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## Analysis of the Effect of FTA on Shrimp Market in Korea

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### Abstract:

*This research study aims to analyze the effect of FTA on shrimp market in Korea. Korea has been actively engaged in the World trade, especially after signing FTAs. While expecting efficient allocation of resources and economic development, it has become harder to predict the certainty of price changes. Among the industries, shrimp has been the most traded marine product and impacts greatly not only in fishery industries but also in consumers' needs. This study reveals how three most representative FTAs affects the price level of shrimps, and thus the overall shrimp market in Korea. Connecting the research of the relationship between FTA and price fluctuation and the consumer trends, this study provides the reciprocal relationship of the elements. The research clearly shows that after settling the FTAs, the price level decreases and eventually leads to increase in demand, as the results of change in shrimp sales in the largest wholesale mart in Korea and change in shrimp import amount shows. This study concludes that FTA has a positive effect on shrimp market in Korea, increasing the supply and demand of shrimps and enlarging the market itself.*

**Keyword:** FTA, shrimp market, shrimp price, price fluctuation, Korea

### 1. Introduction

Resource-poor Korea has recently grown into one of the most aggressive countries to sign FTAs in the world and continues to sign FTAs with many countries. This series of efforts is not just a phenomenon for Korea, but as demonstrated by the signing of the Trans-Pacific Partnership (TPP), which involve 12 countries as of 2015, countries around the world are actively engaged in efforts to forge regional trade more broadly. While we expect positive functions such as economic development and improvement of living standards that will result in efficient allocation of resources through market opening, we expect that price changes will become even more severe in each industry, especially in agriculture, forestry and fisheries, which are the primary industries. In order to provide information that can predict and reduce uncertainty of price changes in these primary industries, there has been a lot of research on volatility of agricultural and livestock products, and although the FTA has been a subject of interest, the research on the price changes of shrimp has been relatively insufficient. So, the study of the effect of FTA on shrimp market seems needed. Shrimp is the largest trading volume among marine products. Korea is also seeing an increase in imports as more FTAs are being signed. In 2014, Korea's total annual supply of shrimp stood at 90,000 tons, about 60 percent of which is imports. Korea is also directly affected by a drop-in production in major shrimp producers, as is the case with changes in the global market. With such an increase in the FTA, Korea, which relies on imports, is heavily influenced by the global market, so the value of research on unpredictable shrimp price changes is beyond question.

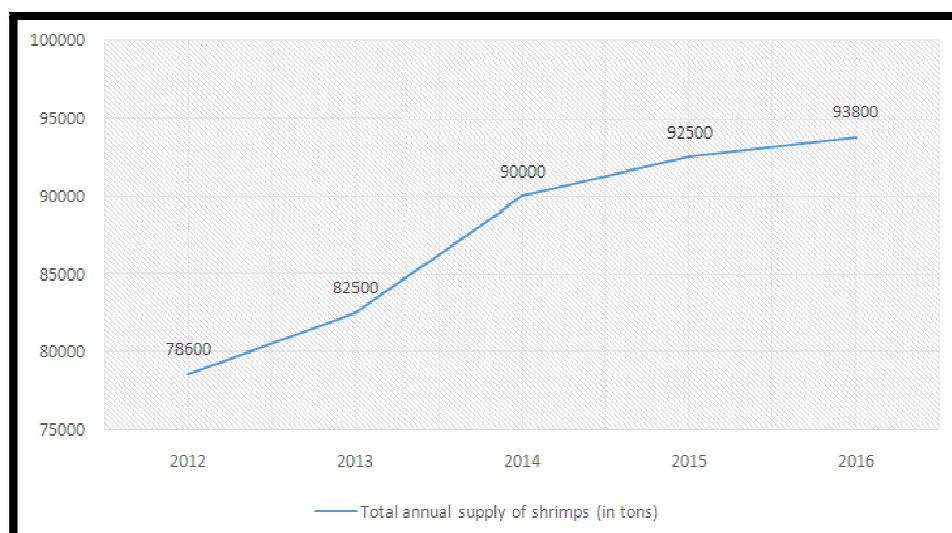


Figure 1

Thus, it is meaningful in that the research on how FTA affects the price changes of shrimp provides information that can predict and reduce uncertainty about the price changes of the most traded marine products. This paper selected China, Vietnam and Thailand, where the most active trade related to the import and export of shrimp is being carried out in Korea.

