

# KIEP WORLD ECONOMY UPDATE

September 28, 2012 | Vol. 2 No. 1

ISSN 1976-0515

## The First Year after the Korea-EU FTA and Its Prospects

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## Summary ●●●

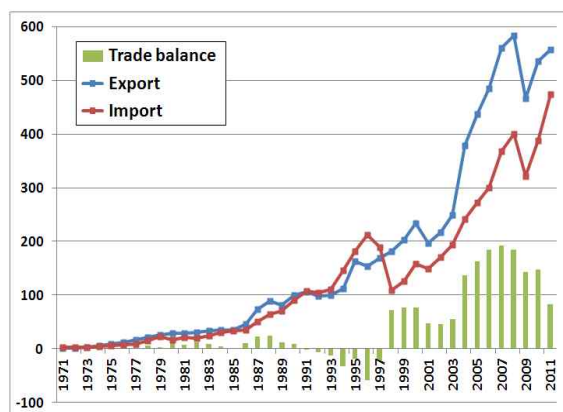
- ▶ Korean exports to the EU, which had been increasing after the global economic crisis, began to decline from the latter half of 2011. During the 11 months the Korea-EU FTA has been in effect, Korean exports to the EU have decreased 11.5%, but imports from the EU have increased 14.8%.
  - Exports to the EU have been decreasing in East Asian countries, including China, Japan, and Taiwan, where manufactured products account for the majority of exports, due to a drop in import demand in the EU caused by the economic recession.
  - Korean exports to the EU are concentrated in ships, electronics, and automobiles. However, despite an increase in exports of automobiles, exports of ships and electronics, which account for 38% of total exports, have sharply declined, causing an overall decline in exports.
  - Imports from the EU are increasing for various types of goods. For certain items, imports have rapidly increased, causing a decrease in trade surplus.
- ▶ An analysis of changes in imports from and exports to the EU after the implementation of preferential tariff rates shows that items with tariff reductions resulted in an increase in both exports and imports, but that items without tariff reductions resulted in a significant decline in exports and an increase in imports.
  - (Exports to the EU) The tariff reduction rate was high for automotive items, resulting in a significant increase in the export of such items. There was a significant reduction in exports of electronics and electricity-related items despite tariff reductions, and the drop in overall European demand for ships caused exports in this area to plunge significantly.
  - (Imports from the EU) There was a significant increase in imports with high tariff reductions, such as refined petroleum, machine parts, and bags. Despite low tariff reductions, imports of crude oil, meat and planes have greatly increased as well.
- ▶ For Korea's FTAs with large industrialized countries, it would be necessary to set up medium and long-term goals, such as improving productivity and maintaining competitiveness in exports, beyond the short-term goal of increasing exports.
  - The long-term focus of trade and industrial policy needs to be changed from increasing exports to promoting technical cooperation to improve productivity. Moreover, assistance needs to be provided for domestic small and mid-size enterprises (SMEs) to attract and acquire technology.
  - As the size of trade and investment grows on both sides, the need for regulatory cooperation to remove non-tariff barriers is expected to grow. In this context the Korea-EU FTA can be used in upgrading domestic regulations.

## 1. Recent Trends in Trade and Investment between Korea and the EU

- With the exception of the period of global financial crisis (2009), trade with the EU has maintained an increasing trend, but trade surplus has been decreasing.
  - EU is Korea's third largest trading partner, after China and Japan, and Korea is the EU's eighth largest trading partner. Korea's trade with the EU in 2011 surpassed 100 billion USD.
  - At the time negotiations were launched for the Korea-EU FTA in 2007, the EU was Korea's second largest trading partner and the site of the most significant trade surplus gain for Korea, whose trade balance amounted to 19.1 billion USD.
  - Although EU's trade share in Korea's total trade dropped from 12.7% in 2007 to 9.6% in 2011, trade volume rose from 92.8 billion USD to 103.2 billion USD within the same time period.
  - After the global financial crisis Korea's trade surplus with the EU has been gradually decreasing as a result of the slowdown of the EU's economic growth, which decelerated demand for imports, and the increase of imports into Korea from the EU, due to Korea's rapid economic recovery.

Figure 1. Trade with the EU

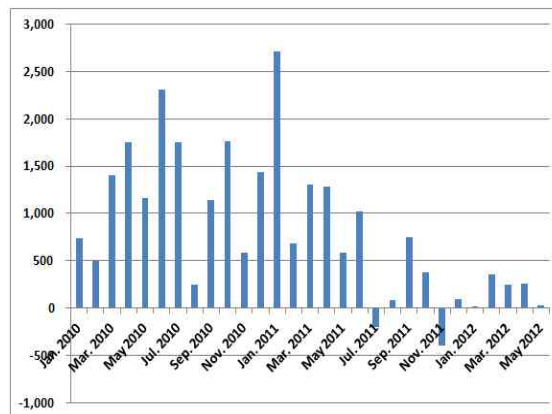
(Unit: 100 million USD)



Source: Korea International Trade Association (KITA).

Figure 2. EU's Trade Balance by Month

(Unit: 1 million USD)



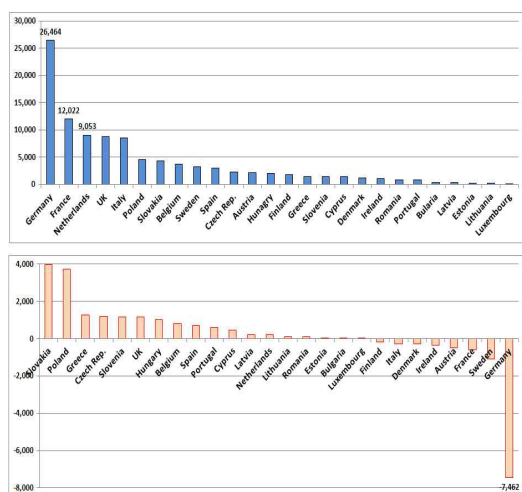
Source: Korea International Trade Association (KITA).

- Trade with Western European countries accounts for majority of Korea's trade with the EU. However, Korea has very large trade deficit with Western Europe, while it has large trade surplus with Eastern Europe.
  - Trade with five large European countries — Germany, France, Netherlands, UK, and Italy (55 % of the EU's GDP) — makes up 64% of the Korea's total trade with the EU. Trade with 10 Eastern European countries comprises only 16%.

- However, with Western European countries, including Germany, Korea has suffered a trade deficit, while it recorded trade surplus with Eastern European countries.
- Korea's trade deficit with Germany resulted from the huge amount of imports of automobile, auto parts, and machinery. This is a chronic situation similar to the Korea's trade deficit with Japan, and Korea's trade deficit with Germany has been continuously increasing.
- ※ Korea's trade balance with Germany: +530 million USD (2005) -> -1.19 billion USD (2007) -> -3.48 billion USD (2009) -> -7.46 billion USD (2011) -> -3.82 billion USD (as of May 2012)
- Korea's exports to Western European countries mostly consist of ships, automobile, and wireless communication devices. In contrast, exports to Eastern European countries mostly comprise of intermediary goods for Korean companies in Eastern Europe, and therefore such exports are considered mainly as intra-firm trade among Korean companies.
- Exports to Eastern Europe have recorded a significant amount of trade surplus, which points to the formation of the following trade structure: "Korea -> Eastern Europe -> Western Europe." The amount of indirect exports to the EU would be greater if exports from Korean factories in Eastern Europe to Western European nations are included.

