

Fifteen Years of Korea's FTA: Achievements and Policy Implications

Moonhee Cho Associate Research Fellow, Trade Agreement Team, Department of International Trade (mhcho@kiep.go.kr)

Young Gui Kim Research Fellow, Trade Agreement Team, Department of International Trade (ygkim@kiep.go.kr)

Chankwon Bae Research Fellow, Department of International Trade (ckbae@kiep.go.kr)

Hyeyoon Keum Senior Researcher, Trade Agreement Team, Department of International Trade (hykeum@kiep.go.kr)

Jun-Hyun Eom Senior Researcher, New Trade Strategy Team, Department of International Trade (jheom@kiep.go.kr)



I. Introduction

Since signing the first free trade agreement (FTA) with Chile in 2004, Korea has established 16 FTAs with 57 countries including EFTA, ASEAN, EU, US, etc.¹ As a result, the shares of exports and imports with FTA partners have grown from 0.3% and 0.4% in

2004 to 72.5% and 62.5% in 2018. We examined whether Korea's FTAs have achieved their original objectives in the following three aspects: FTA network, product market openness and foreign direct investment (FDI). In this study, we introduce main results focusing on market access and policy implications.

Table 1. Korea's Free Trade Agreements

FTA partners	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
Chile																					
Singapore																					
EFTA																					
ASEAN																					
India																					
EU																					
Peru																					
U.S.A.																					
Turkey																					
Australia																					
Canada																					
China																					
New Zealand																					
Vietnam																					
Columbia																					
Central America																					
United Kingdom																					
Israel																					
Indonesia																					

Note:  Indicates years from start of negotiation to entry into force, while  represents years from start of negotiation to conclusion.

Source: www.fta.go.kr.

¹ For the purpose of this study we use the terms "free trade agreement" and "regional trade agreement" interchangeably.

II. Analysis on Korea's FTA networks

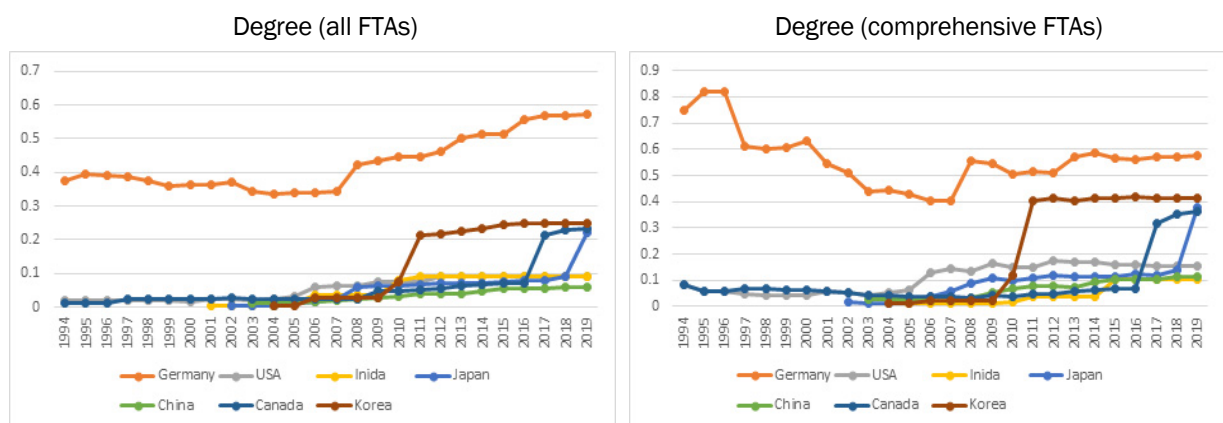
Worldwide, regional trade agreements (RTA) have increased rapidly since the early 1990s. One of the main reasons for the explosive increase in RTAs is the sluggish WTO DDA negotiations. Since RTAs have increased significantly not only in Korea but also around the world, it is necessary to evaluate Korea's FTA network considering these reasons. In this study, three centrality indicators were measured to examine how centrally each country is located within the global RTA network, namely: degree centrality, betweenness centrality, and eigenvector centrality.