To find out how the FTA affects Korea's shrimp market, we will first look at price changes since the FTA was signed. Since the trend that consumers feel about a product itself has nothing to do with FTA, we believe that whether to sign an FTA or not will not affect what consumers feel about shrimp. However, the FTA will affect supply and eventually lead to price changes and then demand. After checking the price changes, we will check the consumer's trend with that price. We will examine the size of the market that has changed since the FTA, sales (created profits), and prospects of the market, to see whether the shrimp market has had a positive impact on consumers after FTA.

## 2. Relationship between FTA and Price Fluctuation

### 2.1. Vietnam FTA

Vietnam is one of the world's top five shrimp exporters, with shrimp accounting for the largest portion at 44 percent of Vietnam's fisheries exports. The vast expanse of beaches, lagoon, straits and thousands of large and small islands are ecologically favorable to shrimp farming, resulting in some 350 shrimp processing plants there alone, producing a total of 1.4 million tons of shrimp per year. In 2012 August 6<sup>th</sup>, VKFTA (Vietnam-Korea Free Trade Agreement) was signed and the two countries started to trade in earnest. In 2017, it is recorded that 53% of the imported shrimps in Korea was from Vietnam. This is the highest rate Korea has ever imported shrimps and clearly shows that the Vietnam FTA had mass effect in Korea's shrimp market. Currently, Korea is the fourth-largest buyer of Vietnam's fishery products, while Vietnam is the third-largest supplier of fishery products to the country. "Vietnam's fisheries companies have a lot of experience meeting the demanding market needs of Japan, and the U.S.," said Chu Tang Tung, an official at the Vietnamese Embassy. "I'm sure Vietnamese fishery products will satisfy Korean consumers' desire to find reliable overseas fishery products," and predicted that Korean demand for Vietnamese fishery products will grow further in the future. There have been positive effect between Korea and Vietnam after signing the FTA, let's now look at the price fluctuation. The most representative imported shrimp from Vietnam is the King Black Tiger Shrimp. The price change of this shrimp will show the overall trend of the price change of shrimps from Vietnam. According to the Korea Consumer Price Commission, the price of King Black Tiger Shrimp was 33,100won(27.98\$) in 2014, 32,500won(27.27\$) in 2015, 29,700won(25.11\$) in 2016, 31,300won(26.46\$) in 2017, 28,900won(24.43\$) in 2018, and 24,900won(21.05\$) in 2019- the dollar value is calculated with 2019 June criteria. Although there was a slight increase between 2016 and 2017, the overall trend can be concluded as decreasing. Thus, the price of the King Black Tiger Shrimp (Vietnam shrimp) has decreased since the VKFTA.