**Figure 3. Trade (above) and Trade Balance (below) with EU Member States (2011)**

(Unit: 1 million USD)



Source: Korea International Trade Association (KITA).

**Table 1. Exports to Major Nation in Western Europe and Eastern Europe (2010)**

(Unit: 1 million USD)

	Items	Exports	Share (%)		Items	Exports	Share (%)
Germany	1 Ship	4,359	40.7	Slovakia	1 Flat-panel display	1,976	44.7
	2 Semiconductor	1,407	13.1		2 Auto parts	1,216	27.5
	3 Automobile	547	5.1		3 Imaging device	275	6.2
	4 Wireless device	495	4.6		4 Computer	101	2.3
	5 Auto parts	445	4.2		5 Optical instrument	84	1.9
	All five items	7,253	67.8		All five items	3,652	82.5
UK	1 Ship	1,568	28.2	Poland	1 Flat-panel display	1,883	43.0
	2 Wireless device	599	10.8		2 Imaging device	546	12.5
	3 Automobile	527	9.5		3 Wireless device	246	5.6
	4 Semiconductor	512	9.2		4 Optical instrument	245	5.6
	5 Petroleum	418	7.5		5 Semiconductor	199	4.5
	All five items	3,624	65.2		All five items	3,119	71.2
France	1 Ship	804	26.8	Hungary	1 Flat-panel display	668	28.0
	2 Wireless device	581	19.3		2 Wireless device	563	23.6
	3 Automobile	484	16.1		3 Imaging device	280	11.7
	4 Semiconductor	102	3.4		4 Semiconductor	255	10.7
	5 Auto parts	59	2.0		5 Automobile	152	6.4
	All five items	2,030	67.6		All five items	1,918	80.4

Note: Percentage refers to the proportion of a particular item in total exports.

Source: Korea International Trade Association (KITA).

- EU's annual investments in Korea have remained at about 3 billion USD despite large annual fluctuations. The investments from four countries — Netherlands, UK, Germany and France — make up over 80% of total investments.

- Among single economic blocs, the EU is the largest foreign investor in Korea (43%), investing 2.4-4.4 billion USD annually over the past decade, investment mostly from Western European countries.

※ Share of EU member state investments in Korea (2005-2009): Netherlands (28.1%), UK (25.6%), Germany (11.1%), France (9.4%)

- Most investments are concentrated in the service sector, particularly the finance, banking, and insurance due to M&A of Korean financial companies and banks by large European firms. The demand to open up the service sector (Mode 3) is expected to be stronger in the future.

**Table 2. EU Investments in Korea (2005-2009 Cumulative)**

(Unit: 1 million USD)

	Industry	Investment	%		Industry	Investment	%
Manufacturing	Food	93.8	0.5	Service	Wholesale and retail, distribution	2,717.3	14.2
	Textile, clothing	50.7	0.3		Restaurants, accommodations	151.5	0.8
	Paper, lumber	52.7	0.3		Transportation	677	3.5
	Chemistry	893.8	4.7		Communications	45.1	0.2
	Medicaments	52.1	0.3		Finance, banking, insurance	7,645	40.1
	Nonmetallic mineral	43.6	0.2		Real estate, lease	875.3	4.6
	Metal	496.3	2.6		Business services	1,588.2	8.3
	Machinery, equipment	289.2	1.5		Culture, recreation	335.3	1.8
	Electricity, electronics	1,400	7.3		Public services	84.8	0.4
	Transportation machine	955.2	5		Service total	14,119	74
	Others	96.7	0.5		Electricity, gas, water and sewage, construction	540.7	2.8
	Manufacturing total	4,424	23.2		Agriculture, forestry, fisheries	0.2	0
					Total	19,084	100

Source: Ministry of Knowledge Economy.

**Table 3. Korea's Investment in Germany and Slovakia (2005-2012 Cumulative)**

(Unit: 1 million USD)

		Industry	Investment	%
Germany	1	Automobile, trailer	1,055	50.5%
	2	Real estate	683.8	32.7%
	3	Textiles (exception: clothing)	150	7.2%
	4	Chemical products	107.7	5.2%
	5	Wholesale and retail (exception: automobiles)	92.8	4.4%
Slovakia	1	Automobile, trailer	715.8	86.5%
	2	Electronic, communication devices	75.5	9.1%
	3	Rubber, plastic	20.9	2.5%
	4	Metal work products	10.1	1.2%
	5	Business services	4.8	0.6%

Note: Germany and Slovakia are presented as examples of a Western European nation and a Eastern European nation, respectively.

Source: Export-Import Bank.

- Korea's investments in the EU reflect the characteristics (income level, industrial specialization, market size) of host countries. Investments are mostly concentrated in the manufacturing industry.

- Korea's investments in the EU amount to about 2 billion USD annually (2000-2011), and in 2010, investments reached a record high of 5.7 billion USD.

- Investments in Western Europe (annual average of 1.74 billion USD) are significantly higher than investments in Eastern Europe (0.29 billion USD). However, from 2005-2006, investments in Eastern Europe exceeded investments in Western Europe due to the large-scale expansion of Korean businesses into Eastern Europe.
- Generally, investments are concentrated in the manufacturing industry. In particular, investments in Eastern Europe are mainly in manufacturing industries.
- Investments between Korea and the EU are asymmetric; EU's investments concentrated in Korea's service sector, while Korea's investments focused on the EU's manufacturing industries. This is a reflection of differences in both parties' industrial competitiveness and market penetration strategy through investment.

## 2. Korea-EU FTA: One Year on

■ Korea's exports to the EU, which had been recovering after the global financial crisis, began to experience a decrease from the latter half of 2011. This seems to be a common situation for many East Asian countries with large amounts of manufacturing exports.

- From 2011, export growth began to noticeably slow down, and from the latter half of the same year, the amount of exports started to decrease. This trend is in contrast with the relatively positive outlook of Korean exports to emerging economies, such as ASEAN countries and China.
- In 2012, Korea's exports to China, India, and Japan are expected to slow down, and eventually total exports will decrease (Table 4).
- During the 11 months after the South Korea-EU FTA went into effect (2011.7-2012.5), Korea's exports to the EU decreased 11.5% compared to the previous year.
- During the implementation period of the Korea-EU FTA, Korea's exports to most countries have increased. The decrease in exports to the EU is an exception (Table 5).

**Table 4. Korea's Exports to Major Countries**

(Unit: Year-on-year rate of change)

	2011				2012		
	Jan	April	July	Oct	Jan	March	May
EU	84.1	13.4	-15.4	-20.3	-38	-20.4	-0.5
China	13.4	9	19.7	14.4	-2.4	-4.2	-4.9
Japan	56.6	62.9	37.1	23.4	11.5	2.1	1.5
USA	35.5	17.4	2.4	-3.6	-0.5	27.9	-8.3
India	54.2	11.6	9.0	-26.8	-14.6	-3.8	8.6
ASEAN	46.9	37.6	56.3	19.0	7.2	11.4	6.9
MER*	44.5	99.8	135.6	-0.9	-8.8	-1.3	46.9
Total exports	44.7	23.5	21.1	7.6	-7.4	-1.5	-0.6

Note: \* Southern Common Market (MERCOSUR).  
Source: Korea International Trade Association (KITA).