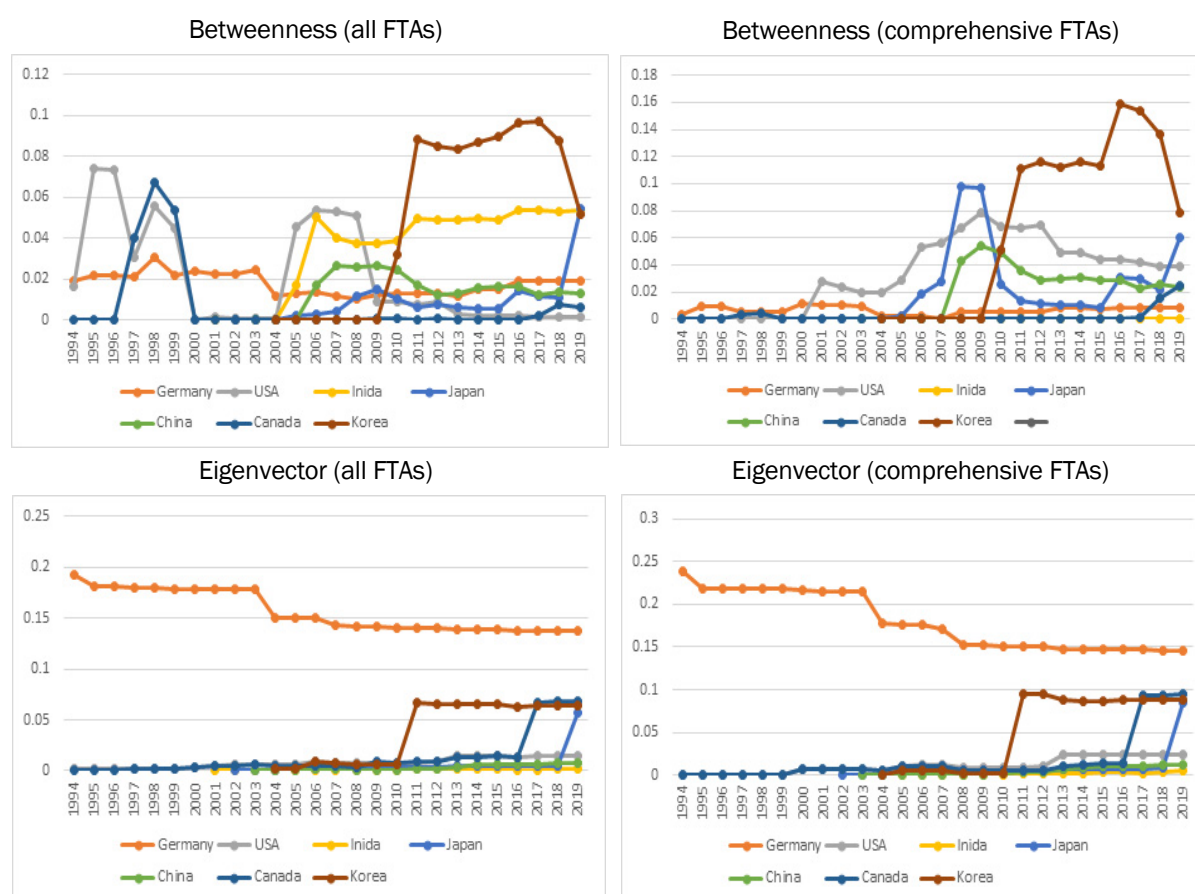
Degree centrality indicates the number of FTAs a country has out of total world FTAs, which shows how well a country is participating in the global FTA networks. Betweenness centrality quantifies the number of times a country plays as a bridge along the shortest path between two other countries without FTAs. If a country k has FTAs with two countries (i, j) which do not have an FTA each other, its betweenness centrality of k is higher than countries i and j . When countries i, j start negotiations for

an FTA between themselves, country k 's FTA text could be used as a reference. This means a country with high betweenness centrality implies an advantage in an FTA platform competition. Eigenvector centrality is similar with degree centrality in that these concepts are based on the number of FTAs a countries participate, but eigenvector centrality considers FTA partners' centrality as a weight. A country with high centrality might be active in trade liberalization and agile to changes in the global trade environment.

The FTA network analysis shows that Germany and the US have the highest level of degree centrality, followed by Korea, China, and Canada with the similar level of degree centrality. Regarding betweenness centrality, Korea showed a high level of centrality during 2010-2016 due to its active FTA promotion policies, but its centrality has weakened slightly since then because of limited trade volume with FTA partners and failure to participate in mega FTAs such as the CPTPP. In eigenvector centrality, the United States and Canada both show high levels of centrality, and Korea is increasing modestly.

Figure 1. Regional Trade Agreement Networks of Major Countries





Source: authors' calculation.

