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ЭКОНОМИЧЕСКАЯ ИНТЕГРАЦИЯ И ГЛОБАЛИЗАЦИЯ ECONOMIC INTEGRATION AND GLOBALIZATION

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Trade strategy of European Union and the impact of EU-South Korea FTA

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Abstract. When the global financial erupted, European Union (EU) had suffered from unprecedented economic downturn. Unemployment soared and consumption declined, causing negative effects on Europe's per capita income growth. EU then started to realize the need for the utilization of Free Trade Agreements (FTAs), to alleviate the low growth trend of European economy. As the first initiative of EU Global Strategy, which was intended to significantly expand EU's export markets to offshore countries through FTAs, South Korea was selected as one of the first targets. After eight rounds of FTA negotiations started from 2006, FTA between EU and South Korea came into effect in 2011. Using UN Comtrade's export and import data from 2000 to 2017, this paper discusses about changes in trade patterns of EU and South Korea before and after the EU-South Korea FTA, and empirically analyzes the impact of EU-South Korea FTA. The results of our regression models show that the FTA indeed has positive effects on growth of both trade volume and trade share in the world, between South Korea and the EU, with significance. The fact that there were increases not only in commodity trade, but also in service goods trade and foreign direct investment suggests that the virtuous cycle of EU-South Korea FTA can expand to related areas. Furthermore, as South Korea is East Asia's FTAcentered country which signed FTAs with both US and China, the two largest economies in the world, the indirect benefits from the EU-South Korea FTA will become greater for the EU. This advantage is expected to help creating a virtuous cycle that induces economic growth of EU through increases in trade, productivity, and job creation.

Keywords: free trade agreement, trade policy, European Union, South Korea, EU-South Korea FTA

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Торговая стратегия Европейского союза и влияние Соглашения о свободной торговле между ЕС и Южной Кореей

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Аннотация. После глобального финансового кризиса Европейский союз (ЕС) пострадал от беспрецедентного экономического спада. Безработица резко возросла, а потребление сократилось, что негативно сказалось на росте доходов на душу населения в Европе. Впоследствии ЕС начал осознавать необходимость использования Соглашений о свободной торговле (ССТ), чтобы смягчить тенденцию низкого роста европейской экономики. В качестве первой инициативы Глобальной стратегии ЕС, которая была направлена на значительное расширение экспортных рынков ЕС в оффшорные страны посредством ССТ, Южная Корея была выбрана в качестве одной из первых целей. После восьми раундов переговоров о ССТ, начатых в 2006 г., ССТ между ЕС и Южной Кореей вступило в силу в 2011 г. Используя данные об экспорте и импорте UN Comtrade за период с 2000 по 2017 г., в этом документе рассматриваются изменения в структуре торговли ЕС и Южной Кореи до и после подписания соглашения о свободной торговле, а также эмпирически анализируется влияние данного соглашения на торговые связи между ЕС и Южной Кореи. Результаты наших регрессионных моделей показывают, что соглашение о свободной торговле действительно оказывает значительное положительное влияние на рост как объема торговли, так и доли торговли в мире между Южной Кореей и ЕС. Тот факт, что произошел рост не только в торговле сырьевыми товарами, но и товарами сферы услуг и прямых иностранных инвестициях, говорит о том, что благотворный цикл ССТ «ЕС - Южная Корея» может распространиться на смежные области. Кроме того, поскольку Южная Корея является страной, ориентированной на ССТ в регионе Восточной Азии, и имеет соглашения о свободной торговле с двумя крупнейшими экономиками мира как США и Китай, такое партнерство принесет ощутимые косвенные выгоды для ЕС. Ожидается позитивное воздействие этого преимущества в смысле увеличения торговли, производительности и числа рабочих мест, что благоприятно отразится на экономическом росте ЕС.

Ключевые слова: Соглашение о свободной торговле, торговая политика, Европейский союз, Корея

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Introduction

"The EU has traditionally pursued favorable trade arrangements with neighboring or former colonial countries, but it has maintained a passive stance on FTAs with distant countries on the grounds that they could undermine the multilateral trading system represented by the WTO. The EU's executive committee, however, began to make a sharp turnaround from its previous stance in October 2006, announcing a global European strategy that calls for pushing for a dramatic free trade deal with offshore countries. The EU's new trade strategy, 'EU Global Strategy', is characterized by the aggressive pursuit of FTAs with distant countries, considering them as part of a comprehensive trade policy that advocates free trade' (Kang et al., 2011, p. 76–77).