**Table 5. Korea's Exports to Major Countries During the South Korea-EU FTA Implementation Period (after July 2911)**

(Unit: 1 million USD)

	July 2010 - May 2011	July 2011 - May 2012	Rate of change
EU	52,774	46,727	-11.5%
China	114,436	122,361	6.9%
Japan	30,930	36,717	18.7%
USA	49,181	54,109	10.0%
India	11,566	11,520	-0.4%
ASEAN	56,391	68,569	21.6%
MER*	10,480	11,744	12.1%
Total exports	471,916	509,659	8.0%

Note: \* Southern Common Market (MERCOSUR).  
Source: Korea International Trade Association (KITA).



- The slowdown and reduction of exports to the EU are not limited to Korea. From 2012, major countries with the exception of the US and India have marked a decrease in exports to the EU.
- In 2011, the drop in Korea's exports to the EU (-8% compared to the previous year) was markedly noticeable (Table 6). However, from 2012, exports of other countries to the EU began to decrease as well.
- According to Eurostat statistics, during the 9 months after the implementation of the Korea-EU FTA (July 2011-March 2012), East Asian countries including Korea (-5.7%), China (-3.2%), Japan (-2.5%), and Taiwan (-12.3%) have experienced a marked decrease in exports to the EU (Table 7).

**Table 6. Exports to the EU**

(Unit: 100 million euro)

	2007	2008	2009	2010	2011	Changes between 2010-2011
S. Korea	413	395	323	392	361	-8.0%
China	2,326	2,479	2,142	2,825	2,921	3.4%
Japan	784	750	570	658	675	2.5%
Taiwan	260	241	179	241	240	-0.6%
India	266	295	254	332	393	18.3%
USA	1,741	1,795	1,519	1,704	1,842	8.1%
Extra-EU 27*	25,961	26,444	21,288	24,684	27,181	10.1%

Note: \* Extra-EU 27 refers to the total exports of non-EU nations to the EU.

Source: Eurostat (July 2012).

**Table 7. Exports to the EU (July 2011 - March 2012)**

(Unit: 1 million euro)

	July 2010 - March 2011	July 2011 - March 2012	Rate of change*
S. Korea	290.6	274.2	-5.7%
China	2,288.9	2,216.1	-3.2%
Japan	525.9	512.7	-2.5%
Taiwan	194.1	170.3	-12.3%
India	273.4	285.4	4.4%
USA	1,372	1,471.7	7.3%
Extra-EU 27*	12,314.9	13,115.1	6.5%

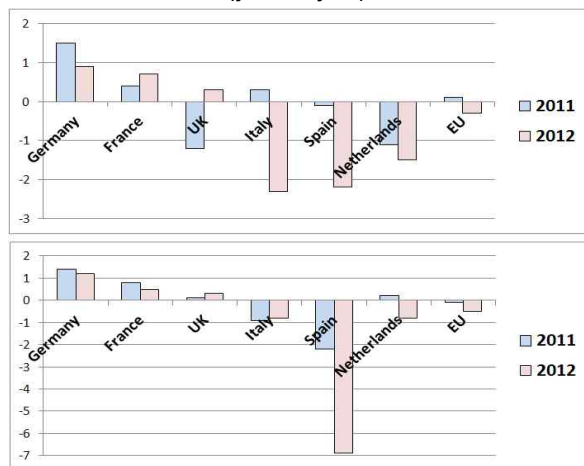
Note: \* Comparison of 9 months after the implementation of the Korea-EU FTA to the same time period of the previous year.

Source: Eurostat (July 2012).

■ **The reduction of exports to the EU is due to the economic recession of EU member states and the decrease in export demand that followed.**

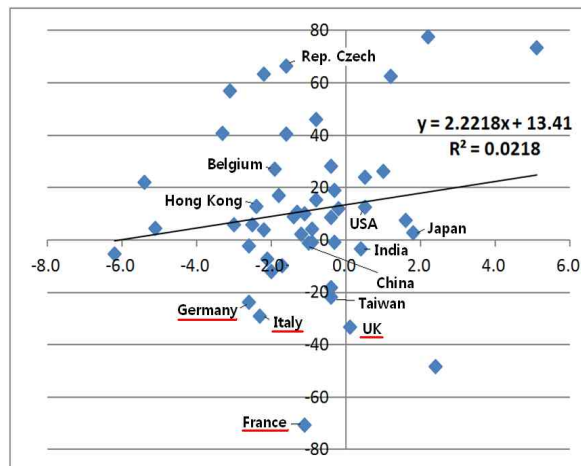
- The austerity in public finance and deleveraging of the private sector due to financial crisis are limiting consumption and investment and major economic indicators such as consumption, production and employment remain uncertain without improvement.
- In the first quarter of 2012, 13 EU member states out of 27 suffered negative growth, and the growth rates of Germany, France, UK, and Italy (65% of the EU's total GDP) only range between -0.7~-0.0%.
- Key indicators, such as private consumption, government spending, and gross investment, are expected to experience negative growth in 2012, and the unemployment rate also continuously increase.
- As shown in Figure 5, the rate of growth in Korea's exports has a positive relationship with the economic fluctuations of its trading partners overall. Due to the slow down of economies in major countries including Germany, France, Italy and UK, exports to these countries are showing a decreasing trend.

**Figure 4. The Rate of Changes in Private Consumption (above) and Government Consumption (below) of Major EU Member States (year-on-year)**



Source: European Commission (May 2012).

**Figure 5. Correlation between the Rate of Change in Korea's Export (vertical) and the Change in Economic Growth Rate (horizontal)**



Note: 1) The horizontal axis shows economic fluctuations (2012 GDP growth rate-2011 GDP growth rate), and the vertical axis shows the rate of change in exports from January to May 2012 compared to the same months of the previous year.

2) Based on the statistics of Korea's top 50 trading partners (94% of total exports).

Source: Calculated by the author using data from the IMF (WEO April 2012) and the Korea International Trade Association (KITA).

■ In contrast, Korea's economy is relatively better in shape. The demand for imports in general is growing and imports from the EU are also gradually increasing.

- Korea's total imports in 2011 increased by 23.3% compared to the previous year, and after the Korea-EU FTA entered into force, total exports showed a 12.3% increase compared to the same time frame of the previous year.

○ For 11 months after the implementation of the Korea-EU FTA, imports from the EU increased by 14.8%. This result is in accordance with the trend of increasing imports from most countries.

**Table 8. Korea's Imports by Year**

(Unit: 1 million USD)

	2010	2011	Rate of change
China	71,572	86,432	20.8%
USA	64,295	68,320	6.3%
Japan	40,402	44,570	10.3%
EU	38,721	47,426	22.5%
ASEAN	44,099	53,119	20.5%
MER	5,542	7,517	35.6%
India	5,675	7,892	39.1%
Total	425,212	524,413	23.3%

Source: Korea International Trade Association (KITA).

