after the arrangement. The statistical data are mostly based on UN Comtrade data between 2000 and 2012. For the followings of this paper, section II provides existing arguments of the benefits from export diversification and the effectiveness of FTA. Section III describes the biased export pattern of Korea and specific analyses. Section IV is devoted to comparing the effect of FTA before with after for the export diversification and emphasizes the utilization of FTA. Section V suggests some policy implications and section VI concludes the paper.

## **CHAPTER II. LITERATURE REVIEW**

### **2.1 Market Diversification**

Having many export partners is one way to hedge a risk. It gives a room to avoid unexpected demand shock from a market. Market diversification is efficient to protect the export lines from potential risk but it could be simply threatened again by a new entrance. Although the advantageous position in a market could end in short term, it is necessary to build various trade relationships. For example, Mexican economy which is heavily relying on U.S. economy shrank more rapidly by the global financial crisis originated from U.S. in 2008.

Besedes and Prusa (2008) investigated and compared countries' export growth based on their performance at the extensive and intensive export margins. Their research has significance in documenting the role of export survival in export growth. They highlighted the importance of extensive and intensive margins of export by decomposing into three dimensions: (i) establishing new partners and markets, (ii) having relationships survive or persist, and (iii) deepening existing relationships. They confirmed that the intensive margin is the dominant factor in the export growth. However, they also emphasized the importance of intensive margin of export by comparing successful developing countries with less successful ones that showed clear differences in terms of intensive export margin. They concluded that relative differences of intensive margins, survival and deepening, have more

impact on long term export growth than those of extensive margins.

Chen and Yu (2010) claimed that countries should make more effort to expand the number of export destinations by emphasizing the role of SMEs. They specifically exemplified Canadian case whose SMEs successfully contributed to the market expansion. According to their research, Canada's SMEs led the market diversification both in terms of number of exporters and value of exports between 2000 and 2006.

## **2.2 Product Diversification**

There are many arguments about product specialization versus diversification. Ricardian theory emphasizes specialization based on comparative advantage. However, some empirical studies have shown that diversification benefits more than specialization. Korea lacks natural resources and has limited range of production. Thus, government supported large enterprises to specialize in certain sector to export. Theoretically specialization is proven for export earnings and benefits both participants but it is also important to cope with risks from recent global economic trend.

Feenstra (1994) insisted that countries with various products are likely to perform much better. Countries with more diversified export products would be protected from volatilities. Imbs and Wacziarg (2003) supported Ricardian theory that relates to a country's specialization. They found that sectoral concentration

originates in the economic geography and makes U-shaped pattern. A country diversifies its product at the initial stage of development until it reaches to certain level of per capita income. Then it has more incentive to specialize its product rather than diversification.

Felbermayr and Kohler (2006) focused on the importance of extensive export margin. If intensive export margin is the only crucial factor for export then the significance of the role of distance should decrease from the gravity model. However, they empirically concluded through the gravity model that extensive export margin is also important.

### **2.3 Small and Medium Enterprise and FTA**

It is hard to neglect the importance of SME. SME performs a role as the engine of economic growth. It uses its creativity and become a source of the innovation. It is also flexible because of its small size and it can adjust itself to the environmental changes in business compared to the large enterprise. Second, SME's capability to create and maintain the employment as an economic substructure can be also emphasized. Recently, the importance of employment in SME is being emphasized as the SMEs in Korea are facing the cutthroat situation with the entrance of the foreign companies.<sup>3</sup>

There are both negative and positive impacts of FTAs on SME. In terms of the

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<sup>3</sup> Park, B. (2009), The Strategy to Secure International Competitiveness of Small and Medium Enterprises on FTA age.

negative impacts, SME is suffering due to the lack of experts who can collect and analyze the international business information. It is difficult to adjust itself to the market because of the various standards by each FTA. SME is also facing a problem in terms of its product capability which is hard to meet the global demand. FTA leads the large enterprise and multinational corporations are dominating the Global Value Chain by trading with other multinational corporations.

In terms of the positive effect, SME can get into the Global Value Chain by trading with various multinational corporations through FTA. It also can take advantage by its local information and cooperate with multinational corporations to enter the new global market. FTA also provides SME an opportunity to grow as a global business by developing originality of the new technology. SME can form a niche market in the labor intensive sector or others that the large enterprise is difficult to enter.

Junho Lee (2011) has suggested that SMEs should use the partner's market as a strategic position for a global market rather than focusing on a simple export extension. It is necessary to access the FTA information such as the preferential tariff and the rule of origin. In terms of the rule of origin, government should make a policy in order to avoid the spaghetti-bowl effect. SMEs also need to access to a market that is supported by the government. They have to search various export and import lines so that they can transfer their transaction lines easily.

## **CHAPTER III. KOREA'S EXPORT PATTERN**

### **3.1 Market Concentration**

There have been many arguments about the gains from trade between large and small economies. Theoretically, the large portion of gains from trade is vested in small economies. The reason is that the gains from trade is created by the terms of trade after all, which is a difference between the international relative price and domestic relative price, and the larger economies would gain the smaller gap between the relative price rates. J. S. Mill (1848) pointed out that the richer countries could gain less from the trade because the demand for foreign products would increase more that makes the worse terms of trade. However, Edgeworth (1899) called it as a paradox because the power of negotiation affects favorably to the richer country. Chipman (1965) assumed a rich country as a country with large production capacity and explained that the opportunity of international trade is more valuable to small economy by emphasizing the neutral technological progress.

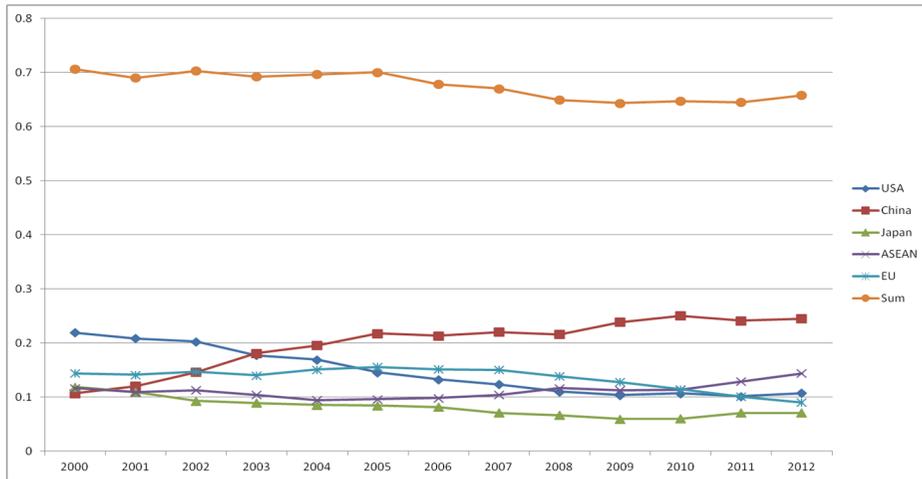
Beyond such arguments, however, Korea prefers exporting to large economies rather than to small economies. It has sold quite some amounts of products with price competitiveness to the large size of markets. Korea's export to U.S., China, Japan, EU and ASEAN accounts nearly 70% of its total export. One of the reasons for Korea's trade with developed countries such as U.S., EU and Japan in the late

20<sup>th</sup> century is that Korea was relatively labor abundant country compared with developed countries which are mostly capital abundant countries. In the early 1960s, Korea's unemployment in urban areas exceeded 16% and 2/3 of the total employee worked for the primary industry. Under this situation, the export leading growth policy could stimulate larger production and increase income level through multiplier effect. This will increase savings which would lead to larger investment and invigorate the economy. An unemployment rate would also decline through the virtuous circle. The trade policy based on a comparative advantage promotes industry structure reorganization. According to Hong (1989), the capital intensity in import business was 50% higher than that of export business between 1966 and 1985. This research means that a new investment to the export business could create additional 50% of employment.

However, it is difficult to maintain high export margins from a small number of markets. Korea needs to secure more of its export markets. The global economy has lost its stability large economies could no more guarantee Korea's export margin. There have been unexpected incidents such as financial crisis in 2009 stemmed from subprime mortgage in U.S. and another crisis in 2011 from Europe. Korean economy is likely to be volatile to external shocks without appropriate risk management. Furthermore, recently, Korea has a diplomatic conflict with Japan which prevents such negotiation including free trade arrangements. It is hard to claim that abovementioned financial crises are the only factors that have solely and negatively affected to Korea's export but it is necessary to develop various export

channels to stabilize the economic growth.

<Figure 3-1> The Weight of Korea's Export to Major Markets



Source: UN Comtrade

### 3.2 Product Specialization

According to the classical trade theory, a country needs to specialize in a product which is comparatively advantageous and the trade through specialization benefits both countries. Both countries could enjoy wider range of commodity basket beyond their production possibility function. MacDougall's (1951) empirical analysis proved that Ricardian model generally holds in the real world and the following analyses by Stern (1962) and Balassa (1963) also supported MacDougall's analysis. MacDougall used U.S. and U.K data for his analysis and proposed a hypothesis that an export of certain industry, which has higher labor

productivity would have comparative advantage, would increase. The regression verified that trades from 20 out of 25 industries were consistent with his hypothesis. Later, however, several doubts arose from scholars like Bhagwati (1964). He analyzed the correlation between the relative labor productivity rate and the relative export price rate and found it statistically insignificant. Other scholars, Caves and Jones (1973), claimed that Bhagwati's verification lacked effectiveness. To conclude, it is acceptable that MacDougall's empirical analysis of Ricardian theory provides partly predictive power to explain the trade patterns in the real world but it is not a perfect model to explain them.