When the global financial crisis erupted in 2008, European Union had suffered from unprecedented economic downturn. Unemployment soared and consumption declined, causing negative effects on Europe's per capita income growth. EU then started to realize the need for the utilization of Free Trade Agreements (FTAs) in order to alleviate the low growth trend of EU's economy. As the first initiative of EU Global Strategy, which was intended to significantly expand EU's export markets to offshore countries through FTAs, South Korea was selected as one of the first targets. After eight rounds of FTA negotiations started from 2006, FTA between EU and South Korea finally came into effect in 2011.

Our study is contributable in that several studies have presented the macroeconomic effects of the EU-South Korea FTA and the expected effects of each industry such as Kang et al. (2011), but not many have conducted empirical studies with the time-series trade data that include recent years. In this paper, trade data up to the year 2017 will be used to test the effects of EU-South Korea FTA on changes in trade patterns of both partners.

The remainders of this paper are as follows. Second section will cover previous studies dedicated to the impact of FTA on import and export. The third and fourth section will investigate the impact of EU-South Korea FTA on both economic entities. The fifth section will discuss conclusions and policy implications.

Literature review

There have been multiple studies to tackle the impact of FTA on trade and other economic activities, but the results vary depending on economic regions. Okabe (2015), in his study on impacts of ASEAN+1 FTAs for the period 2002–2012, found significant trade creation effects of ASEAN-China FTA and ASEAN-Korea FTA in various types of goods. While, the author asserted that the impact of ASEAN-Japan FTA is rather not impressive as bilateral FTA with 7 ASEAN countries are much actively used. Duong (2016), in his study on the impacts of the European Union – Vietnam Free Trade Agreement (EVFTA), employed the gravity model based on the panel data including Vietnam and 27 EU countries for the period 1997-2003, and found a positive association of FTA with bilateral trade between EU and Vietnam.

In the same line of research, Xiang et al. (2017) also identified significant trade creation effects from the China–Australian Free Trade Agreement (ChAFTA) in coal exports. Similarly, in a study of Thangavelu et. al (2021) on the impact of Association of Southeast Asian Nations (ASEAN)-Australia New Zealand Free Trade Agreement (AANZFTA) on Australian imports from ASEAN countries for the period 2012–2016, the positive effects of preferential tariff margins and cosharing rules of origin are revealed.

On the other hand, other studies demonstrated strong adverse impacts of FTA on domestic business (for instance, the reduction of demand and falling price in domestic products due to tariff liberalization) (Francis, 2011). Busse et al. argued that in the case of Jordan, the impacts of FTA were insignificant, in general, excluding that with the USA. Oh and Lee (2011), in their study on the Korea-US FTA on ICT industries, also demonstrated that trade surplus is expected to decrease after the Korea-US FTA and that there are no positive effects of FTA in the short-run.

The study of Quimba et al. (2020) on the impact of FTA on Philippine industries showed mixed views. The study proved a positive relationship between FTA and labor productivity growth, while negative impact on unemployment is found. In addition, Jang (2011) argued that trade treaty reduces inward FDI¹. As FDI plays a crucial role to economic development, trade treaty may negatively affect national economy. Moreover, Augier et al. (2005) raised an issue to apply strict rules of origin, identified as a factor to reduce trade volumes in their study, under complex global value chains (GVCs).

Landscape of trade patterns

Graphical visualization of data helps understand the time-series pattern. Trade data from UN Comtrade are illustrated in graphs so that the readers can easily read the patterns of import and export between Korea and EU, especially before and after the EU-South Korea FTA comes into force.