**Table 9. Korea's Imports during the Implementation Period of the Korea-EU FTA (July 2011 - May 2012)**

(Unit: 1 million USD)

	2010.7 - 2011. 5	2011.7 - 2012. 5	Rate of change
China	73,517	77,269	5.1%
USA	61,469	61,735	0.4%
Japan	38,502	41,956	9.0%
EU	39,276	45,086	14.8%
ASEAN	44,425	48,813	9.9%
MER	6,289	7,426	18.1%
India	6,043	6,697	10.8%
Total	434,848	488,421	12.3%

Source: Korea International Trade Association (KITA).



### 3. Effects of the FTA: Analysis by Industry

#### A. Export and Import Changes by Industry

- In order to measure the change in trade with the EU by category, 30 export and import products were selected. Then we compared the growth rates of Korea's exports to the EU with EU's total import by category.
  - In order to measure the change in exports to the EU, the top 30 export product categories (4-digit HS, 76% of total exports to the EU) were selected by the amount exported. Afterwards, the growth rate for exports to the EU was compared to the rate of increase for the EU's imports by category.
    - When there is a decrease in EU imports for a certain product category (market recession by category), a drop in Korea's exports of the same product to the EU might occur correspondingly. If exports of a product increase, the result is considered positive.
    - Even if Korea's exports to the EU have increased, if the EU's imports of the same product category have risen, comparing the difference between the two rates will reveal Korea's export performance in the EU.
  - In order to calculate the change in imports from the EU, 30 product categories (4-digit HS, 49% of total imports from the EU) were selected. The growth rate of imports from the EU was compared to the growth rate of Korean imports (from all trade partners) by category.
    - Compared to the EU, Korea's economic situation is better with higher economic growth rate and thus imports are experiencing an increasing trend. Therefore, if the growth rate of imports from the EU is greater than the growth rate of total Korean imports in the same category, it can be assumed that the FTA's effect on imports was high.
  
- While exports of automobiles and related products, refined oil, synthetic resin and related products and machinery to the EU have increased significantly, exports of ships, wireless communication devices, electronics, home appliances and office electronic devices have decreased greatly.
  - Exports of automobiles and related parts (HS87, 17% of total exports) have risen by approximately 30%, which is much higher than the average growth rate of the EU market. However, the decrease in exports of ships (HS89) and electronic devices (HS85), which together make up 38% of total exports, led the general decreasing trend in exports.
    - Due to a reduction in the number of orders in the EU ship market since 2009, EU imports of ships have decreased by 40% compared to the previous year. On the other hand, imports of electronic devices to Korea from the EU are continuously increasing, contrasted with the decrease of Korean electronic device exports to the EU.
      - ※ Ships make up 22.4% of Korea's exports to the EU, while this sector only comprises 1% and 2.7% of Japan and China's exports, respectively.
  - A comparison of the changes in exports to the EU and changes in the EU's imports by category (Table

11. ①-② and Results) reveals that despite the decrease of exports, certain products have produced above average results, considering the condition of the EU market.

- Exports of automobiles, batteries, tools, and engine parts have exceeded the EU's growth rate for imports. Exports of tires, heavy lifting equipment, synthetic resins, textiles, optical fiber cables, and ventilating hoods have grown despite the drop in the EU's imports in the same categories.
- Exports of ships and integrated circuits to the EU have plunged. Since the EU's imports of the same categories are also decreasing, Korea's export performance appears to have been average.
- The EU's imports of LCDs, wireless phones, radios, TVs, and camera parts from extra-euro areas are increasing. Yet Korea's exports to the EU of these same products are experiencing a decreasing trend. Therefore Korea's export performance in the above-mentioned categories was poor.

**Table 11. Rate of Change of the Top 30 Products Exported to the EU**

HS Code	Share (2011)	Exports	July 2010 ~ May 2011	July 2011 ~ May 2012	① Variation (%)	② Variation of EU's total imports (%)	Relative rate of change of exports (①-②)	Result
	100	Total exports to the EU	52,774	46,727	-11.5	9.5		
8901	17.9	Ships	11,753	7,156	-39.1	-40.2	1.1	△
8703	10.2	Automobiles	3,541	5,129	44.8	5.6	39.2	OO
8708	6.2	Auto parts	2,995	3,335	11.4	14.8	-3.4	X
9013	5.9	LCDs	3,896	3,060	-21.5	15.9	-37.4	XX
2710	5.3	Refined oil	2,246	2,891	28.7	29.2	-0.5	△
8517	4.6	Wireless phones	3,355	1,982	-40.9	5.8	-46.7	XX
8905	4.6	Special vessels (dredgers, etc)	2,323	323	-86.1	-29.5	-56.6	XX
8529	3.0	Radio, TV, camera parts	1,779	1,418	-20.3	23.1	-43.4	XX
8541	1.7	Semiconductor devices	1,430	583	-59.2	19.9	-79.1	XX
4011	1.5	Tires	674	794	17.8	-21.8	39.6	O
8542	1.4	Electronic integrated circuits	913	679	-25.6	-24.2	-1.4	△
	1.4	Flat-rolled steel	704	702	-0.3	32.7	-33.0	XX
8473	1.1	Office machine parts	852	449	-47.3	-2.0	-45.3	XX
8471	1.0	Optical data process machines	620	492	-20.6	7.7	-28.3	X
8429	1.0	Loading equipment	402	523	30.1	-4.1	34.2	OO
3907	1.0	Polyacetal resins	447	463	3.6	-0.7	4.3	O
8431	0.7	Parts for pulley tackle & hoists	276	343	24.3	24.7	-0.4	△
8479	0.7	Other machinery	332	332	0.0	11.3	-11.3	X
7219	0.6	Flat-roll stainless steel products	372	275	-26.1	-55.6	29.5	O
9001	0.6	Optical fiber cables	331	356	7.6	-9.7	17.3	O
8443	0.6	Fax and printing machinery	312	305	-2.2	20.4	-22.6	X
3903	0.6	Styrene	302	286	-5.3	11.4	-16.7	X
5503	0.6	Synthetic staple fibers	256	286	11.7	-2.7	14.4	O
8507	0.6	Batteries	206	296	43.7	18.6	25.1	O
8528	0.5	Monitors & projectors	329	249	-24.3	6.3	-30.6	XX

Table 11. Continued

HS Code	Share (2011)	Exports	July 2010 ~ May 2011	July 2011 ~ May 2012	① Variation (%)	②Variation of EU's total imports (%)	Relative rate of change of exports (①-②)	Result
8418	0.5	Refrigerators	287	252	-12.2	13.5	-25.7	X
4002	0.5	Synthetic rubber	204	265	29.9	37.2	-7.3	X
8207	0.5	Hand/machine tools	187	267	42.8	8.0	34.8	OO
8414	0.5	Ventilating hoods	196	262	33.7	-1.5	35.2	OO
8409	0.5	Engine parts	178	296	66.3	4.0	62.3	OO
	75.8	Total 30 products	41,698	34,049	-18.3	1.5		

Note: 1) For readability, product names have been simplified. For specific information, please refer to the HS code list.

2) "① Variation" refers to the rate of change in exports between the 11 months of the Korea-EU FTA implementation (July 2011~May 2012) and July 2010~May 2011.

3) "② Variation of EU's total imports" refers to the rate of change in extra-EU imports between the 9 months of the Korea-EU FTA implementation (July 2011~March 2012) and July 2010~March 2011.