Korea is recognized as a strong specialist in certain area of commodities such as semi conductors, IT products and ships. To analyze the general trend of Korea's export pattern, products are separated into groups which are expected to represent the type of industry. The commodities categorized by UN Comtrade SITC 3 digit codes are divided into 6 types of groups based on the level of technologic skill intensity that is required for the manufactures. Some commodities that do not belong to the standards are gathered in another group. Specifically, the standards of groups and the representative samples in each group that was exported the most export in 2012 are listed in <Table 3-1>.

<Table 3-1> Group of Commodities<sup>4</sup> and the Representative Commodities

<b>Group</b>	<b>Products Attributes</b>	<b>Most Exported Item (2012)</b>
A	Primary commodities	Copper
B	Labor-intensive and resource-based manufactures	Knitted or crocheted fabrics (including tubular knit fabrics, n.e.s., pile fabrics and openwork fabrics), n.e.s.
C	Manufactures with low skill and technology intensity	Ships, boats (including hovercraft) and floating structures
D	Manufactures with medium skill and technology intensity	Motor cars and other motor vehicles principally designed for the transport of persons (other than motor vehicles for the transport of ten or more persons, including the driver), including station-wagons and racing cars
E	Manufactures with high skill and technology intensity	Thermionic, cold cathode or photo-cathode valves and tubes (e.g., vacuum or vapour or gas-filled valves and tubes, mercury arc rectifying valves and tubes,

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<sup>4</sup> A few SITC items are not considered because data for these categories are incomplete. These items are: SITC 286 (ores and concentrates of uranium and thorium), SITC 333 (crude petroleum), SITC 351 (electric current), SITC 675 (iron and steel hoops and strips), SITC 688 (uranium and thorium), SITC 911 (postal packages), SITC 931 (special transactions and unclassified commodities), SITC 961 (coin other than gold coin), and SITC 971 (gold). Some other items of SITC section 3, namely SITC 322 (coal), SITC 323 (coke and briquettes), SITC 334 and 335 (petroleum products), and SITC 341 (gas) are also not considered because the analysis only covers non-fuel merchandise trade.

		cathode-ray tubes, television camera tubes); diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices; light-emitting diodes mounted piezoelectric crystals; electronic integrated circuits and micro assemblies
F	Unclassified products	Musical instruments and parts and accessories thereof; records, tapes and other sound or similar recordings

Source: UN Comtrade

The revealed comparative advantage <sup>5</sup> (RCA) is an index based on the Ricardian theory used for calculating the relative advantage or disadvantage of a certain country in a certain class of goods or services as evidenced by trade flows. The RCA is equal to the proportion of the country's exports that are of the class under consideration ( $EX_{ij} / EX_{it}$ ) divided by the proportion of world exports that are of that class ( $EX_{nj} / EX_{nt}$ ). If RCA is larger than unity, the country is said to have a comparative advantage in the commodity or industry.

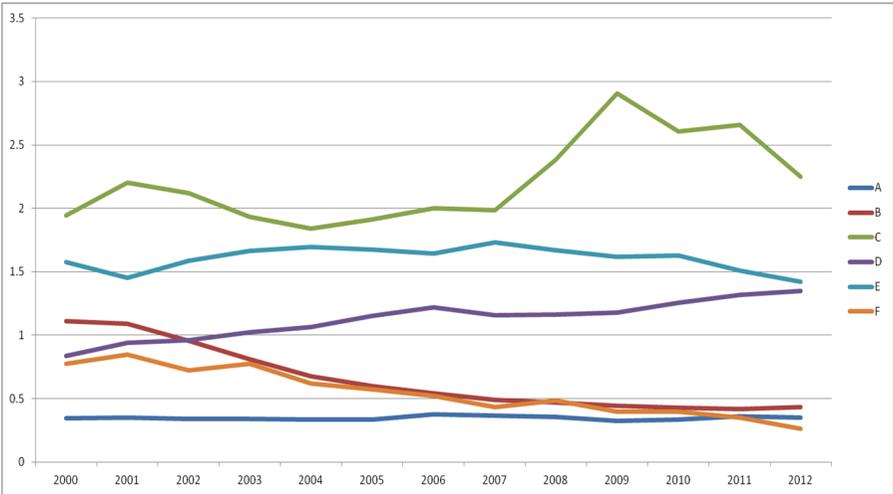
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$${}^5 RCA = \frac{EX_{ij} / EX_{it}}{EX_{nj} / EX_{nt}}$$

EX = Exports  
i = Country index  
n = Set of countries  
j = Commodity index  
t = Set of commodities

Korea has the strongest comparative advantage in group C and also has comparative advantage in group D and E while it has comparative disadvantage in group A, B and F. The most notable feature from the trend of RCA is that the gap between each group became wider as time passed from 2000. This trend proves that Korea has put more resources to the comparatively advantageous group and made attempts to specialize the export product. Although Korea has shown its strength in group C, manufactures with low skill and technology intensity, the performance in the major markets alerts a negative signal<sup>6</sup>. A poor performance in highly depending markets indicates the need for change in Korea's export pattern.

<Figure 3-2> The Trend of Korea's RCA



Source: UN Comtrade

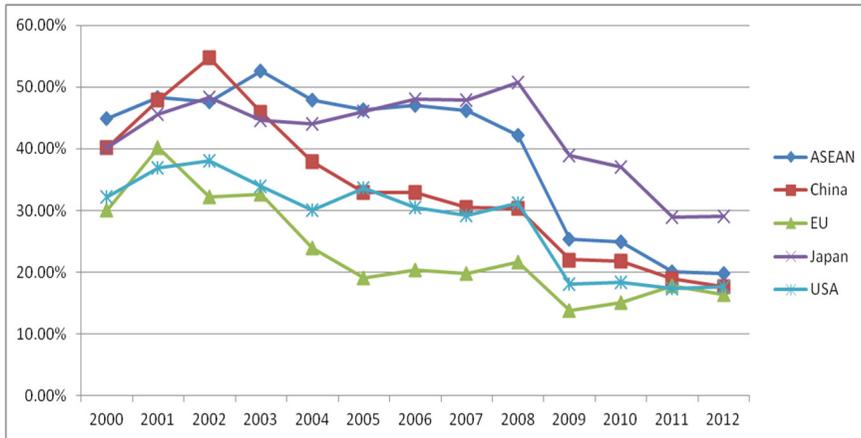
<sup>6</sup> Refer to <Appendix 2>

### **3.3 Exporter Limitation**

In accordance with the biased economic structure in Korea, there is also an imbalance in exporters. Korean government aggressively supported large enterprises in certain industries to enlarge its export margins. As a result, Korea efficiently succeeded in export but Korean SMEs became less independent with their businesses. The direct export from SME has decreased while SME's sale to large enterprise has increased. Moreover, the global financial crisis caused wider rift between SME and LE. LEs could recover quickly from the global financial crisis while SMEs were more vulnerable to the shock. Consequentially SMEs took more passive attitude in export and became subcontractors of the large enterprises. In addition, leading commodities of Korea's exports are mostly dominated by the LEs and SMEs suffer from a tight budget and also lack experts or the information of FTA which is the general trend of world trade, SMEs are passing through LEs for their international sales rather than a direct export.

SME's export to major partners of Korea has decreased dramatically after the global financial crisis in 2009. SMEs are more vulnerable to such shock and the speed of recovery is also slower than that of LE. Among the major export partners of Korea, the most developed countries that is likely to provide more opportunities for the Global Value Chain for SMEs such as EU and U.S. were shown the lowest share. It is necessary to exert to target EU and U.S. markets for higher export margins.

<Figure 3-3> SMEs' Export Shares in Major Countries



(Korean SMEs' export to the Country/Korea's Total Export to the Country)

Source: The Small and Medium Business Administration

## **CHAPTER IV. THE EFFECTIVENESS OF FTA**

This section investigates the effectiveness of Korea's FTAs on export diversification in three dimensions: market diversification, product diversification, exporter diversification. Most of analyses were conducted with 5 cases which are Korea's FTAs with Chile, Singapore, ASEAN, EFTA and India by comparing before with after the FTA. To analyze market diversification effect, the growth rate and the weight of export are used with the export value to compare before with after FTAs. For product diversification, above mentioned product groups are used and changes in export weights of these groups were defined as product diversification.

### **4.1 Market Diversification**

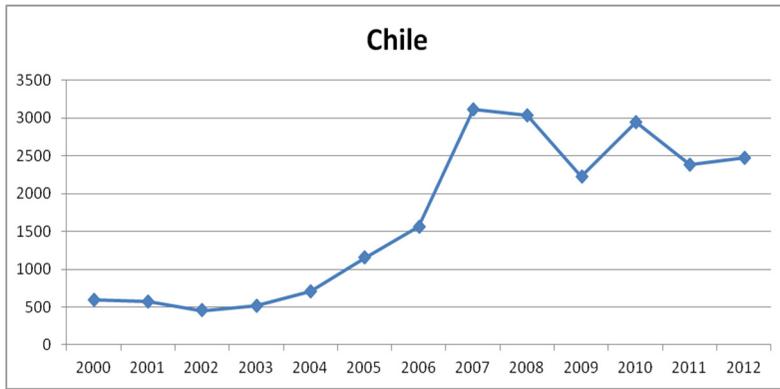
FTA could contribute to the market diversification by simply arranging FTA with a new partner when there is an increase in export weight after the arrangement. An increase in export weight after FTA means that a country is switching its existing destinations or enlarging its export by putting relatively more resources toward a new FTA partner. Another way to expand markets through FTA is called the domino effect of FTA. The domino effect occurs when the FTA triggers another one with partner's neighboring country. Market diversification also takes effect when there is an anchoring effect that promotes a country's export to FTA partner's neighboring country without an additional FTA. Korea could diverse or expand the

markets which are currently focused on a few destinations through several positive effects of FTA.

