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## How to Promote E-Commerce Exports to China: An Empirical Analysis<sup>†</sup>

## By MIN JUNG KIM\*

This paper focuses on the recent extraordinary growth of Chinese cross-border online shopping and draws implications for firm strategies and government policies in Korea to utilize the phenomenon as an opportunity to expand into a broader market via e-commerce exports. I conduct a survey of Chinese cross-border online consumers to identify constraining and determining factors during the stages of their purchase decisions of Korean products. Given the fact that Chinese cross-border online shopping is at the incipient stage and consumers have expressed a strong intent to repurchase, future strategies should focus on attracting new consumers. Accordingly, Korean firms should build a powerful brand image, improve product quality and post-purchase services, and take full advantage of the popularity of the Korean Wave. Meanwhile, the government must step up policy efforts by, for instance, improving e-commerce export statistics, simplifying logistics and clearance procedures, and building trust in Chinese consumers.

Key Word: E-commerce export, Cross-border online shopping, Corporate strategy, Purchase decision making JEL Code: L1, L81, M3

## I. Introduction

China's e-commerce has recently witnessed extensive growth, reaching 12.3 trillion yuan (2,103 trillion won) in gross merchandise value  $(GMV)^1$  in 2014, owing to the nation's economic growth and internet dispersion. With China's

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<sup>1</sup>Gross merchandise value (GMV) is a term used in e-commerce to indicate a total sales value for goods sold through a particular e-commerce platform.

internet penetration rate hovering at around the 50% mark<sup>2</sup> and given the government's eagerness to promote e-commerce further, as expressed in the "Internet Plus" strategy, there is still sufficient room for additional growth. A particularly notable trend is that Chinese consumers are rushing to online retailers across the border. Cross-border e-commerce is booming around the globe, but the growth of China's cross-border online shopping has been exceptionally fast and is forecast to reach approximately 400 trillion won in 2018, according to the China E-Commerce Research Center.

Chinese consumers' enthusiasm for cross-border online shopping offers Korean manufacturers and e-commerce platforms increasingly more opportunities to engage in e-commerce exports, which will stretch the limitations of Korea's narrow domestic market. China accounts for 40% of Korea's e-commerce exports and provides numerous advantages, such as inexpensive logistics costs due to the close geographic proximity, duty-free benefits given the Korea-China FTA, and an amplification of the Korean Wave effect.

Hence, the time has come to seek out measures to use this opportunity more effectively, but sufficient data are not available with regard to Korea's e-commerce exports to China, limiting research in this area. This study thus conducts a survey of Chinese cross-border online shoppers' experiences of purchasing Korean products and presents implications pertaining to the corporate strategies of domestic manufacturers and e-commerce platforms and to government policies to boost e-commerce exports. The survey aims to enhance the understanding of the nation's consumers and, based on the analysis of consumer experiences, find problems related to each e-commerce export method and their solutions. Concretely speaking, I identify constraining and determining factors in the stages of decision making by Chinese consumers to purchase Korean products, i.e., interest, initial purchase, and repurchase, and compare Chinese platforms and Korean platforms. As a result, the strengths and weaknesses of Korean products and those of each platform are derived in views of (new) customer conversion and (existing) consumer retention, respectively.

First, Chinese cross-border online shopping is still in its infancy, and close to 99% of consumers with online shopping experience of Korean products have expressed their intent to repurchase, suggesting that emphasis should be placed on attracting new consumers (i.e., customer conversion) when establishing e-commerce export strategies. The analysis results show that quality factors are more important than price factors when Chinese consumers shop for Korean products online. Therefore, it is advised that Korean manufacturers should firstly establish a brand image that ensures that their products are both of a high quality level and authentic in order to draw interest and drive initial purchases and secondly make better use of word-of-mouth and reputation marketing so that their brands will be well regarded by Chinese consumers. In addition, given that the Korean Wave has been demonstrated to influence repurchases as well as initial purchase decisions, I suggest linking businesses with Korean contents in order to utilize the trend fully.