4) "Relative rate of change of exports (①-②)" is classified as follows: Significant increase (over 30%, OO), increase (3 to 30%, O), standstill (-3 to 3%, Δ), decrease (-3 to -30%, X), and significant decrease (under -30%, XX).

5) The difference between the comparison periods of Korea's exports to the EU and the increase of EU's imports was due to the fact Eurostat data was available only up to March 2012.

Source: Statistics from Korea International Trade Association (KITA) and Eurostat, as of July 2012.

■ Korean imports from the EU show a relatively even growth rate compared to exports to the EU. Certain products were imported for the first time, and imports of other products have rapidly increased.

- Imports of various categories, such as planes and automobiles, along with precision equipment parts, bags, meat, medicaments, and raw materials, have increased. For crude oil and refined oil, imports have rapidly grown regardless of whether their previous imports were low or nonexistent.

※ In the latter half of 2011, beginning with the first imports of four A380 aircrafts (import price of 235 million USD each), imports of aircrafts from the EU have rapidly increased.

※ Due to the effects of immediate tariff (3%) elimination by the FTA and the change in crude oil supply sources (Dubai -> Brent) as a result of the unstable political situation in the Middle East, Brent crude oil from the North Sea began to be newly imported.

- In comparing changes in imports from the EU with changes in Korea's total imports, imports of aircrafts, crude and refined oil, bags, and heavy or precision equipment parts from the EU have exceeded the growth rate of Korea's total imports by category.

○ Imports of automobiles, scrap steel, pump equipment, medical equipment, and cosmetics have increased. However, this growth appears to correspond to the increase in the amount of total imports.

○ Although imports of medicaments and apparatuses for the manufacture of semiconductors have increased, they fell short of the growth rate for total imports. Imports of wireless phones, auto parts, and certain types of machinery and parts appear to have lessened.

Table 12. Rate of Change of the Top 30 Products Imported from the EU

HS Code	Share (2011)	Imports	July 2010 ~ May 2011	July 2011 ~ May 2012	① Variation (%)	② Variation of Korea's total imports (%)	Relative rate of change of imports ①-②	Result
	100	Total imports from the EU	39,276	45,086	14.8	12.3		
8703	5.7	Automobiles	2,264	2,531	11.8	11.2	0.6	△
8486	5.2	Apparatuses for semiconductor manufacturing	2,264	2,380	5.1	15.8	-10.7	X
3004	3.0	Medicaments	1,232	1,376	11.7	13.1	-1.4	△
8802	2.8	Aircrafts	119	975	719.3	55.3	664.0	OO
8708	2.5	Auto parts	1,035	955	-7.7	-3.8	-3.9	X
8479	2.1	Other machinery	991	835	-15.7	-13.4	-2.3	△
8517	2.0	Wireless phones	634	463	-27.0	-13.6	-13.4	X
8542	1.9	Electronic integrated circuits	902	849	-5.9	0.7	-6.6	X
8409	1.8	Engine parts	671	783	16.7	10.7	6.0	O
4202	1.7	Bags and luggage	627	774	23.4	17.9	5.5	O
2710	1.5	Refined petroleum	503	938	86.5	25.1	61.4	OO
7204	1.5	Scrap steel	443	570	28.7	24.3	4.4	△
8414	1.3	Ventilating hoods	710	540	-23.9	-4.5	-19.4	X
8413	1.3	Pumps for liquids	488	589	20.7	19.5	1.2	△
8483	1.3	Transmission shafts and related parts	460	628	36.5	17.6	18.9	O
0203	1.3	Pork	356	606	70.2	45.7	24.5	OO
8481	1.2	Taps, valves, and similar appliances for pipes, etc	454	603	32.8	20.8	12.0	O
9031	1.1	Measuring instruments	460	454	-1.3	4.1	-5.4	X
8408	1.1	Diesel engines	429	494	15.2	16.7	-1.5	△
3002	0.9	Biological blood products	389	376	-3.3	15.3	-18.6	X
8487	0.8	Machinery parts	393	270	-31.3	-15.0	-16.3	X
9018	0.8	Surgical instruments	327	338	3.4	0.2	3.2	O
3304	0.8	Cosmetics	307	340	10.7	8.8	1.9	△
8421	0.8	Purifiers	278	341	22.7	15.6	7.1	O
2709	0.7	Crude oil	0	1,568	-	30.0	-	OO
9032	0.7	Automatic controlling instruments	283	308	8.8	9.8	-1.0	△
8419	0.7	Machinery for temperature change treatment	316	318	0.6	8.1	-7.5	X
8538	0.7	Parts for electric apparatuses, etc	268	291	8.6	-0.3	8.9	O
8501	0.7	Generators	271	286	5.5	-2.5	8.0	O
8471	0.7	Optical data process machines	247	301	21.9	-0.2	22.1	OO
	48.6	Total of 30 products	18,121	22,080	21.8			

Note: 1) For readability, product names have been simplified. For specific information, please refer to the HS code list.

2) "① Variation" refers to the rate of change in imports between the 11 months of Korea-EU FTA implementation (July 2011~May 2012) and July 2010~May 2011. "② Variation of Korea's total imports" refers to the rate of change in Korean imports of the same time frame by category.

3) "Relative rate of change of imports (①-②)" is classified as follows: Significant increase (over 20%, OO), increase (3 to 20%, O), standstill (-3 to 3%, △), decrease (-3 to -20%, X), and significant decrease (under -20%, XX).

Source: Statistics from Korea International Trade Association (KITA) and Eurostat, as of July 2012.

## B. Change in Exports to and Imports from the EU with the Application of the Preferential Tariff Rate

- In order to assess the effects of the FTA by category (4-digit HS), the tariff reduction rate of the Korea-EU FTA and the relative rate of change of imports and exports during the 11 months of the FTA's implementation were compared.
  - The difference between the EU's MFN tariff and the preferential tariff of the Korea-EU FTA, after one year in effect, can be understood as the tariff reduction rate.\* The tariff reduction rate is considered as proportional to the export increase effect: the higher the reduction rate, the greater the export increase effect (Appendix).
    - ※ MFN tariff - preferential tariff after the first year of the FTA = tariff reduction rate
  - The "relative rate of change of exports" was calculated by subtracting the growth rate of Korea's exports from the growth rate of exports to the EU after the implementation of the Korea-EU FTA by category. The effects of the FTA were then determined based on the results.
    - As illustrated in [Table 11], from ① the rate of change of Korea's exports to the EU by category ② the rate of change of the EU's total imports by category was subtracted. The result is defined as the "relative rate of change of exports." It can be assumed that the higher the relative growth rate, the more successful Korea's exports to the EU.
  - In order to measure the effect of the FTA on imports, the "relative rate of change of imports" by category was calculated by subtracting the growth rate of imports from the EU by category from the growth rate of Korea's total imports.
    - As shown in [Table 12], the result of imports to Korea from the EU after the implementation of the FTA was determined by comparing ① the variation of Korea's imports from the EU by category with ② the variation of Korea's total imports by category.