#### **4.1.1 Korea-Chile FTA**

Korea-Chile FTA, which was the first FTA for Korea, entered into force in 2004. Korea desired to overcome the regionalism in America through the FTA with Chile. In consequence of the FTA, Korea's export to Chile increased rapidly after 2004 and its export value almost doubled in 2007 compared to that in 2006. In 2007, the export value passed over \$3 billion which was the highest and turned into downward trend when the global financial crisis broke out in 2009. However, the slow-down has been recovered quickly and it is gradually growing again. The weight of Korea's export to Chile also increased after the FTA. Although the absolute value of weight seems very small, it has increased significantly after 2004 along with the export growth rate. Recently, the weight has decreased but the weights of export after FTA are still higher than before the negotiation. In this context, there is a positive effect of the market diversification through the FTA that was large at the beginning but became lower as time passed. Korea arranged many other FTAs after the FTA with Chile that its export has more diversified to other partners. The weight of export began to drop after 2007 and FTAs with Singapore and ASEAN have offset the effect of Korea-Chile FTA in some degree.

<Figure 4-1> Korea's Export to Chile



(Unit: Million\$)

Source: UN Comtrade

<Table 4-1> The Growth Rate and Weight of Korea's Export to Chile

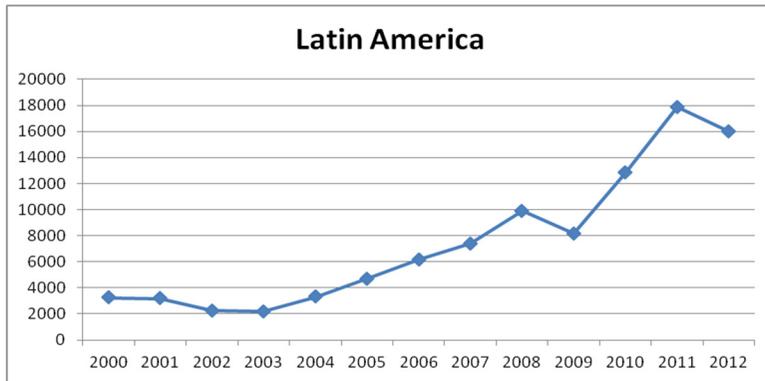
Year	Growth Rate	Weight	Year	Growth Rate	Weight
2000	-	0.34	2007	98.90	0.84
2001	-3.45	0.38	2008	-2.67	0.72
2002	-20.71	0.28	2009	-26.48	0.61
2003	13.92	0.27	2010	32.21	0.63
2004	36.95	0.28	2011	-19.19	0.43
2005	62.50	0.40	2012	3.69	0.45
2006	36.07	0.48			

(Unit: %)

Source: UN Comtrade

Korea has successfully penetrated to neighboring markets through Korea-Chile FTA. In other words, the FTA positively affected the market expansion. According to <Figure 4-2>, Korea's export to Latin America after Korea-Chile FTA has also increased without additional FTAs with Latin American countries. Korea-Peru FTA, the second FTA with Latin America, entered into force in 2011 but the export was already increasing before the arrangement and it has rather decreased slightly after 2011. The export increased continuously until the global financial crisis. It has remarkably increased after the crisis and reached the highest value in 2011. The export growth rate was 57% in 2010 that indicates a quick recovery from the shock. Another notable feature in terms of the export growth rate is that the export growth rate of Latin America has relatively less decreased than that of Chile, which is the FTA partner, in 2009. There was another substantial export growth in 2004 that shows positive effect of Korea-Chile FTA. In comparison with the continuation of negative growth before the trade agreement, Korea's export to Latin America has entered upon a new phase after the FTA with Chile. The increasing trend of export weight to Latin America also indicates Korea's successful market diversification by using the FTA in close area.

<Figure 4-2> Korea's Export to Latin America



(Unit: Million\$)

\*Korea's total export to Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Suriname, Uruguay and Venezuela.

Source: UN Comtrade

<Table 4-2> The Growth Rate and Weight of Korea's Export to Latin America

Year	Growth Rate	Weight	Year	Growth Rate	Weight
2000	-	1.88	2007	19.32	2.06
2001	-2.00	2.17	2008	34.04	2.41
2002	-29.08	1.45	2009	-17.32	2.32
2003	-3.63	1.17	2010	57.12	2.83
2004	52.77	1.35	2011	38.90	3.30
2005	40.92	1.69	2012	-10.41	3.03
2006	32.65	1.96			

(Unit: %)

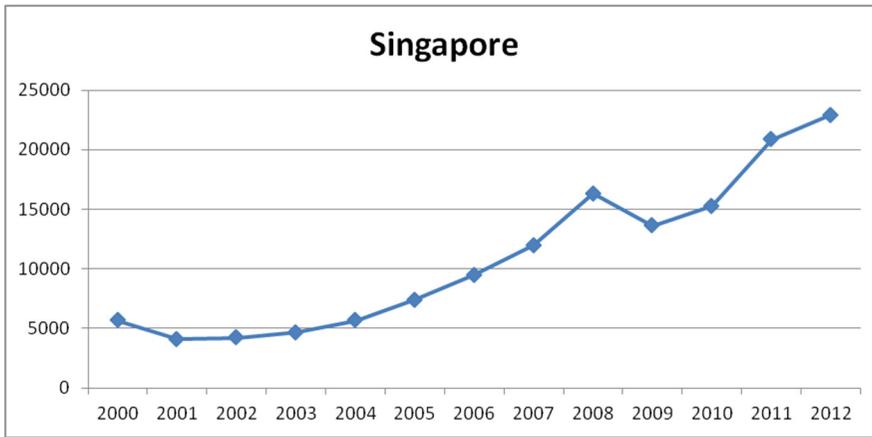
Source: UN Comtrade

Korea-Chile case shows an increase of export weight to a partner through the FTA which supports the concept of market diversification through a new FTA. It also proved the anchoring effect of the FTA that caused export increase to Latin America. As a result, Korea-Chile FTA has successfully contributed to the market diversification by proving that a FTA increases the export not only to the partner but also to neighboring countries.

#### **4.1.2 Korea-Singapore FTA and Korea-ASEAN FTA**

Korea-Singapore FTA entered into force in 2006 which is the the first FTA with Asian country. From Korea's point of view, Singapore has its importance on a geographic aspect that connects the hubs between South East Asia and North East Asia. The export increased gradually over the time except in the event of the global financial crisis in 2009. According to <Figure 4-3>, Korea's export to Singapore was already in an increasing trend before the FTA. It seems that the FTA did not make a significant change in commodity trade. This is because Singapore was already imposing non-tariff policy on most products. As well as Korea-Chile's case, the weight of export to partner increased after the FTA along with the export growth rate. Although Singapore is one of the main destinations for Korea, the result implies the market diversification through FTA.

<Figure 4-3> Korea's Export to Singapore



(Unit: Million\$)

Source: UN Comtrade

<Table 4-3> The Growth Rate and Weight of Korea's Export to Singapore

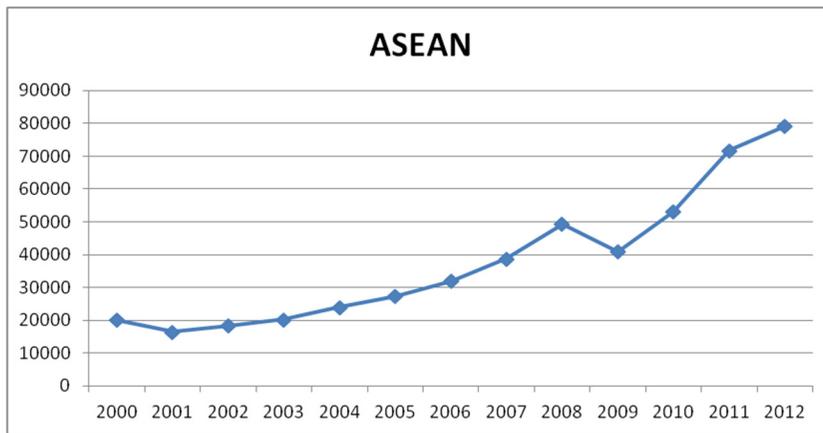
Year	Growth Rate	Weight	Year	Growth Rate	Weight
2000	-	3.28	2007	25.93	3.22
2001	-27.77	2.71	2008	36.35	3.86
2002	3.48	2.60	2009	-16.42	3.75
2003	9.82	2.39	2010	11.95	3.27
2004	21.95	2.23	2011	36.70	3.75
2005	31.01	2.60	2012	9.83	4.18
2006	28.12	2.92			

(Unit: %)

Source: UN Comtrade

However, Korea-Singapore FTA is significant by its contagious effect. The FTA with Singapore promoted another FTA with ASEAN. The framework agreement of Korea-ASEAN FTA was made in 2006 and an agreement on goods entered into force in 2007, a year after the FTA with Singapore. Korea's export to ASEAN including Singapore increased with the synergy. Both FTAs promoted export and it is a good example of the domino effect of FTA. The export increased faster after FTA compared to the past. The export weight to ASEAN also increased after the FTA. As a result, market expansion has successfully achieved by a FTA triggering another FTA with better performances.