This paper also finds that Korean e-commerce platforms should make improvements in the areas of brand establishment, promotion, language, and

<sup>&</sup>lt;sup>2</sup>According to CNNIC (2015), China's internet penetration rate rose from 10.5% in 2006 to 47.9% in 2014.

payment systems to expand e-commerce exports. Specifically, having the past experience of visiting or staying in Korea has been found to play an essential role in choosing Korean e-commerce platforms; therefore, efforts are needed to raise the reputation of Korean platforms among Chinese tourists during their visits to Korea.

With regard to an e-commerce export policy, I recommend that the government provide statistics on Korea's e-commerce exports through Chinese platforms, which will enable a precise assessment of the current status as well as more research and analysis. Moreover, simplifying the logistics and customs procedures will be of great help to Korean manufacturers in their efforts to offer competitive products to Chinese consumers. Lastly, because customer trust is critical in crossborder e-commerce, more policies must be devised to protect Chinese consumers as well as Korean export businesses.

The remainder of the paper is organized as follows. Section II describes the current state of China's e-commerce, especially cross-border online shopping, and Korea's e-commerce exports. Section III provides an overview of the related literature. The empirical analysis results of the survey on Chinese consumers' experiences of purchasing Korean products online are discussed in Section IV. Section V concludes the paper.

#### **II. Industry Background**

#### A. China's E-Commerce

One striking feature of the rise of China's e-commerce is the rapid growth of the online shopping market.<sup>3</sup> As shown in Figure 1, China's online shopping amounted to 2.8 trillion yuan (481 trillion won) in 2014 and overtook the US to stand at the top starting in 2013. Despite recording a mere 7% of the e-commerce market in 2009, China's online shopping is expected to reach 30% in 2018 and lead the growth of the entire industry. Before 2010, online shopping transactions were mostly C2C (consumer to consumer).<sup>4</sup> However, as the market matured, consumers grew more particular about the quality of the purchased goods, which led to the expansion of B2C (business to consumer). Accordingly, the proportion of B2C in online shopping is estimated to surpass 50% in 2015 and continue to rise afterwards, becoming a key growth engine (iResearch, 2015. 7. 27).

With the increase in B2C, China's cross-border online shopping<sup>5</sup> has increased so remarkably that a new word, 'Haitao,' was coined to describe Chinese cross-border online shoppers. The growth of cross-border online shopping is now

<sup>&</sup>lt;sup>3</sup>E-Commerce is largely categorized into B2B (business to business) and online shopping; the latter refers to transactions between individual consumers and product or service sellers. Depending on whether the seller is a company or an individual, this type of online shopping is categorized as B2C (business to consumer) or C2C (consumer to consumer).

<sup>&</sup>lt;sup>4</sup>According to iResearch (Oct. 22, 2013), B2C and C2C accounted for 7.8% and 92.2% of all online shopping transactions in 2009, respectively.

<sup>&</sup>lt;sup>5</sup>Cross-border online shopping describes domestic consumers' direct purchases of foreign products via online platforms. This can be seen as a type of B2C, with the consumer as the buyer and a foreign company as the seller.

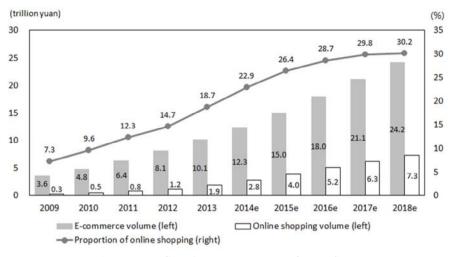
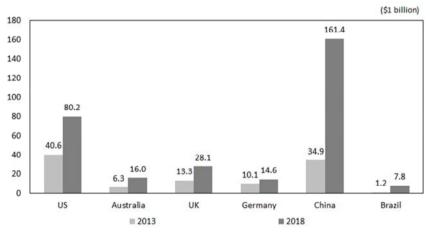


FIGURE 1. TRENDS IN CHINA'S E-COMMERCE AND ONLINE SHOPPING

*Note*: E-commerce and online shopping volumes are measured in terms of their gross merchandise value (GMV). Data for 2014-2018 are estimates.

