

Korea's Trade Liberalization and Consumer Welfare

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Trade liberalization benefits consumers, according to trade theories, because it gives them access to a wider variety of products at lower prices than what their home country could supply. Despite Korea's continuous trade liberalization over the years, however, it is criticized that Korean consumers have rarely realized welfare enhancement due to trade liberalization, pointing to no change or even an increase in consumer prices of imported goods for which tariff was reduced or eliminated through trade liberalization or effectuation of free trade agreements with other countries.

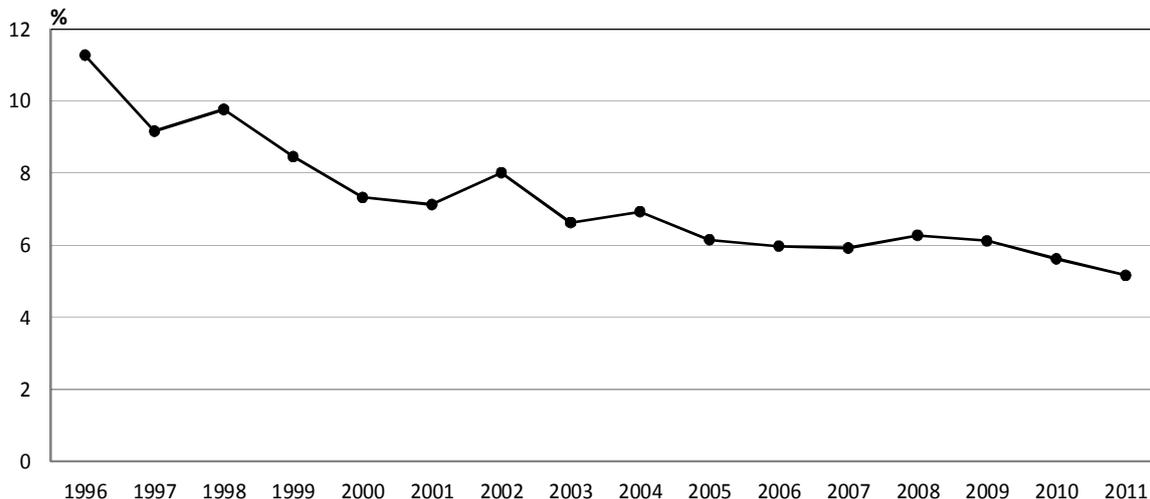
While it is generally believed that trade liberalization benefits consumers, there is only a handful of direct evidence on the gains from trade that particularly focuses on consumers' welfare. In this report, we examine and estimate the welfare impacts of trade liberalization and increased trade on consumers. First, we investigate the trend of prices of imported consumer goods over time and then identify factors that might affect those prices. Second, we examine changes in product variety available in Korea due to trade liberalization and estimate how these changes in product variety affect Korean consumers' welfare.

In particular, within a constant elasticity of substitution (CES) framework, we develop a price index for import that is corrected for new and disappearing varieties by following Feenstra's (1994) approach and using Korea's trade data. New varieties lower unit costs, depending on their substitutability with other varieties and their expenditure shares. Third, we investigate the marketing margins of imported consumer goods from the border to final consumers and estimate the margin on every stage for each marketing channel.

Korea's Trade Liberalization

Korea has continuously liberalized trade and opened its domestic market since it had entered into the General Agreement on Tariffs and Trade (GATT) in 1967. During the Uruguay Round (UR) negotiation from 1986 to 1994, and subsequent implementation process, Korea has reduced its bounded tariff voluntarily. As a result, the level of a weighted average tariff was reduced to 5.1% in 2011 from 11.3% in 1996, as can be seen in Figure 1.¹

Figure 1. Korea's Weighted Average Tariff Rates (1996–2011)



Source: Authors' calculation using trade statistics from Korea International Trade Association (KITA) and Korea Customs Services.

Korea has further liberalized trade in the 2000s by pursuing comprehensive free trade agreements (FTAs) with many countries by "pushing forward synchronized multiple FTAs." As of May 2013, Korea put 9 FTAs into effect with 46 countries, including the United States and the EU.