### 1) Changes in exports to the EU

- Overall, transportation equipment-related products have a high tariff reduction rate, and accordingly, exports in this area have markedly increased. However, exports of electric and electronic products have decreased significantly regardless of the tariff reduction rate.
  - Exports of products with high tariff reduction rates, such as automobiles and tools, have shown a relatively significant increase. Exports of tires and engine parts have also recorded huge growth as a result of the Korea-EU FTA.
    - Exports of automobile (tariff reduction rate: 2.7%) and engine parts (2.4%), tools (2.7%), and tires (1.3%) to the EU marked a 17 to 66% increase. Refined oil (3.9%) and auto parts (3.8%) also recorded a 29% and 11% increase, respectively.
      - ※ For refined oil and auto parts, the EU's imports have increased by 29% and 15%, respectively. Therefore, the relative growth rate of Korea's exports to the EU for the two categories is insignificant.

- Despite tariff reductions for radios, TVs, and camera parts, exports have significantly decreased. Liquid bios, monitors, and projectors also reported a significant drop in exports.
- The following should be noted about the above-mentioned products: ① While the EU's import demand has increased (ranging from 6 to 23%), Korea's exports to the EU have decreased (ranging from -37 to -20%); ② China's exports of the same products to the EU are experiencing an increasing trend, and Taiwan and Japan have also succeeded in either maintaining or growing exports of those products; and ③ the amount of Korea's total exports of the same products is on a decreasing trend.
- ※ The rate of change of China's exports to the EU for 10 months from July 2011 to April 2012 compared to the same time frame of the previous year: liquid devices (+107%); radios, TVs, camera parts (+380%); monitors and projectors (-11%) (according to Eurostat).

**Table 13. Relative Rate of Change of Exports to the EU<sup>1)</sup> by Tariff Reduction Rate**

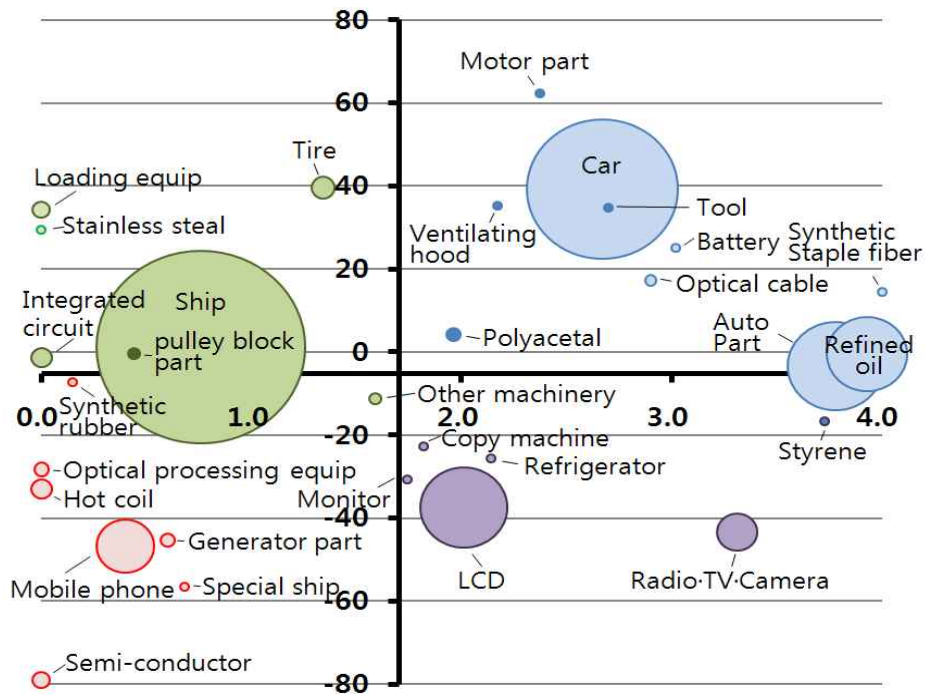
	Tariff Reduction Rate <sup>1)</sup>			
		Insignificant (under 1%)	Average (1~2.5%)	Significant (over 2.5%)
Relative rate of change of exports <sup>2)</sup>	Significant increase (over 30%)	• Heavy/lifting equipment and machines	• Tires • Ventilating hoods • Engine parts	• Automobiles • Tools
	Increase (3~30%)	• Stainless steel products	• Polyacetal resins	• Optical fiber cable • Synthetic staple fiber • Batteries
	Standstill (-3~3%)	• Ships • Electronic integrated circuits • Pully tackle and hoist parts	-	• Auto parts • Refined oil
	Decrease (-30~-3%)	• Optical data process machines • Synthetic rubber	• Other machinery • Copier and fax machine parts • Refrigerators	• Styrene
	Significant decrease (under -30%)	• Wireless phones • Special ships • Semiconductor devices • Flat-rolled steel • Generator and boiler parts	• Liquid bios • Monitors and projectors	• Radios • TVs • Cameras

Note: 1) Tariff reduction rate refers to the difference between the EU's MFN tariff rate by category (4-digit HS) and the preferential tariff rate of the Korea-EU FTA. The tariff reduction rate is proportional to the tariff reduction effect of the FTA: the higher the reduction rate, the greater the tariff reduction effect.

2) The relative rate of change of exports to the EU is the difference between the growth rate of Korea's exports to the EU by category and the growth rate of Korea's total exports during the implementation period of the Korea-EU FTA (July 2011 to May 2012) compared to the same months of the previous year. The same as ①-② in [Table 11].



**Figure 6. Relative Rate of Change of Exports to the EU (vertical)  
According to the FTA Tariff Reduction Rate (horizontal)**



Note: 1) The size of the circle denotes the amount of exports to the EU after implementation of the FTA.  
2) For the specific names of product categories, please refer to the HS code in [Table 11].  
3) Please refer to the appendix for the tariff reduction rate by category.  
Source: Korea International Trade Association (KITA), Korea-EU FTA agreement customs tariff.

- Considering the above information, the decrease in exports of the aforementioned products to the EU may be the result of the diminishing competitiveness of Korean products or an increase in outsourcing.
- Exports of wireless phones and semiconductor devices have dropped significantly. As the EU's import tariff on those products was already close to 0, the FTA did not exert a direct effect. Exports are considered to have decreased due to the combination of the economic recession in several EU member states and the increase in outsourcing among Korean businesses.
- Exports of wireless phones to the EU from Korea, as well as from Taiwan and Japan, have marked a significant decrease. On the other hand, China's exports of the same products to the EU have significantly increased.
- ※ Rate of change for exports of wireless phones (HS8541) from major East Asian countries to the EU (comparison of the 10 months from July 2011 to April 2012 and the same time frame of the previous year): South Korea (-53%), Taiwan (-19%), Japan (67%), China (+40%) (according to Eurostat)
- Although exports of ships have recorded the largest percentage drop in total exports, the tariff reduction effect was insignificant. Since ship imports have significantly decreased in general, the relative decrease rate in exports appears to be small.

## 2) Change in imports from the EU

■ Among the 30 major product categories, Korea provides a higher tariff reduction rate to the EU than the EU does to Korea. Focusing on items with the largest difference in tariff reduction rates, imports increased relatively evenly.