Source: Data until 2010 are from iResearch (Oct. 22, 2013), and data after 2011 are from iResearch (Mar. 9, 2015).





*Note*: Calculated by multiplying the original amount in local currency by the respective exchange rate against the dollar (2013 annual average).

Source: PayPal (2013).

a global trend, but in China it has grown rapidly compared to that in other countries (Figure 2). As of 2013, US cross-border online shopping tops the list in terms of consumption size, followed closely by China. However, their positions are

| Country   | Proportion (%) |
|-----------|----------------|
| US        | 84             |
| Hong Kong | 58             |
| Japan     | 52             |
| UK        | 43             |
| Australia | 39             |
| Korea     | 37             |

TABLE 1— POPULAR CROSS-BORDER Online Shopping Destinations of Haitao Shoppers

Note: Proportion of Haitao shoppers who ever purchased online directly from each country.

Source: PayPal (2013).

highly likely to switch in the coming five years with China considerably outpacing the US at present.<sup>6</sup> Table 1 lists countries favored by Haitao shoppers arranged in the order of 'most frequently purchased'; Korea ranks sixth, meaning that 37% of Haitao consumers have purchased Korean products online.

#### B. Korea's E-Commerce Exports

Korea's e-commerce exports have expanded by more than 20-fold since 2010 to reach \$44.6 million in 2014, and this figure is expected to triple for 2015 (Figure 3). It remains low compared to the size of e-commerce imports, which stood at \$1,544.9 million in 2014. However, statistics compiled by the Korea Customs Service on e-commerce exports do not provide an understanding of the current situation, as exporters are not obliged to report exports of items valued below two million won. Given that most e-commerce exports are small B2C transactions, more than 90% of e-commerce export goods are omitted from these statistics.<sup>7</sup> In actual fact, Korean online retailers exported 582.0 billion won worth of goods in 2014,<sup>8</sup> ten times more than the records released by the Korea Customs Service, according to the Ministry of Trade, Industry and Energy and the Korea Online Shopping Association.

Table 2 shows that China is Korea's largest e-commerce export market, accounting for 42.2% of all e-commerce exports. China's portion in Korea's e-commerce exports is even more impressive for clothing (94.7%) and beauty and fashion items (nearly 70%), which are top export consumer goods. This means that China is a vital component in Korea's e-commerce exports, and its importance is likely to increase in the coming years.

Korean manufacturers hoping to export online to Chinese consumers can use either a Chinese e-commerce platform or a Korean one. A Chinese platform has certain merits, such as high traffic flows from existing users, a friendly platform

<sup>&</sup>lt;sup>6</sup>The China E-Commerce Research Center presented the optimistic projection that Chinese cross-border online shopping will reach 418 trillion won in 2018.

<sup>&</sup>lt;sup>7</sup>Meanwhile, e-commerce imports of low-priced products are also subject to a simplified clearance procedure, but they are not left out of the statistics.

<sup>&</sup>lt;sup>8</sup>This is the result of a survey of major online retailers (eBay Korea, Lotte.com, 11ST) and two web-hosting companies (Cafe24, Makeshop). If the coverage broadens, the actual size is expected to be larger.

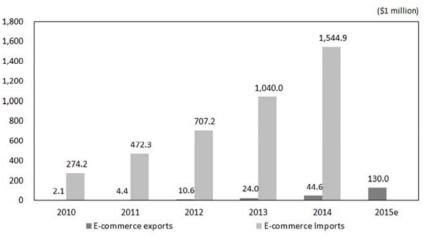


FIGURE 3. TRENDS IN KOREA'S E-COMMERCE EXPORTS AND IMPORTS

Note: Data for e-commerce exports in 2015 are estimates.