<Figure 4-4> Korea's Export to ASEAN



(Unit: Million\$)

\*Korea's total export to Brunei Darussalam, Cambodia, Indonesia, Lao People's Dem. Rep., Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam.

Source: UN Comtrade

<Table 4-4> The Growth Rate and Weight of Korea's Export to ASEAN

Year	Growth Rate	Weight	Year	Growth Rate	Weight
2000	-	11.69	2007	20.83	10.43
2001	-18.25	10.94	2008	27.21	11.68
2002	11.80	11.33	2009	-16.85	11.27
2003	10.07	10.45	2010	29.81	11.41
2004	18.62	9.46	2011	34.98	12.93
2005	14.19	9.65	2012	10.22	14.44
2006	16.88	9.85			

(Unit: %)

Source: UN Comtrade

### 4.1.3 Korea-EFTA FTA and Korea-India FTA

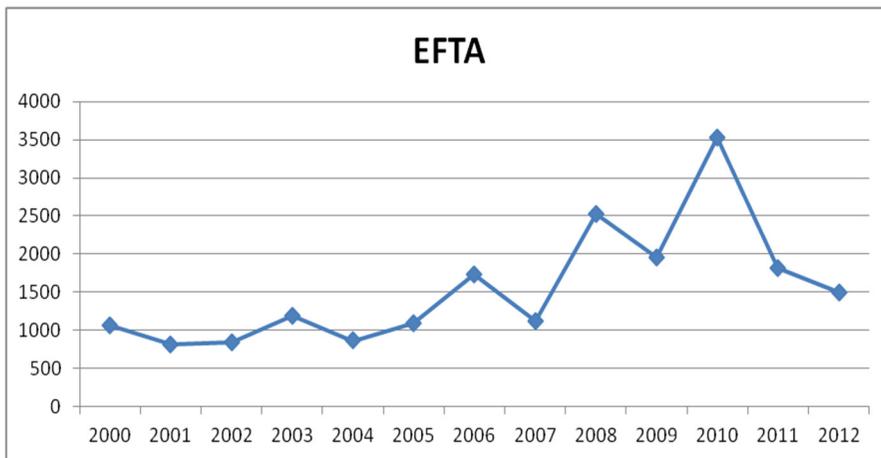
Despite abovementioned successful examples of the market diversification through the domino effect of FTA, Korea-EFTA FTA shows a failure in terms of market diversification. Korea's FTA with EFTA<sup>7</sup> entered into force in 2006. It is the first FTA for Korea with western developed countries. There are ups and downs in export value but it followed the increasing trend until 2010. In 2008, the export increased more than twice of its previous year's export value. However, Korea's main purpose of this FTA was to test for EU market. Korea made EFTA market as a

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<sup>7</sup> EFTA is consisted of Switzerland, Norway, Iceland and Liechtenstein. This research excludes Liechtenstein because UN Comtrade excludes its data.

stepping stone to EU. Korea-EU FTA entered into force in 2011 and EFTA market lost its incentive after Korea-EU FTA. The export weight of EFTA has dropped even before the FTA. According to <Figure 3-1>, however, the export weight to EU has declined since 2005. It also decreased after Korea-EU FTA. This is because the export weight to China has dramatically increased. It is reasonable to interpret a sudden fall in EFTA export after 2010 that Korea's export turned its head to EU expecting the upcoming FTA which is close to EFTA and a large export increase to China has covered the effect. As a result, Korea-EFTA FTA worked somewhat positively on market diversification at the beginning but another FTA in close area deprived EFTA of the positive effect from the FTA.

<Figure 4-5> Korea's Export to EFTA



(Unit: Million\$)

\*Korea's total export to Iceland, Norway and Switzerland

Source: UN Comtrade

<Table 4-5> The Growth Rate and Weight of Korea's Export to EFTA

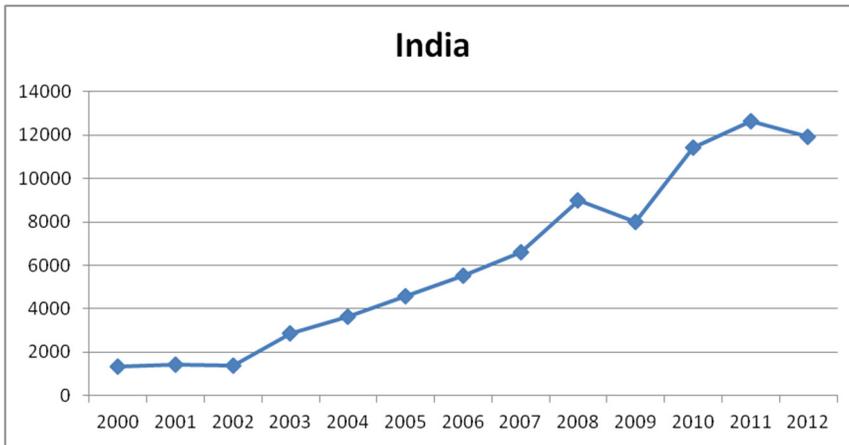
<b>Year</b>	<b>Growth Rate</b>	<b>Weight</b>	<b>Year</b>	<b>Growth Rate</b>	<b>Weight</b>
2000	-	0.62	2007	-35.11	0.30
2001	-23.16	0.54	2008	124.57	0.60
2002	2.89	0.52	2009	-22.41	0.54
2003	41.52	0.61	2010	80.06	0.76
2004	-27.43	0.34	2011	-48.39	0.33
2005	26.29	0.38	2012	-17.76	0.27
2006	58.67	0.53			

(Unit: %)

Source: UN Comtrade

Korea-India FTA, the third FTA with Asian economies, entered into force in 2010. As well as other cases, Korea's export to India increased as time passed except for the period of global financial crisis. It has shown remarkable growth in 2003 by doubling its export value. It seems there is not a significant change in the growth rate and the weight of export after the arrangement. They have rather decreased slightly after the FTA. It seems the FTA has negatively affected to the export or it could be interpreted as a natural phenomenon by the diminishing returns principle.

<Figure 4-6> Korea's Export to India



(Unit: Million\$)

Source: UN Comtrade

<Table 4-6> The Growth Rate and Weight of Korea's Export to India

Year	Growth Rate	Weight	Year	Growth Rate	Weight
2000	-	0.77	2007	19.29	1.78
2001	6.15	0.94	2008	36.02	2.13
2002	-1.68	0.85	2009	-10.74	2.20
2003	106.12	1.47	2010	42.70	2.45
2004	27.31	1.43	2011	10.66	2.28
2005	26.59	1.62	2012	-5.79	2.18
2006	20.33	1.70			

(Unit: %)

Source: UN Comtrade

Perhaps not much time has passed to analyze the effect of abovementioned cases but India case is worse than those that it is too early to analyze the effect with immediate results. However, regarding the recent growth of India and its geographic advantage that Korea's could spread to Middle East Asia and Western Asia, Korea-India FTA is likely to have much larger significance in the future.

## **4.2 Product Diversification**

There are still many arguments about the effect of FTA in terms of the direction of product. There are two possible ways of production through FTA, specialization and diversification. Specialization relates to Ricardian model and proponents stress that a FTA eliminates trade barriers allowing a country to concentrate more on its product based on comparative advantage and the status of resource allocation. Opponents insist beyond the theory that a FTA provides more opportunities to firms to trade commodities that have not been trade before the negotiation. This section analyzes the effect of diversification through two indices, Export Similarity Index (ESI)<sup>8</sup> and the variance of the export weight of commodity groups<sup>9</sup>. ESI is to determine the export structure, which relates to the specialization and the variance of groups is to determine whether the diversification has been made. Diversification

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<sup>8</sup> Based on the assumption that countries with similar export structure tend to compete more in terms of export, ESI indicates the degree of export competition between 2 countries. It has value between 0 and 100, the more competitive with more similar export structure would have higher value.

<sup>9</sup> Refer to <Table 3-1>

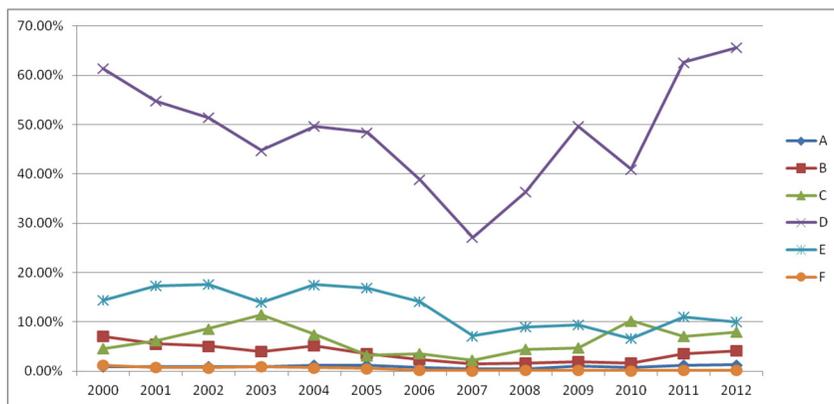
of commodities through FTA is observed when the export weight of each group changes after the FTA. For example, successful product diversification is resulting from the decline in variation after FTA indicates the narrower export gap among groups and it means the range of export items became wider through FTA. Theoretically there are negative correlation between the variance of export weight and ESI. Similar export structures between countries are likely to promote intra-industry trade and this will lead to low variance among commodity groups.