- Among products with high tariff reduction rates, refined oil, intermediary goods such as parts, and consumer goods like bags have recorded a significant increase in imports. Despite the low tariff reduction rate, crude oil, meat and aircrafts have recorded a significant increase in imports.
  - Imports of crude oil (tariff reduction rate: 5.4%), engine parts (5.3%), purifiers (6.3%), and electronic delivery parts (4.9%) have shown a huge increase by 16~87% in imports, and imports of bags (6.0%) have grown by 23%.
  - Although the tariff reduction rate of crude oil is only 3%, imports have risen due to trade diversion (from Dubai to B rent). For pork, the tariff reduction rate is only 3.3%, but an increase of 70% occurred in imports.
  - Imports of aircrafts have grown by over 700% from the previous year due to the purchase of A380s at the end of 2011. Considering the fact that the MFN tariff is close to 0% and the special characteristics of purchasing aircrafts, this import increase cannot be seen as a result of the FTA.
- Imports of auto parts and machinery have increased or remained at a standstill despite a huge tariff cut, and automobile imports have also not shown much difference compared to the trends of automobile imports from other countries.
  - Despite a huge tariff reduction (8%), imports of auto parts from the EU have decreased (-7.7%), and imports of semiconductor manufacturing equipment, automatic control devices, thermal process equipment, and other machinery did not match the trend of imports from other nations. Considering these points, the amplitude of the FTA's effect on increasing imports was low.
  - Imports of automobiles from the EU have increased by 11.8%, exceeding the growth rate of imports from other nations (9.5%). However, imports fell conspicuously below the growth rate of Korean exports of automobiles to the EU (45%).

**Table 14. Relative Rate of Change of Imports to the EU<sup>1)</sup> by Tariff Reduction Rate**

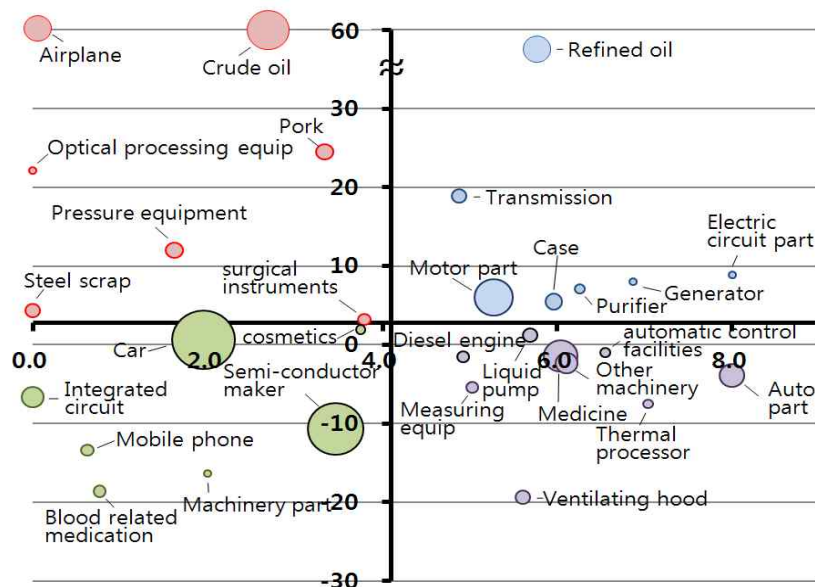
	Tariff Reduction Rate <sup>1)</sup>			
		Insignificant (under 3%)	Average (3~5%)	Significant (over 5%)
Relative rate of change of imports <sup>2)</sup>	Significant increase (over 20%)	<ul style="list-style-type: none"> <li>• Aircrafts</li> <li>• Optical data process machines</li> </ul>	<ul style="list-style-type: none"> <li>• Pork</li> <li>• Crude oil</li> </ul>	<ul style="list-style-type: none"> <li>• Refined oil</li> </ul>
	Increase (3~20%)	<ul style="list-style-type: none"> <li>• Scrap steel</li> <li>• Oil pressure-related machines</li> </ul>	<ul style="list-style-type: none"> <li>• Electronic delivery-related parts</li> <li>• Surgical instruments</li> </ul>	<ul style="list-style-type: none"> <li>• Bags and luggage</li> <li>• Engine parts</li> <li>• Purifiers</li> <li>• Apparatus for switching or protecting electrical circuits</li> <li>• Generators</li> </ul>
	Standstill (-3~3%)	<ul style="list-style-type: none"> <li>• Automobiles</li> </ul>	<ul style="list-style-type: none"> <li>• Diesel engines</li> <li>• Cosmetics</li> </ul>	<ul style="list-style-type: none"> <li>• Medicaments</li> <li>• Liquid pumps</li> <li>• Automatic control devices</li> </ul>

Table 14. Continued

	Tariff Reduction Rate <sup>1)</sup>			
	Insignificant (under 3%)	Average (3~5%)	Significant (over 5%)	
Relative rate of change <sub>2)</sub> of imports	Increase (3~20%)	<ul style="list-style-type: none"> <li>Scrap steel</li> <li>Oil pressure-related machines</li> </ul>	<ul style="list-style-type: none"> <li>Electronic delivery-related parts</li> <li>Surgical instruments</li> </ul>	<ul style="list-style-type: none"> <li>Bags and luggage</li> <li>Engine parts</li> <li>Purifiers</li> <li>Apparatus for switching or protecting electrical circuits</li> <li>Generators</li> </ul>
	Standstill (-3~3%)	<ul style="list-style-type: none"> <li>Automobiles</li> </ul>	<ul style="list-style-type: none"> <li>Diesel engines</li> <li>Cosmetics</li> </ul>	<ul style="list-style-type: none"> <li>Medicaments</li> <li>Liquid pumps</li> <li>Automatic control devices</li> </ul>
	Decrease (-20~-3%)	<ul style="list-style-type: none"> <li>Wireless phones</li> <li>Electronic integrated circuits</li> <li>Machine parts</li> <li>Biological blood products</li> </ul>	<ul style="list-style-type: none"> <li>Semiconductor manufacturing equipment</li> </ul>	<ul style="list-style-type: none"> <li>Auto parts</li> <li>Other machinery</li> <li>Ventilating hoods</li> <li>Measuring devices</li> <li>Thermal process equipment</li> </ul>
	Significant decrease (under -20%)			

Note: 1) Tariff reduction rate refers to the difference between the EU's standard tariff rate by category (4-digit HS) and the preferential tariff rate of the Korea-EU FTA. The tariff reduction rate is proportional to the tariff reduction effect of the FTA: the higher the reduction rate, the greater the tariff reduction effect.  
 2) The relative rate of change of imports from the EU is the difference between the growth rate of Korea's import from the EU by category and the growth rate of Korea's total imports during the implementation period of the Korea-EU FTA (July 2011 to May 2012) compared to the same time frame of the previous year. The same as ①-② in [Table 12].

Figure 7. Relative Rate of Change of Imports from the EU (vertical)  
According to the FTA Tariff Reduction Rate (horizontal)



Note: 1) The size of the circle denotes the amount of imports from the EU after implementation of the FTA.  
 2) For the specific names of product categories, refer to the HS code in [Table 11].  
 3) Refer to the appendix for the tariff reduction rate by category.  
 Source: Korea International Trade Association (KITA), Korea-EU FTA agreement customs tariff.

## 4. Further Economic Cooperation after the Korea–EU FTA

■ After the implementation of the Korea-EU FTA, exports to the EU have decreased. Besides short-term achievements such as increasing exports, medium to long-term goals, such as increasing manufacturer and consumer welfare, enhancing productivity, and maintaining competitiveness in exports, are necessary in implementing FTAs with large advanced trade partners.