Source: E-commerce exports data from Korea Customs Service's press release (Oct. 29, 2015), E-commerce imports data from Korea Customs Service's press release (Jul. 13, 2015)

| Product       | E-commerce exports | Top markets |                |  |
|---------------|--------------------|-------------|----------------|--|
|               | (million dollar)   | Country     | Proportion (%) |  |
|               |                    | China       | 42.2           |  |
| Total         | 108.3              | Singapore   | 21.1           |  |
|               |                    | US          | 17.2           |  |
| Clothing      | 29.1               | China       | 94.7           |  |
| Beauty items  | 11.5               | China       | 73.1           |  |
| Fashion items | 6.5                | China       | 68.9           |  |

#### TABLE 2— KOREA'S E-COMMERCE EXPORTS: TOP PRODUCTS AND PARTNER COUNTRIES

*Note*: 1) As of Sep. 2014 - Aug. 2015. 2) Proportion of each country in Korea's total ecommerce exports (amount) of each product.

Source: Press release, Korea Customs Service (Oct. 29, 2015).

design customized to Chinese consumers, and secured consumer trust. However, there are also flaws, such as limited opportunities for brand exposure due to competition from other countries and difficulties in communication with Chinese platform representatives due to the language barrier. Therefore, using a Korean platform could be more beneficial to Korean manufacturers in terms of marketing and cost-saving.

A deep understanding and comparison of approaches towards e-commerce exports is fundamental to Korean companies who wish to take full advantage of China's e-commerce boom. To such an end, precise statistical data on e-commerce exports must initially be compiled; the clearance data of the Korea Customs Service is inadequate if used to identify actual e-commerce exports. In recognition of this, Statistics Korea started to release statistics on reverse direct purchases<sup>9</sup> in late 2015 based on corporate surveys of major domestic online retailers. However, given the possibility that most e-commerce exports are being driven by Chinese platforms, there are limitations due to the lack of information on e-commerce exports via Chinese platforms.

### **III. Literature Review**

There is a dearth of research on how Korea should avail itself of the development of Chinese e-commerce, though there are a few studies. First, Kim *et al.* (2013) illustrated the current status and patterns of the overseas expansion of businesses in the Chinese Internet industry, including e-commerce, and studied how Korea should respond and cooperate with China. They observed the pattern by which major Internet firms in China emerged under the protective environment offered by the Chinese government given the vast size of the domestic market and then expanded overseas to spur more growth afterwards. It was noted that strategic alliances have been used to obtain content (referred to as a "technology-seeking" or "content-seeking" expansion pattern) in Korea, while Chinese capital enjoys a jump in size through large-scale M&As of local businesses (referred to as an "asset-seeking" or a "market seeking" expansion pattern) in other countries. The paper concluded that Chinese e-commerce companies do not have a great enough incentive to operate in Korea due to its limited market size and that they are instead looking to acquire more quality goods from Korea.

I concur with the view that it is important to consider the incentives of Chinese e-commerce firms to attain Korean products. This paper provides strategic suggestions for businesses and policy implications, focusing on the trend of the expansion of Chinese cross-border online shopping, to turn the phenomenon into a valuable opportunity for e-commerce exports. E-commerce exports have exhibited modest numbers, and locating reliable statistics can be difficult. Hence, not many studies have been conducted on e-commerce export strategies, and all existing works employed survey methods.

Chang (2015) conducted a survey of consumers in the United States, Japan, China, Indonesia, and Vietnam to look into purchase determinants in relation to online shopping and customer satisfaction with regard to Korean products. According to Chang, overseas consumers were most likely to buy online cosmetic goods and clothing from among available Korean products, and factors such as quality, payment security, and seller trustworthiness were found to be most important in all five countries. Each country demonstrated certain preferential differences: consumers in the Unites States and Japan chose price as the key factor, while product authenticity was considered important in China, whereas convenience of the return process was considered important in Indonesia and Vietnam. Chang adopted an ordered probit model with the dependent variable as an indicator as to whether a customer would buy more Korean products in the future (decrease, status quo, increase) and with the independent variables as various levels of satisfactions with price, product, supplementary service, and online service of Korean products. The results showed that instead of price, product characteristics such as quality, design, brand image and online service characteristics such as authenticity, descriptions written in the local language, payment security, and purchase reviews played a more integral role in driving sales.