#### **4.2.1 Korea-Chile FTA**

According to <Figure 4-7>, group D, manufactures with medium skill and technology intensity, has been the most important export to Chile. It accounts around 65% of Korea's export to Chile. On the other hand, group A, primary commodities, and group B, labor intensive and resource based manufactures, were the lowest portion of export which were both less than 10% of the export. The variance among groups dropped until 2007 and jumped again. The export gap among groups was the smallest in 2007. This result indicates that the diversification occurred at the beginning but the specialization took over after 2007. Meanwhile, ESI remained at the low level that describes the low export competition between Korea and Chile. There was not an immediate change in both indices after the FTA. As a result, the diversification seemed to be made before the FTA but Korea's export to Chile became more influenced by the different export structure through

the FTA. In short, the specialization has deepened after the FTA.

<Figure 4-7> Export Weight of Commodity Groups: Chile



(Group's export to Chile/Total export to Chile)

Source: UN Comtrade

<Table 4-7> Variance and ESI: Chile

Year	VAR	ESI	Year	VAR	ESI
2000	5.43	13.33	2007	1.10	11.77
2001	4.31	14.05	2008	1.95	13.93
2002	3.74	12.55	2009	3.68	13.03
2003	2.77	16.38	2010	2.44	11.77
2004	3.49	13.61	2011	5.77	12.78
2005	3.49	12.96	2012	6.32	12.45
2006	2.25	12.18			

Source: UN Comtrade

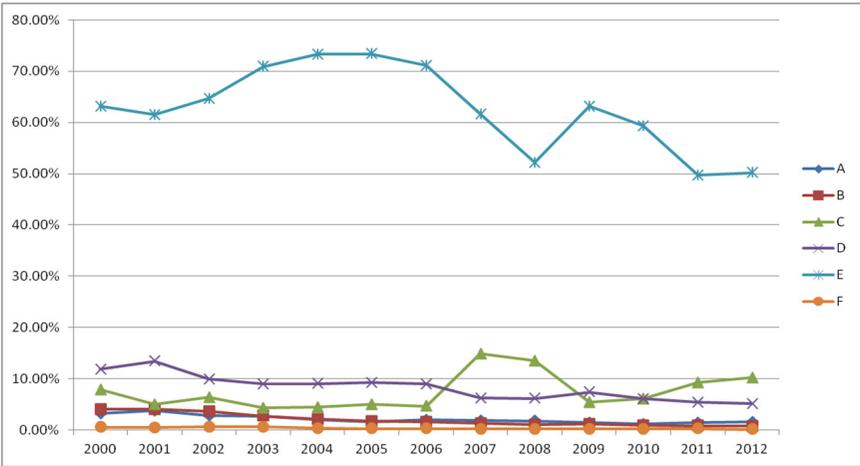
In this case, the result supported more to the specialization advocates. However, this results in the Korea's FTA policy toward Chile. Korea established several strategic targets for the FTA with Chile. First, Korea tried to overcome the regionalism for the purpose of market diversification. Second, it was to secure a strategic position across the Pacific Ocean. Korea wanted to have stable investment overseas and Chile is a country that is stably developing in Latin America recently. Third, Korea desired to secure the stable import line of raw materials such as copper. This aim most relates to the result. Korea lacks natural resources but have relatively better performance on certain manufactures than Chile that owns mine resources in the north. Therefore Chile was suitable for Korea's FTA partner for these reasons. Consequentially, however, Korea's FTA policy was established to exploit the benefits from the difference in export structure, comparative advantage.

#### **4.2.2 Korea-Singapore FTA**

A group of manufactures with high skill and technology intensity dominated Korea's export to Singapore. Although its importance has fallen since 2006, it still accounts the most part of the export. ESI dropped until 2009 and gradually increasing recently. In other words, the export structures of Korea and Singapore became more similar and competitive after 2008 that intra-industry trade is expected to be made. The variance increased until 2005 but turned into downward trend after

the FTA. This result indicates the positive effect of FTA on the product diversification. According to <Figure 4-8>, group C, manufactures with low skill and technology intensity, and group E, manufactures with high skill and technology intensity, are observed to have somewhat symmetric trend. Moreover, there is a noteworthy phenomenon that portrays a switch of export product after the FTA. A decrease in group E is covered by an increase in group C. Opposite trend between two groups implies that there is a substitution effect and it is likely to influence to the product diversification. Considering the change in the export weight after FTA without a significant change in tariff rate, the FTA implies more of its importance on the product diversification.

<Figure 4-8> Export Weight of Commodity Groups: Singapore



(Group’s Export to Singapore/ Total Export to Singapore)

Source: UN Comtrade

<Table 4-8> Variance and ESI: Singapore

<b>Year</b>	<b>VAR</b>	<b>ESI</b>	<b>Year</b>	<b>VAR</b>	<b>ESI</b>
2000	5.70	62.58	2007	5.67	54.13
2001	5.45	57.05	2008	4.02	51.06
2002	6.10	56.98	2009	6.10	49.75
2003	7.57	56.67	2010	5.38	51.77
2004	8.19	56.05	2011	3.69	52.19
2005	8.23	55.14	2012	3.77	53.26
2006	7.71	53.66			

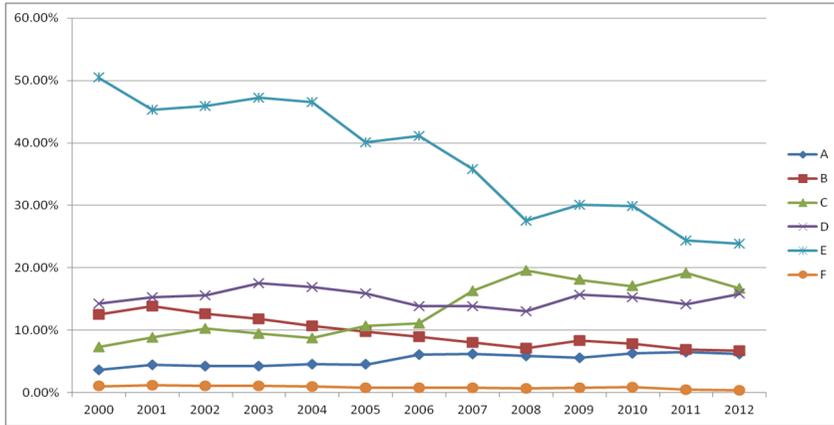
Source: UN Comtrade

In fact, Korea's purpose of the FTA with Singapore was more related to financial sector rather than commodity because Singapore was already imposing low level of tariff on products. Korean government supported stable international businesses abroad. Korea-Singapore FTA is also important for a geographic reason that both countries are located in Asia and they have similar economic structure compared to the countries in other continent. Similar structure promotes intra-industry trade and it is likely to lead to the product diversification. It also has its meaning on the range of the FTA. Korea-Singapore FTA is a comprehensive arrangement that helps enhancing competitiveness in various sectors. As a result, Korea's FTA with Singapore is effective on the product diversification.

### 4.2.3 Korea-ASEAN FTA

As well as Korea-Singapore's case, group E, manufactures with high skill and technology intensity, has led Korea's export to ASEAN. Unlike the previous case, however, <Figure 4-9> clearly portrays the effective product diversification. According to <Figure 4-9>, the gap among export weight of each group in 2012 is narrower than that in 2000. In other words, the export weights have converged especially from 2006. Group E was exported around a half of Korea's total export headed to ASEAN in 2000 but it declined dramatically after the FTA with the rise of group C's export weight. According to <Table 4-9>, the variance also supports the evidence of the progress of product diversification. In comparison to the past, it has decreased values after the FTA. An interesting feature for ASEAN case is that ESI also has decreased after the FTA. Theoretically higher ESI tend to lead to a lower variance that was the case for Korea-Chile, <Table 4-9> shows a different phenomenon. The export structures of Korea and ASEAN became more heterogeneous which makes the situation easier to specialize the product based on the comparative advantage and less competitive in terms of the export but the variances among the commodity groups became lower than before that indicates an increase in a variety of exportation. In accordance with the increases in both export value and weight, Korea has gained extensive export margins through the FTA with ASEAN.