Factors Affecting Import Prices Other than Tariffs

1. Exchange Rates and World Price Fluctuation

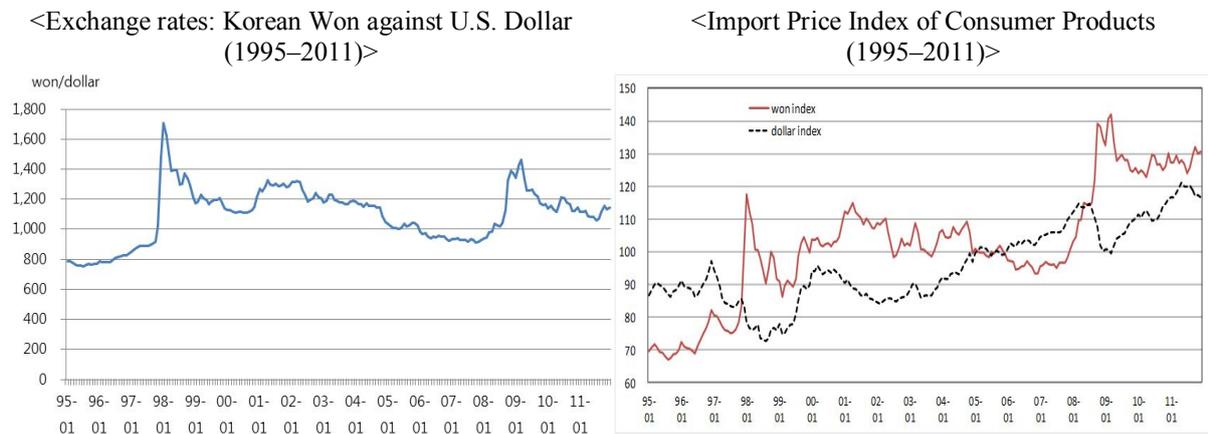
One of the factors affecting prices of imported consumer goods is the world price of commodities and exchange rates.

¹ The values of imports were used as weights and the tariff reduction effects of Korea's free trade agreements were not included in calculating the weighted average tariff.

World prices of agricultural products and selected manufactured goods have been rising since the early and middle 2000s, offsetting the effect of Korea's tariff reduction or elimination. On the other hand, Korean won has become stronger against U.S. dollar during that period. Thus, prices of those imports, in terms of domestic currency, have been gradually falling until the 2008 global financial crisis due to the combined effects of the appreciation of the Korean currency and the upward trend of the world prices along with Korea's trade liberalization.

As Figure 2 shows below, the reduction in import tariffs seems to have lowered import prices when they are denominated in domestic currency (Korean won). Despite the reduction in import prices, however, prices faced by final consumers do not show a clear trend of decline. This tells us that there must be some price deteriorations in the process of domestic marketing structure and distribution system for imported consumer goods in Korea.

Figure 2. Exchange Rates and Import Price Index (1995–2011)



Source: Bank of Korea.

2. Relatively Small Shares of Consumer Goods in Imports

One of the reasons consumers do not make out welfare effects from trade liberalization may be due to small shares of consumer goods in Korea's total imports. As Table 1 shows, consumer goods' share in Korea's imports has only been 8–10% over the last 20 years. Consequently, the impact of tariff reduction on consumer prices must be relatively small.

3. Gradual Phase-out of Tariffs

Korea's trade liberalization has been continuous yet gradual. It is difficult for consumers to recognize the effect of tariff reduction when the size of reduction is relatively small. In some consumer goods, full tariff elimination takes place over a long period of time. For example, the phase-out of tariff elimination for beef takes 10 years while pork takes 15 years in the Korea-US FTA. This means that tariffs are reduced by less than 2–3% per year for those goods.

Table 1. Korea's Imports of Consumer Goods (1990–2011)

(unit: million U.S. dollars, %)

	1990	1995	2000	2005	2010	2011
Consumer goods	5,718 (8.2)	13,216 (9.8)	14,026 (8.7)	26,395 (10.1)	41,855 (9.8)	52,403 (10.0)
Direct consumer goods	2,744	5,537	6,325	9,383	14,931	19,952
Durables	2,151	5,134	4,726	10,619	16,289	18,645
Non-durables	792	2,544	2,975	6,393	10,635	13,806

Note: Definitions of consumer goods follow the classification of KITA. Shares are in parentheses.