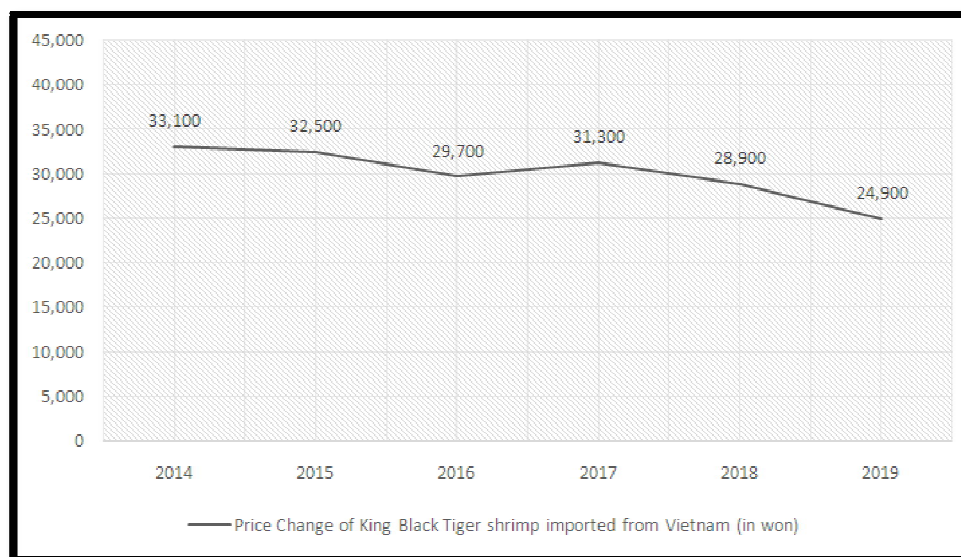


Figure 2

### 2.2. China FTA

China is the country to produce the most shrimps in the world, producing 354 tons in 2014; 46% of the shrimps are from China. Korea imported 9,853 tons of shrimp from China in 2016, a year after the Korea-China FTA took effect (December 2015), down 6 percent from the previous year, which is attributed to the rising demand for shrimp in China. China decided to eliminate tariffs for 20 years, and tariffs in 2016 were applied at 18 percent, down 2 percent from the base tax rate, but imports fell rather, and import market share stood at 15 percent, down slightly from before it took effect. The Korea-China FTA will reduce tariffs by an additional 1 percent every year, but it was expected that China will not be able to export its products to Korea for the time being due to rising demand from China. However, China has been producing more number of shrimps and have increased its exports to Korea after the FTA. It is apparent that after the

Korea-China FTA, Korea has been importing less shrimps from China due to internal issues in China. However, China has increased its shrimp exports in the recent years and larger sum of Chinese shrimps are making their way to Korea. The most representative shrimp from China is the White-leg Prawn. The price change of this shrimp will show the overall trend of the price change of shrimps from China. According to the price record of a fish market named 'shings halemoul', the price of White-leg Prawn(1kg) was 22,800won(19.24\$) in 2015, 22,400won(18.90\$) in 2016, 21,700won(18.31\$) in 2017, 19,500won(16.45\$) in 2018, and 18,900won(15.95\$) in 2019. There was only a slight change (decrease in price) between 2015 and 2017. However, it can clearly be seen that the overall trend of the price fluctuation is decreasing because of the increased imports of shrimps due to the Korea-China FTA.