<Figure 4-9> Export Weight of Commodity Groups: ASEAN



(Group's Export to ASEAN/Total Export to ASEAN)

Source: UN Comtrade

<Table 4-9> Variance and ESI: ASEAN

Year	VAR	ESI	Year	VAR	ESI
2000	3.29	62.58	2007	1.50	54.13
2001	2.52	57.05	2008	0.98	51.06
2002	2.59	56.98	2009	1.11	49.75
2003	2.79	56.67	2010	1.05	51.77
2004	2.72	56.05	2011	0.79	52.19
2005	1.96	55.14	2012	0.74	53.26
2006	2.01	53.66			

Source: UN Comtrade

One of the main aims of Korea-ASEAN FTA is to make an attempt to a

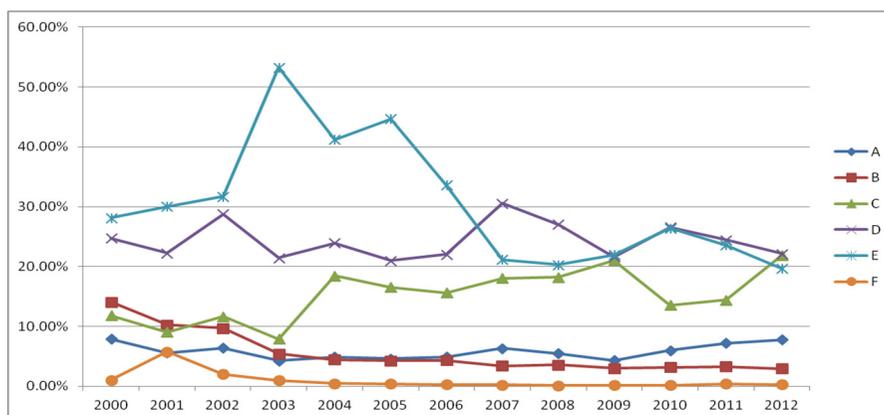
regional integration in Asia. Since ASEAN is one the biggest markets in Asia, Korea endeavored not to be lagged behind the rivals such as China and Japan. Korea-ASEAN FTA which entered in to force for commodity sector a year after the FTA with Singapore, a member of ASEAN, gives a better implication on product diversification through mega FTAs by having a larger effect.

#### **4.2.4 Korea-India FTA**

Compared to other cases, export weight of group B, labor-intensive and resource based manufactures, was relatively high. In 2000, it started with over 10% but gradually decreased as time passed. The export to India was mostly depending on the group of manufactures with high skill and technology intensity. However, the importance of group C and D gradually increased and they took over the export weight of group E in 2012. After the FTA in 2010, the export of group A and C replaced those of group D and E. Some parts of the exports of manufactures that require medium or high skills, which were leading the export, are substituted with commodities that are manufactured with relatively lower skills. Despite India's location which belongs to Asia as well as Korea and Singapore, it has relatively low ESI that two countries are not likely to compete with each other in terms of export by focusing on their major items. The variance, however, was lower than that of Singapore. That is, Korea is exporting products more equally to India that has low ESI than those to Singapore that has higher ESI. This contradicts the general

concept of specialization.

<Figure 4-10> Export Weight of Commodity Groups: India



(Group's Export to India/Total Export to India)

Source: UN Comtrade

<Table 4-10> Variance and ESI: India

Year	VAR	ESI	Year	VAR	ESI
2000	1.04	31.65	2007	1.40	35.83
2001	1.00	35.10	2008	1.17	39.23
2002	1.50	33.80	2009	1.11	37.07
2003	3.91	33.95	2010	1.34	37.05
2004	2.40	34.16	2011	1.06	38.81
2005	2.71	35.17	2012	0.99	40.57
2006	1.63	36.24			

Source: UN Comtrade

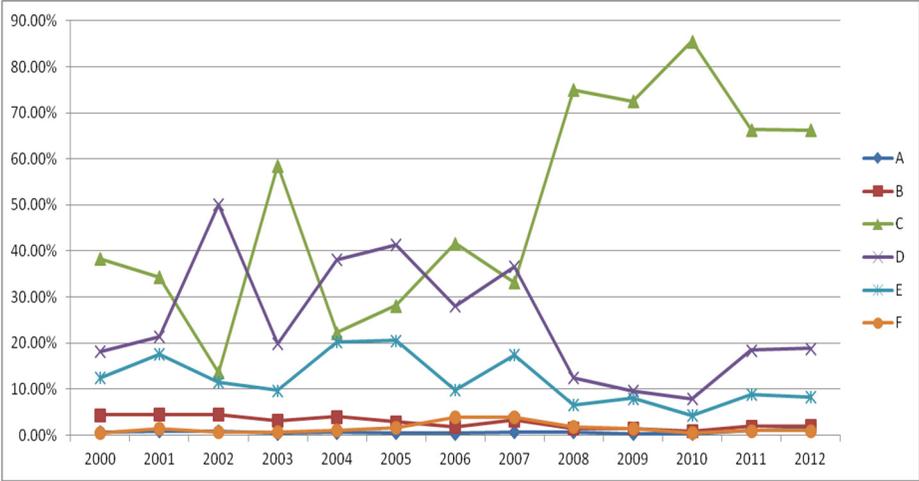
India is geographically important to Korea that could work as a hub of Western Asia. For this reason, Korea wanted to arrange FTA with India to enjoy the first-mover advantage in a large emerging market. Despite a disadvantageous environmental condition, the effect of product diversification was larger than that in Singapore. This is because complementary export has been achieved through intra-industry trade. India exported complementary items such as auto parts, ships, textile goods and synthetic resins to Korea. For these reasons, the product diversification has been successfully progressed. Since only 2 years have passed during the researched period, the measurement of the effect of the FTA could not be accurate. However, the trends have changed after the FTA that gives implication on this case.

#### **4.2.5 Korea-EFTA FTA**

In the case of Korea's export to EFTA, the export weights of group D and E, manufactures with medium and high skill and technology intensity, have similar trend while that of group C that requires lower skill and technology intensity shows an opposite movement. According to <Figure 4-11>, a decrease in export weights of group D and E is covered by an increase of group C's export weight. Korea-EFTA FTA entered into force in 2009 but the gap has been widened since 2007. It explains that the specialization has been deepened since 2007. In 2010, the export through specialization was intensified the most that more than 80% of the export was led by

group C. Inferring from the fact that year of the FTA, the FTA stimulated the specialization in a trade pattern by eliminating such trade barriers. It became more balanced in 2012 but still the gap was quite wide that the export weight of group C dominated by accounting around 70% and the rest was covered by group D and E together. According to ESI, Korea and EFTA are not expected to have severe competition in international trade because the export structures are different from each other. Thus, theoretically, it is expected to detect the specialization of product in transactions between two parties.

<Figure 4-11> Export Weight of Commodity Groups: EFTA



(Group’s Export to EFTA/Total Export to EFTA)

Source: UN Comtrade

<Table 4-11> Variance and ESI: EFTA

Year	VAR	ESI	Year	VAR	ESI
2000	2.09	28.92	2007	2.53	27.48
2001	1.79	29.39	2008	8.45	26.68
2002	3.49	27.79	2009	7.92	26.43
2003	5.01	28.62	2010	11.4	26.28
2004	2.27	26.96	2011	6.46	26.78
2005	2.85	26.95	2012	6.46	26.39
2006	2.82	26.89			

Source: UN Comtrade

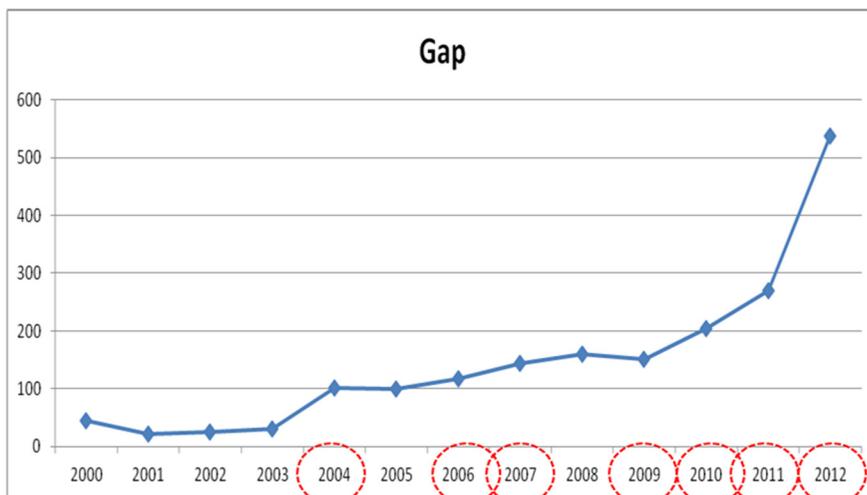
The variance among groups was more volatile than ESI. It is possible to infer from the result that other factors such as a political issue or external economic condition intervened to the relation between both parties. In fact, Korea regarded EFTA as a test market of EU. Korean government strategically aligned with EFTA to enter EU market. For Korean firms, EU market priors to EFTA and many products turned the way to EU rather than EFTA along with the Korea-EU FTA.

### 4.3 Exporter Diversification

Due to such policies from the past, Large Enterprise (LE) is still driving Korea's export. According to the data from the Small and Medium Business

Administration, the export gap between LE and SME turned out to be larger after Korea's FTAs. The circled years in <Figure 4-12> refer to years that FTAs entered into force and the export gap between two groups became bigger after the effectuations. From the result, Korea's FTAs tend to affect more favorable to LEs. In addition, Korea's LEs hire many FTA experts and they strive to take advantage of FTAs.