Source: Trade Statistics, KITA.

4. Marketing Margins and Distribution Channels

Despite Korea's continuous trade liberalization, tariff reduction has not been properly reflected in prices faced by final consumers due to the structural problems in domestic marketing and distribution channels. The market structure of most imported consumer goods is characterized by monopoly either

through an exclusive contract or a subsidiary of foreign producers. For this reason, potential gains from tariff reduction through trade liberalization might have been captured by monopoly importers in the Korean domestic market rather than being transferred to final consumers in the form of price drop. Table 2 compares the marketing margins of domestically produced consumer goods with those of imported ones. It illustrates much higher margins for imports.

Table 2. Marketing Margins of Domestic Consumer Goods and Imports

(unit: %)

	Grapes		Pork		Electric Irons		Electric Razors		Electric Toothbrushes	
	Domes-tic	Chile	Domes-tic	Imports (frozen pork belly)	Domes-tic	Imports	Domes-tic	Imports	Domes-tic	Imports
Market-ing Margins	45	30	43	47	23	56	23	62	23	63

Source: Authors' calculation using Wholesale and Retail Trade Survey from Statistic Korea for manufactured products and price data from Korea Institute for Animal Products Quality Evaluation, Korea Meat Trade Association, and Korea Agro-Fisheries & Food Trade Corp.

We have further investigated the domestic marketing channels of selected major imported consumer goods. Main findings of the investigation are summarized as follows.

- Most of imported manufactured goods, in particular, small household appliances, are supplied by only one company. In other words, an overseas affiliate has virtually the monopoly power on household appliances in the Korean market.
- The marketing margin of imported goods is generally two or three times higher than that of domestic products.
- The marketing margin generated at the retailing stage is higher than that at the wholesale stage.
- Fair competition is one of the effective ways to reduce marketing costs of the imported goods, including the marketing margin.

5. Product Variety

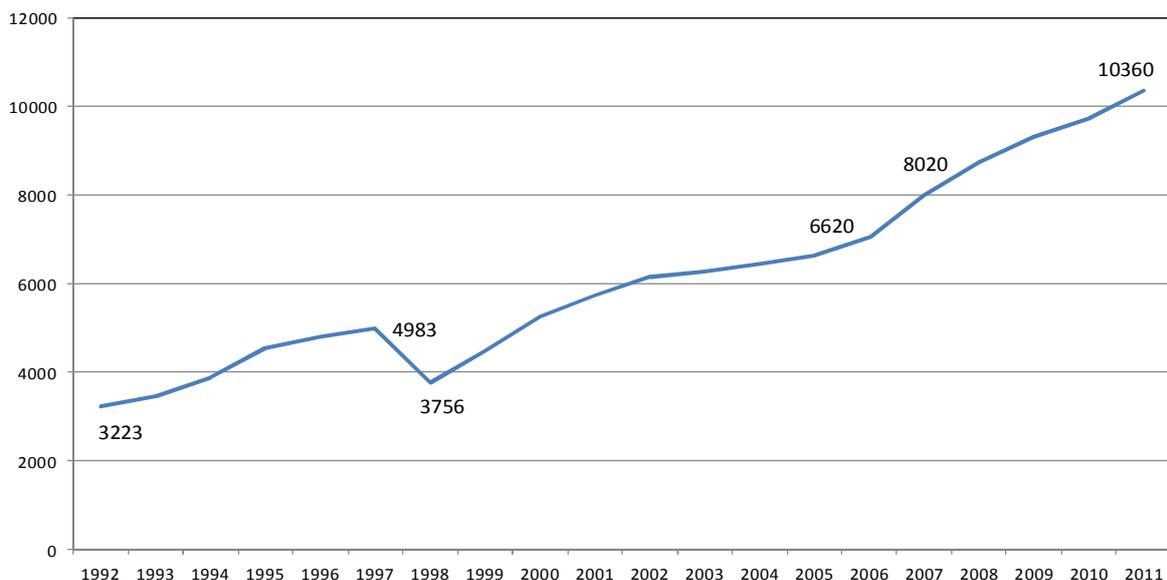
Recently, more attention has been drawn to

the importance of gains from product variety through trade. Although increased product variety is generally believed to bring welfare gains, standard national measures of welfare and prices do not assess how much better off consumers are when a new variety of an existing good or new good becomes available. Both the import price index and the consumer price index (CPI) largely fail to capture the effect of the introduction of new varieties and the increase in the standard of living due to new varieties. If the effect of new varieties on prices can be precisely included in the price index calculation and the availability of new varieties is appropriately appreciated by consumers, it will help consumers recognize benefits from trade liberalization.