III. The effects of FTAs on Korea's trade and FDI

Korea's exports and imports with FTA countries are steadily increasing at a higher rate of growth than those with non-FTA countries. Korea's exports to its 52 FTA partners have increased significantly from \$170.7 billion in 2004 to \$4.3 trillion in 2018, on average growing by about 7% each year, higher than the average annual growth rate of 5% for non-FTA countries. Korea's imports from FTA partners have expanded by about 8% per year on average, which is higher than the average annual growth rate of 5% for countries that have not signed FTAs with Korea.

The empirical analysis at the national level shows that FTAs have a positive effect on the increase in both exports and imports in volumes. We also observed positive effects on export and import product varieties. In addition, we examine the effects of provisions related to non-tariff measures such as competition and trade remedies. Trade remedy provisions are shown to have significantly positive effects on exports, while competition provisions increase imports from FTA partners.

In the industry level analysis, we find the FTAs have a positive effect on Korea's exports in the agriculture, forestry, fisheries and food industry. On the other hand, FTAs have a positive effect

on Korea's imports only when they include competition provisions and standard provisions. In the textiles, clothing and leather industry, we find that FTAs have a positive effect on both exports and imports. In the coke and petroleum refining industry, FTAs have a positive effect on exports, but not on the export product varieties. In the chemicals and chemical products industry, FTAs have a significant effect on both exports and imports. In the electronics industry, FTAs do not appear to have a significant effect on either exports or imports. In the machinery industry, FTAs have a positive effect on exports and imports. In the auto industry, FTAs have a positive effect on imports.

In the firm level analysis, we find that tariff reductions in terms of importing partners increase firms' profit, while import tariff reductions of Korea are associated with declining firms' profit.

Finally, we find that the FTAs have a positive effect on FDI. In addition, FTAs increased outbound foreign direct investment (OFDI) to both developed and developing countries, but increased inbound foreign direct investment (IFDI) only from developed countries. However, we could not find any empirical evidence that investment provisions have a significant effect on FDI.

Table 2. The effects of FTAs on Korea's Trade

	Trade with FTA partners		FTA Effects	
	Size	Share	FTA	Inclusion of non-tariff provisions (competition, standards, trade remedy)
Export	(+)	(+)	(+)	△
Import	(+)	(+)	(+)	△
Number of exporting items	(+)	(+)	(+)	·
Number of importing items	(+)	(+)	(+)	·

Note: (+), △, and · represent significantly positive effects, partially positive effects, and no effects, respectively.

Source: author's calculation and estimation.

IV. Policy implications

The FTA promotion policy of Korea has had several positive effects on Korea's economy. Korea should continue to maintain innovation and economic growth through FTAs. The proportion of Korea's trade with FTA partners is

quite high already at about 68%, but as a country adopting a growth strategy through free trade, it is necessary to continue promoting FTAs. Especially, as uncertainties in the trade environment such as recent trade conflicts between the United States and China and Japan's export regulations are growing, it is necessary

to continue promoting FTAs with more economies in various regions to alleviate Korea's high dependence on major countries such as the United States, China, and Japan.

Korea's FTA policy up to now has been based on the FTA roadmap established in 2003. Now the time has come to evaluate the past FTA policy and launch a new trade agreement roadmap, which contains a comprehensive trade strategy reflecting the changing trade environment and demand for economic cooperation as well as strategies for selecting new FTA partners.

It is also important for Korea to utilize existing FTAs efficiently and make an effort to reflect opinions from firms and experts to FTA implementation committees and negotiations for upgrading existing FTAs. Moreover, the Korean government should help SMEs access the international market through FTAs. One of the main reasons why Korea is highly dependent on a small number of export products is that SMEs account for a very low share of total exports due to their relative lack of export capabilities. As a result, as trade liberalization proceeds, the gap between large companies and SMEs may widen and income inequality may intensify. Performing SME internationalization policies can be a way to break this vicious circle and close the gap. That is, SMEs can become a solution to inclusive trade and export product diversification.

In addition, the government should make an effort to increase consumers' welfare through FTAs in order to promote the FTA policy in

hand with public support. In order for preferential tariffs imposed under FTAs to lower import prices, it is necessary to increase the import utilization rate and diversify import countries. In addition, reducing the excessive concentration of domestic distributors and providing information on distribution and prices of imported goods to consumers will eventually lower the domestic prices of imported goods. Finally, trade adjustment assistance should be provided to actively induce business transformation of firms negatively affected by FTAs and support vocational training and job search activities for the unemployed. **KIEP**