<Figure 4-12> Export Gap



(Unit: Billion \$)

(LEs' Export – SMEs' Export),

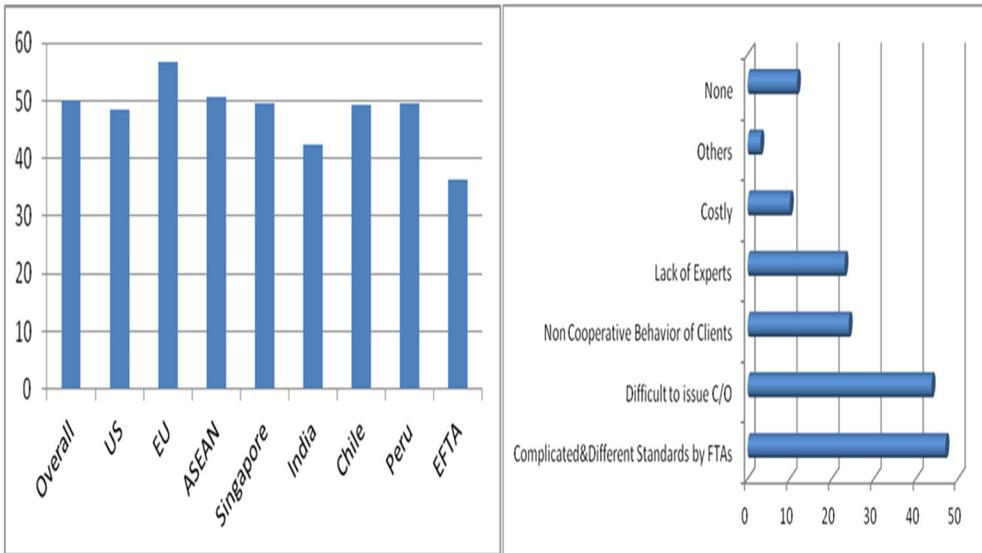
Source: The Small and Medium Business Administration

Korean SMEs raise their voices against the difficulties of FTA utilization. There are many FTAs that have entered into force and there will be more FTAs. However, many SMEs are not taking advantage of FTAs so far. According to

<Figure 4-13>, only half of SMEs think they are taking advantage of FTA tariffs in general. The survey was conducted in 2012 through 300 exporting SMEs that have more than 10 employees about the FTA tariff application, sensitive effect of FTAs and rules of origin. Regarding the FTA tariff utilization, EU was the highest (56.8%) while EFTA was the lowest (36.4%). It is acceptable that the rate of EU is higher than that of EFTA. The application rate for U.S. and ASEAN was 48.4% and 50.7% respectively. The low application rate of FTA tariff 50.1% in average points out that only a half of SMEs are actually taking advantage of the preferential tariff. The exporting SMEs feel FTAs negatively or not effective because of the fierce international competition and a low utilization of FTA preferential tariffs. To make matters worse, 88.3% of SMEs felt the difficulties of rules of origin. The main reason was the complex standards by each FTA. Another big reason was the strict and particular work to issue a certificate of origin.

To eliminate such barriers of the FTA utilization, the process of certificate of origin needs to be simplified along with the international standard of rules of origin. Also it is important to have an education of relevant FTA regulation. Since SMEs need more time to understand or utilize the FTA, the FTAs that is in progress simultaneously across the country needs to be promoted by stages in order to prevent a FTA effect from offsetting.

<Figure 4-13> SMEs' FTA Tariff Utilization and Problems of Rules of Origin (2012)



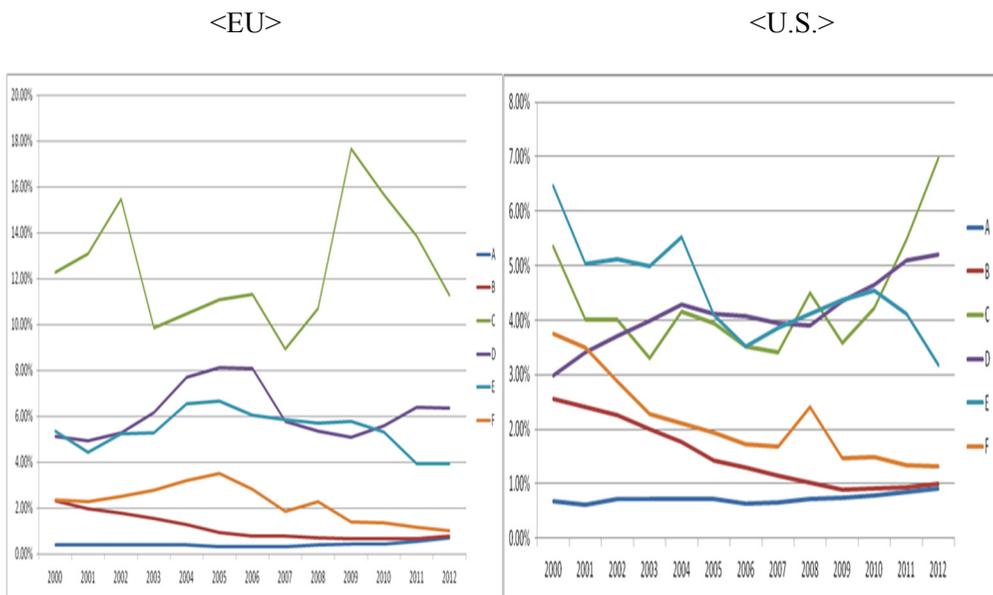
Source: Korea Federation of Small and Medium Business

Korean SMEs should put more effort to survive in markets such as EU and U.S. EU and U.S. are major export markets of Korea but the export weights are replacing by those of China and ASEAN. According to <Figure 4-14>, group C, which has the most comparative advantage in Korea, is the only group that passed over 10%. From its heavy fluctuation of market share, Korea's lacks more of its stability in EU. Moreover, none of the groups has reached to 10% in U.S. market. As well as in EU, group C is leading the export recently. It also gives Korea's position a warning of danger.

However, Korea should not neglect the importance of these markets which are the world most developed economies. Although it is difficult to survive in the competitive markets such as EU and U.S., these markets provide a lot of

opportunities for Global Value Chain. Korean SMEs should not avoid or hesitate to enter EU and U.S markets. According to UNCTAD reports, value-added trade gives 30% of contribution to the GDP for developing countries which is 12% larger than that of developed countries. Global Value Chain mechanism is so important for an economy that it helps adopting new technology allowing a country to have a better product capacity. Therefore, it plays an important role in long-term industrial upgrade. SMEs should escape from the Peter Pan syndrome and aggressively participate in the Global Value Chain mechanism in EU and U.S. markets.

<Figure 4-14> Korea's Market Share in EU and U.S. by Groups



(Korea's Export by Group/EU,U.S.'s Import by Group)

Source: UN Comtrade

## **CHAPTER V. POLICY IMPLICATION**

Korean government should strengthen both the quantity and quality of the FTA education for SMEs. It is necessary to provide more specific information and the actual instructions of FTAs so that SMEs could take advantage of benefits such as FTA's preferential tariff. Utilizing existing FTAs is as important as increasing the number of FTAs. The mega-FTAs, such as RCEP and TPP that Korea is currently participating in the negotiation, need to be carried forward by stages. Moreover, various and complex standards of FTAs in terms of the rules of origin needs to be simplified by an international regulation through the mega FTA. In this way, Korean government could provide a better environment for SMEs to utilize the FTAs.

Since FTA is a well paved highway for an efficient trade, it is exporters who have to go through it. SMEs should actively participate in a FTA mechanism. They should not hesitate to enter competitive markets including U.S. and EU to exchange with international businesses. They should also challenge a new product by taking advantage of flexibility from their small size. In short, SMEs should not fear the changes and need to go through the competition rather than sitting still enjoying the SME's favorable privilege from the government. In this regard, Korean government needs to establish institutions to support challenges and remedy the failure. Eventually SMEs are the important key to solve the problems of Korea's export pattern in three aspects simultaneously.

## **CHAPTER VI. CONCLUDING REMARKS**

To sum up, FTAs of Korea have somewhat positively influenced on export diversification. In terms of the market diversification, the export weight to the partner increased after the FTAs that Korea's export has diverged through FTAs. Also an export increase has spread to partner's neighboring countries. Many destinations provide a room to cope with a potential risk such as unexpected incident in certain market but various export lines do not always guarantee a high export margin. Other competitor would freely enter threatening a position.

In the long run, the product relates more to a higher export margin. A wide range of exporting items proves a strong capability of product. Korea's FTAs with Asian countries led to a successful product diversification but others showed different results that the specialization has deepened. As well as economic condition, specific targets of a FTA decided the trade pattern of products.

Unlike the market and product diversifications, the disparity of exporters has deteriorated after the FTAs. Since many FTAs have been arranging, SMEs that suffers from the lack of budget could not utilize FTAs. Many SMEs neglect the significance of the FTA that could not take advantage of preferential tariff after the trade negotiations. They recognize the difficulties of the rules of origins. Therefore the government needs to support in quality for a full utilization and SMEs should actively participate in international business through a FTA. They should enter the markets such as EU and U.S. to take advantage of Global Value Chain and

challenge on new products using their flexibility by relatively small scale. That is, SMEs need to lead the export diversification of Korea. Then, Korea's export diversification through FTAs would have a greater effect.

This research included some cases from Korea's total FTAs. There are many FTAs that have arranged recently that is excluded in this paper. The impact of those FTAs was hard to observe because only a couple of years have passed. Perhaps, a further research after few years will represent much to the effect of Korea's FTAs overall.