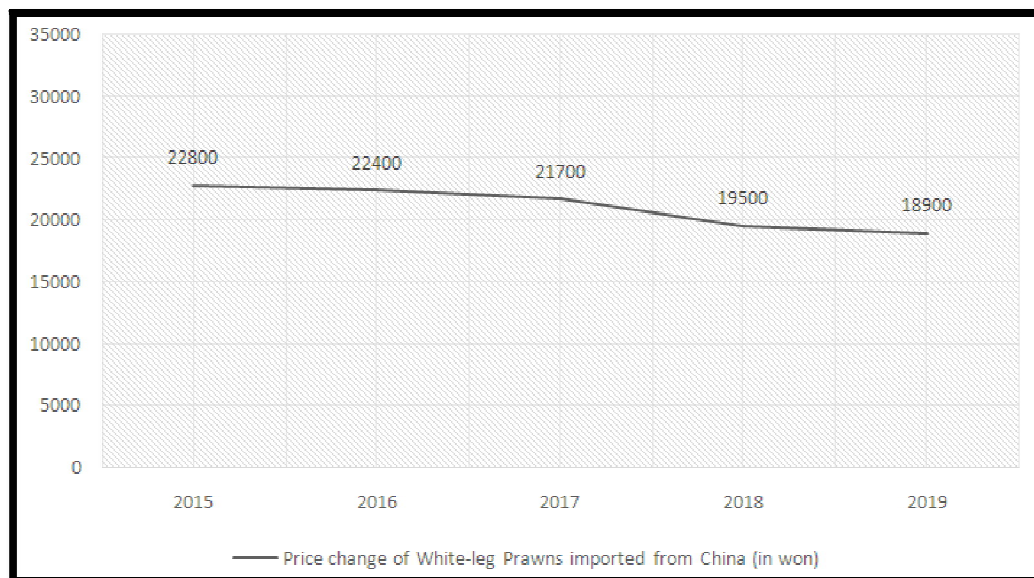


Figure 3

### 2.3. Thailand FTA

Over the past few years, the Thai shrimp industry has confronted many challenges, such as trade barriers, economic problems in the importing countries, and highly intense competition from low-cost rival countries such as Taiwan, China and Ecuador. However, there are several positive future trends for Thai shrimp exports. For the last few decades, the international shrimp trade has grown over 280%. Furthermore, world demand for seafood products as a healthy protein is expected to increase. Likewise, the threat of mad cow disease and avian bird flu has generated more demand for Thai shrimp around the world. Thailand is one of the world's major shrimp exporters, with the shrimp industry's annual exports reaching \$2 billion. About 90 percent of Thai shrimp are produced in a form, with the remaining 10 percent being natural. The amount of Green-leg Tiger shrimp exported to Korea during 2016 alone amounts to about 3,298 tons. Thailand is one of the countries to be included in the Korea-ASEAN FTA. While there are other countries included in the same FTA, Thailand is the country to import the most shrimps to Korea among the ASEAN FTA countries. Thailand is the 6<sup>th</sup> in exporting shrimps around the world, making \$694.3 million in 2017. This is the amount only in seawater shrimps, and if freshwater shrimps are added, the dollar value will be even greater. The phenomenal growth of Thailand's shrimp export industry has benefited from higher processing capabilities related to capture fishery, established supporting industries, advancement in aquaculture farming techniques, and sound infrastructure and transport systems to major export markets. Nevertheless, in order to be more competitive, the Department of Fisheries has emphasized increased investment in upgrading shrimp processing technologies, creating more value-added products, and improving international hygiene and quality standards.

The most representative shrimp from Thailand is the Green-leg Tiger shrimp. The price change of this shrimp will show the overall trend of the price change of shrimps from Thailand. According to the price record of a fish market named 'shings halemoul', the price of Green-leg Tiger shrimp(1.3kg) was 42,600won(35.93\$) in 2015, 41,700won(35.18\$) in 2016, 41,200won(34.75\$) in 2017, 38,800won(32.73\$) in 2018, and 36,400won(30.70\$) in 2019. After the Korea-ASEAN FTA, we can clearly see that the price has decreased over the years.

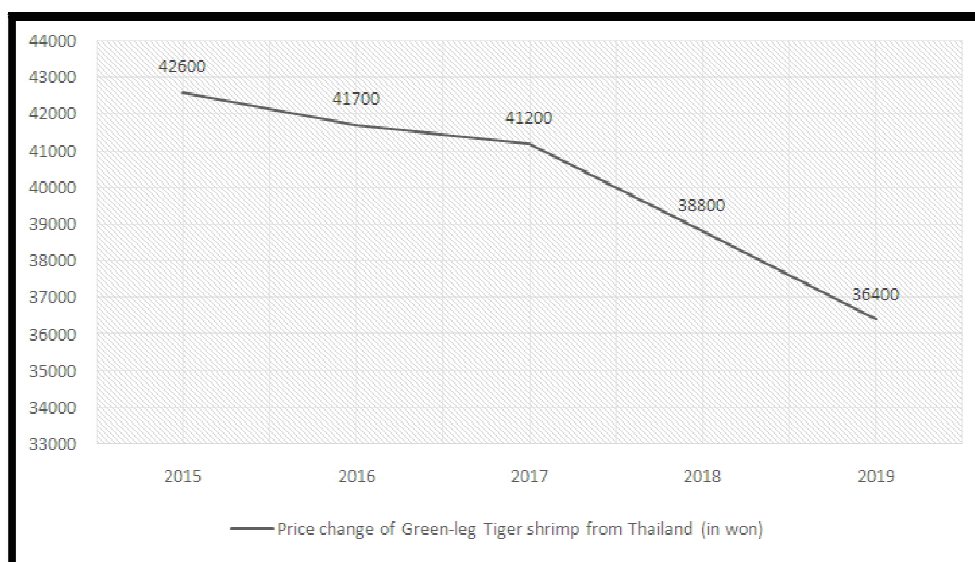


Figure 4

### 3. Price Fluctuation and Consumer Trends (Overall)

#### 3.1. The Change of Market Size

The results above show us that the FTAs have overall resulted in decreased in shrimp price over the years. We will now look at how the price fluctuation (decrease in price) have affected the shrimp market, and thus the consumer trends. The change of market size will show us the effect of FTA on the shrimp market (whether it has a positive effect or negative effect).

The first data to look at is the change in shrimp sales' amount in Emart, the largest wholesale mart in Korea. Because Emart is the biggest wholesale mart, it will be reasonable to look at the record of change and interpret the results. According to the official record provided from Emart, the shrimp sales was \$16.96million in 2013, \$21.76million in 2014, \$24.64million in 2015, \$28.76million in 2016, and \$29.52million in 2017. The records tell us that the sales have increased during the pass 5years between 2013 and 2017.