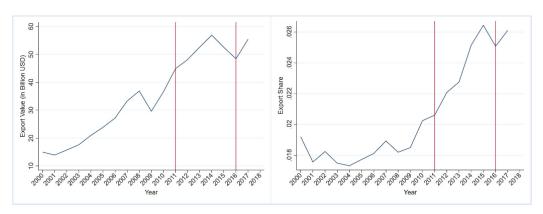


Figure 1. Export from EU to Korea and its share in the world, 2000–2018

Source: UN Comtrade. Retrieved June 20, 2019, from http://www.comtrade.un.org

Figure 1 illustrates export from EU to Korea (left) and its export share in the world (right, EU's export to Korea divided by EU's total export to the world). The left graph of Figure 1 can also be interpreted as import to Korea from the EU. We can see that after the provisional EU-South Korea FTA in 2011, the 'growth rate' of EU's to Korea export share has become steeper. Also, after the official EU-South Korea FTA enters into force in 2016, the downtrend of both export and import share changes to an increasing trend, and in terms of growth rates, they turn to positive from negative.

¹ FDI: Foreign Direct Investment.

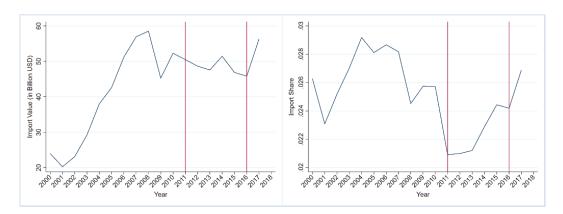


Figure 2. Import to EU from Korea and its share in the world, 2000-2018

Source: UN Comtrade. Retrieved June 20, 2019, from http://www.comtrade.un.org

Figure 2 depicts imports to EU from Korea (left) and its import share in the world (right, EU's export to Korea divided by EU's total export to the world). The left graph of Figure 2 can also be interpreted as export to EU from Korea. We can see that both after the provisional EU-South Korea FTA in 2011 and after the official EU-South Korea FTA conclusion in 2016, EU's from Korea import share significantly increases. Although the level of import value from Korea keeps decreasing even after the year 2011, it increases after the year 2016. One thing to note is that from the year 2008 to 2011, the world trade stagnated; therefore, to detect the exact impact of EU-South Korea FTA, it is worth analyzing both the 'level' and 'share' variables as above.

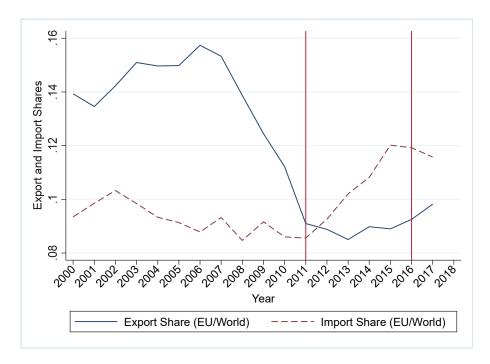


Figure 3. Korea's to EU export and from EU import shares, 2000–2018

Source: UN Comtrade. Retrieved June 20, 2019, from http://www.comtrade.un.org

Figure 3 shows time-series graphs of Korea's to EU export and from EU import shares to the world. Both graphs turn to increasing trend after the turning-point and critical year of 2011. After 2011, steep drop of Korea's to EU export share starts to slow down and eventually starts to grow. Also, Korea's from EU import grows steeply right after the year 2011.

Then, the question is, which products have contributed to the growth of trade between the two economic entities?

Top 5 fastest grown products from 2011 to 2016

Exports from EU to Korea	Exports from Korea to EU	
1. Leather Products	1. Organic Chemicals	
2. Meat	2. Pharmaceuticals	
3. Perfumes and Oils	3. Aircraft and Parts	
4. Wine and Spirts	4. Furniture	
5. Clothing and Shoes	Specialty textiles	

Source: UN Comtrade. Retrieved June 20, 2019, from http://www.comtrade.un.org

Table 1 shows the top 5 fastest grown products in trade volume from 2011 to 2016. It appears that Korea primarily imports luxury goods such as clothing, shoes, and bags that are made of leather. Perfumes and wine, which are also regarded as luxury goods, are in the top 5 list. This is because Korea's high tax rate on luxury goods was lowered after the EU-South Korea FTA. On the other hand, EU has imported high-tech products such as organic chemicals, pharmaceuticals, and machinery parts.

Apart from the trade of goods, service trade and foreign direct investment (FDI) has also increased after the EU-South Korea FTA. According to EU's report 'Assessing Results of the EU-South Korea FTA' (2016), EU's trade in services has steeply increased since 2011. By the year 2016, exports of services from EU to Korea have increased by 50%, and that from Korea to EU have increased by 35% since 2011². Moreover, by 2015, EU's FDI in Korea has reached 50 billion Euros and Korea's FDI in EU has reached 20 billion Euros. Hyundai and Kia's motor vehicle assembling factories in Czech Republic and Slovakia are major examples of FDI after the EU-South Korea FTA.