## APPENDIX

<Appendix 1> Korea's FTA Arrangements (as of April 2014)

FTA Partner	Status of Negotiation
Chile	2004. 4. 1 entry into force
Singapore	2006. 3. 2 entry into force
EFTA(Switzerland, Norway, Liechtenstein, Iceland)	2006. 9. 1 entry into force
ASEAN	2006. 8. 24 framework agreement 2007. 6. 1 agreement on goods entry into force 2009. 5. 1 agreement on services entry into force 2009. 9. 1 agreement on investment entry into force
India	2010. 1. 1 entry into force
EU	2011. 7. 1 provisional entry into force
Peru	2011. 8. 1 entry into force
US	2012. 3. 15 entry into force (2007.6 signed)
Turkey	2013. 5. 1 entry into force
Columbia	2012. 6. 25 negotiated settlement
Australia	2013. 12. 4 negotiated settlement

Canada	2014. 3. 11 negotiated settlement
In Progress	Indonesia, China, Vietnam, China-Japan, RCEP, New Zealand
Pending	Japan, GCC, Mexico, Israel, Malaysia, MERCOSUR

Source: <<http://www.fta.go.kr>>

<Appendix 2> Korea's Market Share in Major Markets

Market	Group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>ASEAN</b>	A	3.71	3.70	3.76	3.78	3.99	4.09	5.04	4.95	5.00	4.49	4.86	5.25	5.24
	B	15.22	14.94	13.68	12.47	11.60	10.58	10.73	9.29	9.33	9.36	8.77	8.52	7.50
	C	11.07	11.31	12.52	10.79	9.58	10.46	11.97	15.17	16.44	16.12	16.12	18.81	17.61
	D	5.64	5.55	6.25	6.92	6.43	6.34	5.97	5.94	5.91	7.18	6.82	7.28	7.81
	E	10.55	8.56	9.63	9.55	9.65	9.04	9.43	9.17	8.22	9.13	9.47	9.60	9.84
	F	5.51	5.83	6.20	5.86	5.31	4.61	4.46	4.22	4.39	4.60	5.90	3.93	3.27
<b>China</b>	A	4.15	3.37	3.74	3.86	4.01	3.78	4.09	3.73	3.10	2.60	2.22	2.15	2.15
	B	13.66	13.54	13.08	12.24	11.45	11.58	10.65	9.84	9.43	9.06	8.86	8.27	8.55
	C	11.89	13.38	12.08	13.40	16.36	14.30	13.79	13.77	16.69	15.47	16.36	16.41	16.45
	D	6.27	6.05	6.81	8.62	9.92	11.85	11.46	10.58	10.42	11.91	11.91	12.17	13.10
	E	9.54	8.50	11.50	12.97	14.89	16.19	14.77	16.21	16.31	16.89	17.70	17.28	17.26
	F	8.53	9.39	9.45	7.88	7.42	7.38	6.51	5.27	4.24	3.43	4.31	4.18	2.68
<b>EU</b>	A	0.40	0.38	0.39	0.39	0.41	0.33	0.30	0.33	0.41	0.42	0.44	0.54	0.71
	B	2.31	1.97	1.78	1.54	1.28	0.94	0.77	0.76	0.70	0.65	0.68	0.66	0.76
	C	12.27	13.10	15.47	9.86	10.46	11.08	11.30	8.94	10.70	17.67	15.66	13.85	11.29
	D	5.12	4.92	5.26	6.16	7.70	8.14	8.07	5.79	5.35	5.10	5.57	6.38	6.36
	E	5.36	4.41	5.22	5.26	6.55	6.66	6.03	5.85	5.69	5.76	5.31	3.91	3.92
	F	2.34	2.28	2.49	2.77	3.20	3.51	2.81	1.87	2.28	1.40	1.34	1.15	1.00
<b>Japan</b>	A	3.62	3.35	3.26	3.17	3.36	3.12	3.20	3.17	3.15	3.69	3.89	4.73	4.45

	B	5.99	4.77	4.07	3.56	3.35	3.05	2.58	2.40	2.47	2.46	2.46	2.42	2.48
	C	23.56	20.12	17.49	17.51	19.09	21.05	17.95	15.92	17.86	18.29	19.71	21.54	22.52
	D	4.92	5.27	5.42	5.63	6.05	6.50	6.49	5.40	5.86	6.05	5.82	6.09	6.21
	E	9.62	7.42	7.54	7.91	8.16	8.22	9.30	9.09	8.06	8.13	8.03	8.09	7.73
	F	4.75	4.31	4.67	4.60	6.38	6.45	5.27	3.72	3.78	5.13	4.81	4.50	4.61
	U.S.	A	0.68	0.62	0.71	0.71	0.73	0.73	0.64	0.66	0.71	0.75	0.78	0.84
B		2.55	2.41	2.26	2.00	1.77	1.43	1.30	1.14	1.01	0.90	0.90	0.92	1.00
C		5.36	4.01	4.00	3.29	4.15	3.95	3.52	3.41	4.51	3.58	4.22	5.49	6.98
D		2.99	3.42	3.71	3.98	4.30	4.11	4.08	3.95	3.90	4.36	4.65	5.10	5.21
E		6.46	5.03	5.11	4.98	5.52	4.09	3.52	3.86	4.10	4.37	4.54	4.11	3.19
F		3.76	3.49	2.87	2.28	2.11	1.94	1.73	1.69	2.41	1.47	1.49	1.34	1.32

(Unit: %)

(Korea's Export / Country's Import)

Source: UN Comtrade

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The Small and Medium Business Corporation (<http://sbc.or.kr>)

United Nations Commodity Trade Statistics Database (<http://comtrade.un.org>)

# 수출 다변화를 중심으로 본 한국 FTA의 수출성과 분석

국문초록

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박해민

세계화가 가속화됨에 따라 국제무역은 세계경제성장에 중요한 역할을 하고 있으며, FTA가 국제무역의 흐름을 주도하고 있다. 한국은 수출을 통해 성공적으로 경제성장을 이룩하였고 현재까지도 경제발전의 원동력이 되고 있다. 하지만 한국의 수출구조는 안정적이지 못하여 위험을 내포하고 있다. 첫 째, 한국의 수출시장은 중국, 아세안, 일본, 미국, EU 등 거대 경제권 5개에 편중되어 있다. 둘 째, 한국의 수출품목 또한 몇 가지 상품에 집중되어 제한적이다. 셋 째, 대기업 위주의 수출이 심화되어 중소기업들의 역할이 줄어들고 있다. 이러한 편중된 수출구조는 오늘날과 같이 복잡해지고 심하게 변동하기 쉬운 세계경제 상황 속에서 예기치 못

하게 발생하는 금융위기, 상품의 가격 변동, 특정 시장에서의 급격한 수요 변화 등의 충격에 취약하며 이러한 경우 한국경제는 위기를 맞이할 수 있다. 수출주도형 성장을 이룩해온 한국은 수출구조를 다변화하여 보다 안정적인 경제성장을 도모해야 한다.

한국은 그 동안 FTA를 통해 비교적 성공적으로 시장을 다변화 하였다. 그 예로, FTA 이후 각 해당국으로의 수출비중이 증가하였다. 한-칠레 FTA의 경우, 칠레뿐만 아니라 남미로의 수출 또한 확대되어 FTA를 통한 거점효과가 나타났다. 한-싱가포르 FTA는 이듬해에 한-아세안 FTA를 촉진시켰고 상품부분에 있어서 효력이 발효됨에 따라 수출비중 또한 증가하여 FTA의 도미노 효과를 보여주었다. 이러한 사례들은 FTA를 통한 성공적인 시장다변화를 보여준다. 한국과 아시아 국가들과의 FTA들은 성공적인 품목다변화의 사례가 되었으나 그 외 지역의 국가들에서는 오히려 상품의 특화가 심화되는 등 다른 결과 나타났다. 이는 경제적인 요건 외에 해당 FTA에 따른 특정한 정책이나 전략이 상품무역패턴에 많은 영향을 끼쳤기 때문이다. 한편, 거의 모든 FTA 이후에 중소기업과 대기업의 수출격차는 더욱 벌어졌다. 이는 중소기업들이 대기업보다 FTA의 활용에 많은 어려움을 겪고 있기 때문이다.

정부는 중소기업을 대상으로 FTA 정보제공 및 교육을 확대하고 원산지증명서 발급의 절차를 간소화 하는 등 이들이 실질적으로 FTA의 효과를 체감할 수 있도록 해야 한다. 또한 단계적으로 거대 FTA를 추진하여

FTA간 상쇄효과를 막고 원산지규정에 관한 기준을 간소화해야 한다. 중소기업 또한 적극적으로 수출시장에 참여해야 한다. 경쟁에 맞서 유럽과 미국 등 국제가치사슬에 편승할 수 있는 기회가 많은 시장에 진출하여 다양한 해외기업들과 교류해야 한다. 그리고 작은 규모에서 나오는 생산의 유연성을 이용하여 새로운 상품으로 생산을 전환하는 등 적극적으로 수출에 임해야 한다. 이를 독려하는 정부의 지원이 뒷받침된다면 중소기업은 한국수출다변화를 주도하는 역할을 하게 될 것이다. 그렇게 되면 한국은 FTA를 통한 수출다변화로 인해 안정적인 경제성장을 할 수 있을 것이다.

**Keywords:** 시장집중도, 상품특화, 수출업자 간 불균형, 안정적 수출구조, 수출다변화, FTA의 활용

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