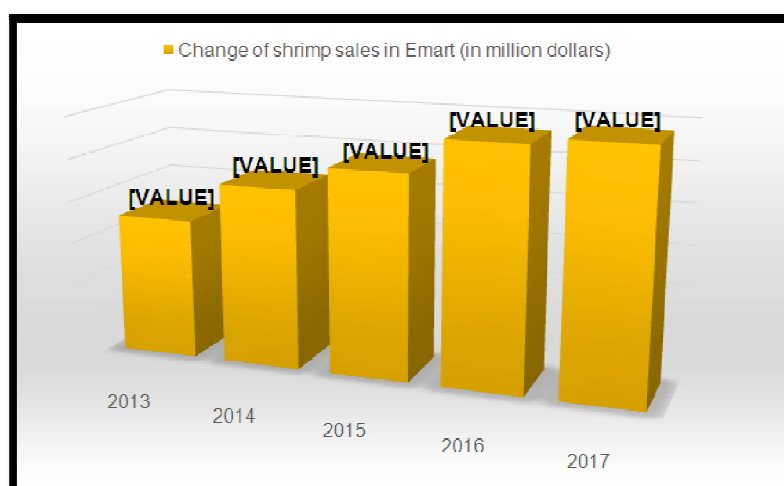


Figure 5

The second data to look at is the record of shrimp import amount (in dollar value) in the recent five years. According to Korea's Custom Office, the shrimp import amount was \$3.3616billion in 2014, \$3.3037billion in 2015, \$3.4039 in 2016, \$3.6927billion in 2017, \$3.7011billion in 2018. Although there was a slight decrease in between 2014 and 2015, the overall trend is on the rise.

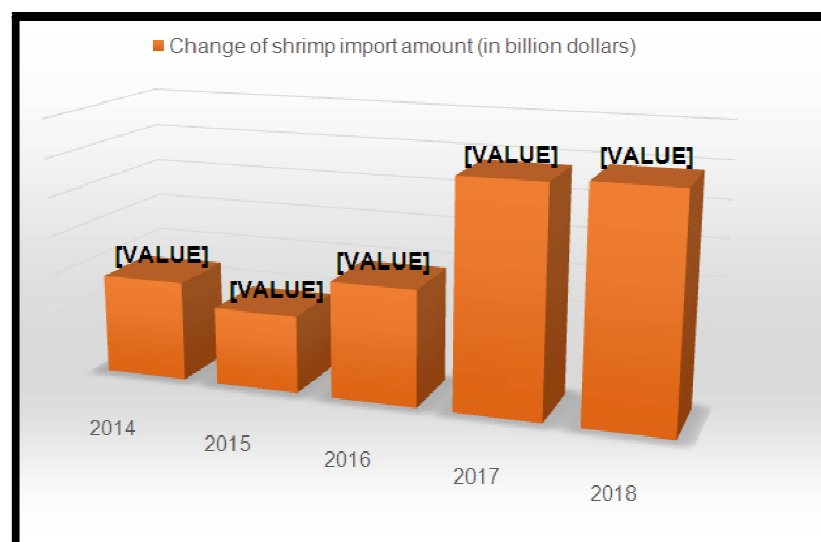


Figure 6

#### 4. Prospect of the Future Shrimp Market

According to the Korea Maritime Affairs and Fisheries Development Institute, the World Food and Agriculture Organization recently estimated that the growth rate of the Korean shrimp market rose 2.3 percent last year from the previous year in 2019. Korea's shrimp import continues to increase, and the sales amount is proportionate. It is estimated that the shrimp import sales will increase by 4.4% and amount also increase by 3.9% next year. We can clearly see that the shrimp market is improving, and we cannot ignore the fact that FTA has been signed over the recent years.

#### 5. Conclusion

The study about the relationship between signing the FTA and price fluctuation shows us that as Korea signs FTAs, the supply overall increases and price level decreases. After the VKFTA, the shrimp price has decreased by 32.9% over six years. After the Korea-China FTA, the shrimp price has decreased by 20.6% over five years. After the Korea-ASEAN FTA, the shrimp price has decreased by 17%. The study about price fluctuation and consumer trends clearly shows us that the overall shrimp market has gotten larger over the years. The shrimp sales in Emart has increased 74% between 2013 and 2017. The shrimp import amount (in dollar value) has increased 10% between 2014 and 2018. It can be indicated that the FTA allows more shrimps to be exported to Korea, and this leads to decreased price levels of various kinds of shrimps consumed. Because of the decreased price level, people are able to consume more shrimps. Finally, this increased demand in shrimps results in growth of shrimp market in Korea. It can be concluded that FTA has positive effect on shrimp market in Korea and promotes shrimp consumption. So, regardless of other issues that might affect the demand & supply of shrimps, signing FTAs will bring more economic prosperity and satisfaction to consumers in Korea.