EU's report (2016) also states that there is a strong evidence of a positive impact of the FTA on Korean exports to the EU relative to other competitor economies in Asia and emerging economies such as Japan, Taiwan, BRICS and Malaysia.

Methodology and empirical analysis

We present simple regression models that test the effects of EU-South Korea FTA on the trade relationship between the two. The growth regression models are represented by three reduced-form equations such that:

$$Model 1: GT_{i,t} = \beta_0 + \beta_1 FT A_{i,t} + \nu_t + \varepsilon_{i,t}$$
 (1)

$$Model 2: GT_{i,t} = \beta_0 + \beta_1 FT A_{i,t} + \nu_t + \nu_i + \varepsilon_{i,t}$$
 (2)

$$Model \ 3: \ GTS_{i,t} = \beta_0 + \beta_1 FTA_{i,t} + \nu_t + \varepsilon_{i,t}$$
 (3)

$$Model \ 4: \ GTS_{i,t} = \beta_0 + \beta_1 FTA_{i,t} + \nu_t + \nu_i + \varepsilon_{i,t}$$
 (4)

Table 1

² Source: EUROSTAT.

Where $GT_{i,t}$ is annual growth rates of trade values between South Korea and EU, and $GTS_{i,t}$ is annual growth rates of shares of trade values with partner economic entity to the world, both from year t to year t+1, where i denotes the type of trade flow: export or import. Here, we used trade data (export and import) between South Korea and EU from 2000 to 2017, downloaded from UN Comtrade. $FTA_{i,t}$ is a dummy variable where it is one during the period after the enactment of Korea-EU FTA, and zero otherwise. Also, v_t and v_i are included to control for the year, trade flow type, and fixed effects respectively. Lastly, the error term of the regression is represented by $\varepsilon_{i,t}$, and t ranges from 2000 to 2016.

Regression results

Table 2

	Model 1	Model 2	Model 3	Model 4
Regressors	Growth of Export & Import	Growth of Export & Import	Growth of Export & Import Shares	Growth of Export & Import Shares
FTA effect	0.301 *** (0.001)	0.301 *** (0.001)	0.180 *** (0.005)	0.180 *** (0.006)
Constant term	-0.115** (0.037)	-0.127** (0.026)	-0.103** (0.018)	-0.111** (0.016)
Flow type fixed effects	No	Yes	No	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Observations	34	34	34	34

Note: * p < 0.1, ** p < 0.05, *** p < 0.01

R-squared

Adjusted R-squared

Table 2 shows the regression results of growth of trade and trade shares with year and trade flow type specific fixed effects.

0.865

0.721

0.666

0.353

0.678

0.336

0.856

0.720

The above empirical result strongly shows that both the growth rate of export and import level and those of shares of partner countries relative to the world in the years under the EU-South Korea FTA were higher, with statistical significance. This implies EU-South Korea FTA had been successful in promoting the economic relationship between the two.

Conclusion

The EU-South Korea FTA, which provisionally came into force in July 2011, and officially ratified in December 2015, appeared to have had a statistically significant effect on growth of both trade level and trade share in the world between the two economic entities: Korea and the EU. Also, trade in service sector and foreign direct investment between the two partners have grown significantly.

EU's new trade policy since the global financial crisis have been successful in concluding FTAs with major economies such as Korea, and the

EU-South Korea FTA has increased the trade between the two, which consequently has contributed to improve EU's economic growth. Particularly, the data shows that EU-South Korea FTA turned out to successfully promote the trade between the two.

In addition, the fact that there were increases not only in commodity trade, but also in service goods trade and foreign direct investment suggests that the virtuous cycle of EU-South Korea FTA can expand to related areas.

Also, as South Korea is East Asia's FTA-centered country which signed FTAs with both US and China, the two largest economies in the world, the indirect benefits from the EU-South Korea FTA will become greater for the EU. This advantage is expected to help creating a virtuous cycle that induces economic growth of EU through increases in trade, productivity, and job creation.

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