- Due to the EU's economic recession and the export products concentrated to some items (ship and wireless phone), exports have not grown as expected. However, for products with significant tariff cuts and large-scale production lines in Korea, exports have increased.
- The increase in imports of various products (raw material, intermediary goods, and consumer goods) from the EU worsened Korea's trade balance. However, such an increase can be assumed to have contributed to boosting welfare of domestic manufacturer and consumer.
  - The increase in imports of intermediary goods (parts and installation equipment) from Germany led to an increase in domestic manufacturing. Increases in imports of crude oil and meat are representative examples of imports that improve consumer welfare.
- The EU is currently negotiating FTAs with India and ASEAN member states, and negotiation with Japan is expected to begin soon. Therefore it is necessary to take proactive steps to secure markets through the Korea-EU FTA, maintain trade, and enhance brand image.

■ In order to experience the full positive effects of FTAs with advanced countries, the long-term focus of policy support needs to shift from increasing exports to technological cooperation

- Increasing Korean exports to the EU could be difficult as long as the economic recession continues in the EU. Therefore, policy support needs to shift from trade cooperation to increase exports, to technological cooperation to increase productivity.
  - There is high probability that the tariff reduction effect will eventually face limitations due to the slowdown of advanced nations' economic growth and their FTA expansionary policies. Therefore medium to long-term goals need to focus on increasing productivity through technical acquisition.
- Technology cooperation is a follow-up measure for the revitalization of FTAs with advanced countries. Thus a network should be created to activate international technology transfer between Korea and the EU.
  - Small and medium enterprises (SMEs) experience a number of hardships in the course of doing business, starting from finding technology in need. It is basically impossible for SMEs to independently introduce, apply and spread new technology in most cases.
- Most technological collaborations occur by attracting foreign investments. Therefore continuous efforts to improve conditions for FDI are necessary.

- As the size of trade and investments increase for both parties, the need for collaboration on regulations to eliminate the non-tariff barrier will intensify. Thus the Korea-EU FTA should be used for improving domestic regulations.
- The Korea-EU FTA is the EU's first FTA with a third country, in which the EU structured regulatory cooperation and specified the elimination of the non-tariff barrier for certain product categories.
  - The Korea-EU FTA stipulates regulatory cooperation through mutual recognition and work groups hereafter, in order to minimize trade impediments due to differences in the standards and regulations of each party in the areas of home appliances, cars, medical manufacturing and equipment, and chemicals.
  - In reality, the EU's regulations are more far-reaching (in terms of applied nations and regulatory level), and there is a limit to adhering to domestic regulations, considering Korea's export-oriented economy.
- Through a certain level of regulatory cooperation, it is necessary to establish better regulations and support the preparation and adaptation processes of domestic industries.
  - The securement of regulatory sovereignty and the need for expansion of external markets require balance.

## Appendix

**Appendix Table. The EU and Korea's Import Tariff and Tariff Reduction Rates,  
One Year after Korea-EU FTA Implementation**

EU's Import Tariff for 30 Korean Export Items				
4-digit HS Code	Item	MFNtariff (①)	Preferential tariff one year after Korea-EU FTA implementation (②)	Tariff reduction (①-②)
5503	Synthetic staple fibers	4.0	0.0	4.0
2710	Refined oil	3.9	0.0	3.9
8708	Auto parts	3.8	0.0	3.8
3903	Styrene	4.6	0.9	3.7
8529	Radios, TVs, cameras	3.3	0.0	3.3
8507	Batteries	3.0	0.0	3.0
9001	Optical fiber cable	2.9	0.0	2.9
8207	Tools	2.7	0.0	2.7
8703	Automobiles	9.8	7.1	2.7
8409	Engine parts	2.4	0.0	2.4
8414	Ventilating hoods	2.2	0.0	2.2
8418	Refrigerators	2.1	0.0	2.1
9013	Liquid crystal device	2.0	0.0	2.0
3907	Polyacetal resins	2.6	0.6	2.0
8443	Copier, fax machine parts	1.8	0.0	1.8
8528	Monitors, projectors	9.3	7.6	1.7
8479	Other machinery	1.6	0.0	1.6
4011	Tires	4.2	2.9	1.3
8901	Ships	0.8	0.0	0.8
8905	Special vessels	0.7	0.0	0.7
8473	Parts for office machines	0.6	0.0	0.6
8431	Pulley tackle & hoist parts	0.4	0.0	0.4
8517	Wireless phones	0.9	0.5	0.4
4002	Synthetic rubber	0.2	0.0	0.2
8541	Semiconductor devices	0.0	0.0	0.0
8542	Electronic integrated circuits	0.0	0.0	0.0
7210	Flat-rolled steel	0.0	0.0	0.0
8471	Optical data process machines	0.0	0.0	0.0
8429	Heavy lifting equipment	0.0	0.0	0.0
7219	Flat-rolled stainless steel products	0.0	0.0	0.0



Appendix Table. Continued

Korea's Import Tariff for 30 EU's Export Items				
4-digit HS Code	Item	MFNtariff (②)	Preferential tariff one year after Korea-EU FTA implementation (②)	Tariff reduction (②-②)
8708	Auto parts	8.0	0.0	8.0
8538	Electrical switching apparatus parts	8.0	0.0	8.0
8419	Heaters	7.3	0.2	7.0
8501	Generators	7.5	0.6	6.9
9032	Automatic control instruments	6.6	0.0	6.6
8421	Purifiers	7.2	0.9	6.3
8479	Other machinery	7.6	1.4	6.1
3004	Medicaments	8.0	2.0	6.0
4202	Bags and luggage	8.0	2.0	6.0
8413	Pumps for liquids	8.0	2.3	5.7
8414	Ventilating hoods	7.9	2.3	5.6
2710	Refined oil	5.9	0.4	5.4
8409	Engine parts	7.5	2.2	5.3
9031	Measuring instruments	5.0	0.0	5.0
8408	Diesel engines	7.0	2.1	4.9
8483	Transmission shaft parts	6.3	1.5	4.9
9018	Surgical instruments	8.0	4.2	3.8
3304	Cosmetics	8.0	4.2	3.8
8486	Apparatuses for semiconductor manufacturing	4.2	0.7	3.5
0231	Pork	23.8	20.4	3.3
2709	Crude oil	3.0	0.0	3.0
8487	Machinery parts	8.0	6.0	2.0
8703	Automobiles	8.0	6.1	2.0
8481	Oleo-hydraulic components	8.0	6.4	1.6
3002	Biological blood products	0.8	0.0	0.8
8542	Electronic integrated circuits	0.0	0.0	0.0
7210	Flat-rolled steel	0.0	0.0	0.0
8471	Optical data process machines	0.0	0.0	0.0
8429	Heavy lifting equipment	0.0	0.0	0.0
7219	Flat-rolled stainless steel products	0.0	0.0	0.0

Note: The EU's import tariff was calculated by computing the 8-digit HS tariff, and calculating a simple average tariff of a 4-digit HS. Korea's import tariff was calculated by computing the 10-digit HS tariff, and calculating the simple average tariff of a 4-digit HS.

Source: Trade Navi (Ministry of Knowledge Economy-Korea International Trade Association), Korea-EU FTA Tariff Schedule.