#### 6. References

- i. Samuel Kim. (n.d.). Prawn Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2018-2023 (pp.168-211). International Journal of Social Science Studies, ISSN 1349-3715.
- ii. Changmo Ma. (2009). World Shrimp Market Flow. Korea Maritime Institute, ISSN 2005-7423.
- iii. Haeyeon Lee. (2016). Korea-China FTA Promotion and Export Prospects. Korea Institute of international trade
- iv. Ingyo Jeong. (2014). Korea-Vietnam Bilateral FTA: Issues and Economic Impacts. Korea International Trade Association, ISSN1226-7120.
- v. Mijin Jo & Junggoyn Kim.(2013). Analysis on FTAs and the Market Access: Vietnam's Importing Market. The Journal of customs and trade, ISSN1229-7445.
- vi. Trend of world shrimp market. Retrieved May 11, 2019, from <http://www.susantimes.co.kr/etnews/?fn=v&no=12301&cid=21120100>
- vii. Information about VKFTA (history records). Retrieved May 23, 2019, from <https://www.ftatex.or.kr/tmcis-ptlweb/fta/fta2610L.do>.
- viii. Changsu Lee. (2009).Economic Effects and Implications of the China FTA. International Journal of Economic Studies, ISSN 1677-2931.
- ix. Jueun Kim. (2012). A Study on Restrictions on Imports of Shrimp. Journal of Korean Society of Solutions, ISSN 1598-0812
- x. Yongyun Jung. (2016). Thailand's FTA Trade Policy: Origin, Utilization and Implications. Korean Society of Thailand Editorial Writers, ISSN 1598-236X.
- xi. Gyeongduk Gyun. (2015). Thailand's FTA Policy and Implications. Korea Institute for International Economic Policy, ISSN 1598-2769.
- xii. Donghyun Kim. (2011). Development of Korea-China Trade and the Impact of its Bilateral FTA on Korean Industry. Journal of Trade and Commerce, ISSN 1611-3917.

- xiii. 13. Article related to China's export in shrimps. Retrieved May 26, 2019, from [http://blog.daum.net/\\_blog/BlogTypeView.do?blogid=0CwSU&articleno=16440972&categoryId=554200&regdt=20090720161222](http://blog.daum.net/_blog/BlogTypeView.do?blogid=0CwSU&articleno=16440972&categoryId=554200&regdt=20090720161222)
- xiv. Jonghwan Go. (2017). Economic Effects of Agreement on Trade in Services under the Korea-ASEAN FTA. *Journal of International Regional Exploration*, ISSN 1226-6000.
- xv. H. Holly Wang. (2015). Determinants of shrimp importation into the Korea: an application of an augmented gravity model. *Korean Journal of exports and imports*, ISSN 2082-5719.
- xvi. Chenou Yan. (2018). Analyzing Market Integration of Imported Shrimps. *Journal of Korea Fisheries Management Association*, ISSN 1225-1011.
- xvii. Facts about shrimps imported from Vietnam. Retrieved June 5, 2019, from [http://danmee.chosun.com/site/data/html\\_dir/2017/05/02/2017050201741.html](http://danmee.chosun.com/site/data/html_dir/2017/05/02/2017050201741.html).
- xviii. Pawan Powell. (2017). The effect of FTA in fishery industries in Asia. *International Journal of Fishery*, ISSN 1344-5798.
- xix. Article about information relating to shrimp exports in Asia. Retrieved June 2, 2019, from <http://www.viva100.com/main/view.php?key=20180621010006992>.
- xx. Article about shrimp import in Korea. Retrieved June 3, 2019, from [http://biz.chosun.com/site/data/html\\_dir/2014/05/18/2014051800683.html](http://biz.chosun.com/site/data/html_dir/2014/05/18/2014051800683.html).