As a result of Korea's continuous trade liberalization, the number of product varieties has been increasing over the last two decades. For the selected 234 imported consumer goods, the number of product variety has increased from 3,223 in 1992 to 10,360 in 2011, as shown in Figure 3.

Figure 3. Increasing Product Variety in Korea's Imports (1992-2011)

(unit: number of product variety)



Source: Authors' calculation using Trade Statistics from KITA.

We define the variety as a product imported from a certain country, that is, if a product is imported from many different countries then the same product is considered as a different variety. According to this definition, the number of Korea's imported product varieties

has more than doubled from 64,162 in 1992 to 132,993 in 2011 while the number of imported products in HS 8 has only increased by 11% for the same period, as can be seen in Table 3.

Table 3. Number of Product Variety in Korea's Imports

Year	Number of Products (HS 8)	Number of Importing Countries per product	Total Number of Product Variety
1992 (A)	8,041	6	64,162
2011 (B)	8,893	10	132,993
(B/A)*100 (%)	110.6	166.7	207.3

Note: Product Variety is defined by HS 8 product imported from a specific country.

Source: Authors' calculation using Trade Statistics from KITA and Korea Customs and Trade Development Institute.

Our recalculation of the import price index using Korea's import data suggests that the variety-adjusted index fell 20% faster than the conventional index between 1992 and 2011. To calculate the impact of variety growth on consumer welfare, we have to make an additional assumption about how the increased availability of foreign varieties affects domestic production. With the assumption that the number of domestic varieties is unchanged, we can proceed to estimate the impact of variety growth, due to the continuous expansion of trade liberalization on the well-being of Korean consumers. We found that the official import price index understates the rate of decline in import prices by 20% over the last two decades, from 1992 to 2011. If we take the average import share of Korean GDP for the last 20 years, which is 30%, then the value to consumers of the increased variety is in the range of 8.3% and 21.7% of GDP in 2011, or roughly USD 93–243 billion, depending on the estimates of elasticities of substitution. This sum represents what Korean consumers

are willing to pay for the access to the expanded set of varieties available in 2011.

Policy Implications

Policy Implications Derived from These Findings Are as Follows.

- Fostering fair and competitive environments in the domestic market of the imported goods would be one of the most effective ways for reducing the marketing margin of the imported goods on the whole, resulting in a decrease in consumer prices of those imported consumer goods, and hence ensuring gains from trade entertained by final consumers.
- Concerted efforts by civil organizations and NGOs or consumer groups, such as frequent consumer price reviews on imported goods and relevant monitoring activities, should be encouraged for the benefits of consumers.

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Table 4. Gains from Trade Due to Increased Product Variety

	Import Share (%)	Gains from Variety (%)				
		Elasticity of Substitution (σ)				
		$\sigma = 2.5$	$\sigma = 2.9$	$\sigma = 3.6$	$\sigma = 4.4$	$\sigma = 5.2$
1996 (based on Total Imports)	26.2	18.3	14.8	11.0	8.5	6.9
1996 (based on Imports for Domestic Consumption)	17.7	12.1	9.7	7.1	5.5	4.5
Average (1992-2011) (based on Total Imports)	30.8	21.7	17.6	13.2	10.2	8.3
Average (1992-2011) (based on Imports for Domestic Consumption)	18.6	12.8	10.2	7.6	5.8	4.7

Notes: The gains from variety (GFV) are computed as $\frac{[(1 - \text{Import Share})^{-1/(\sigma-1)} - 1]}{[(1 - \text{Import Share})^{-1/(\sigma-1)}]}$ and are expressed as a percentage of the free trade real GDP per capita following *Product Variety and the Gains from International Trade*, Feenstra (2010).

The elasticities of substitution are the median (4.4) and average (5.2) estimates of Korea's selected imports in addition to those from Feenstra (2010).