This paper is also relevant to the research stream on cross-border e-commerce or cross-border online shopping. Most researchers in these areas also utilized surveys due to the lack of official records on cross-border trades via online shopping. Gomez-Herrera *et al.* (2013; 2014) constructed data using a survey on domestic and cross-border B2C online shopping in 27 European Union countries to compare online and offline transactions. They found that the traditional gravity model holds explanatory power even in online cross-border trades and that the transaction costs of online trades related to geographic distance have drastically decreased compared to the case of offline trades. In contrast, transaction costs incurred by the language barrier during online trades have increased compared to the offline channel, and system requirements such as online payment and delivery capabilities now play critical roles.

Baybars and Tanyeri (2011) categorized the deterrents in cross-border online shopping as those related to security and trust, language, cross-border payments, cross-border logistics, and regulation and administrative systems. Based on the TAM (Technology Acceptance Model), they used a survey to test their hypotheses that the perceived problems related to cross-border online shopping will affect attitudes, attitudes will affect the intent to purchase, and the intent to purchase will affect actual purchase decisions. They showed via a t-test that a consumer group with experience in cross-border online shopping has a better perception compared to a group without experience in all of the categories above except for regulation and administrative systems. Baybars and Tanyeri interpreted this difference in the two groups as resulting from the experience of cross-border online shopping, but it appears that they made the mistake of neglecting possible reverse causality.

In addition, IPC (2010) used a survey in the US and seven European countries, and PayPal (2013) used a survey in six major countries, including the US, the UK, and China, to expound the current status and prospects of cross-border online shopping. IPC (2010) interestingly found that cross-border online shopping consumers have more experience and purchase more frequently online compared to domestic online shopping consumers. Moreover, related to delivery, clearly indicating delivery fees on the product page, giving notifications about when products are shipped, and providing various shipping and return options were shown to be important. According to PayPal (2013), the most critical reason that consumers avoid cross-border online shopping is a concern about identity theft and fraud, i.e., trust issues. Therefore, most consumers seek buyer protection systems in overseas purchases; specifically, consumers in China and Brazil were reported to be more sensitive to these issues.

This study also adopted a survey method to overcome the lack of proper data, studying Chinese consumers with cross-border online shopping experience by examining purchase factors and satisfaction levels with regard to Korean products in an effort to enhance our understanding of Chinese consumers, who may differ from Koreans. However, this study sets itself apart from prior studies in two aspects. First, it identifies decision-making stages, such as the interest, initial purchase and repurchase stages, and systematically explores encouraging and discouraging factors. Second, by analyzing Chinese consumers' shopping experiences, it provides strategy implications for e-commerce platforms as well as merchandisers in Korea who aspire to export their goods online.

Finally, the body of marketing and information systems literature on ecommerce includes much research about the influential factors of individual propensity, trust, purchase (intent), customer satisfaction, repurchase (intent), and loyalty and the relationships among them. For example, Kim *et al.* (2009) proved the two sets of hypotheses that connect trust, perceived risk and benefit, intent to purchase, and real purchases as well as pre-purchase expectations, satisfaction, and intent to repurchase. Kuan *et al.* (2008) compared the effects of the website quality on the initial intent to purchase and subsequent intent to purchase, concluding that one must focus on system quality (e.g., website design quality) for customer conversion and service quality for customer retention. Moreover, Shankar *et al.* (2003) proved that loyalty and satisfaction are positively related and that the association is reinforced more in online environments than offline. Posselt and Gerstner (2005) uncovered that post-purchase service has a stronger impact on repurchase intent than pre-purchase service.

The survey design adopted here is related to this line of discussions. I also structure the stages of purchase decision making and examine which factors affect each stage. This paper contributes to the literature by applying the research method to the new environment of cross-border online shopping and identifying influential factors that are unique to the online purchases of foreign products.

#### **IV. Empirical Analysis**

## A. Survey Design

This study analyzed the results of a survey conducted on Chinese cross-border online shoppers about their experiences purchasing Korean products. The survey was conducted online with Chinese panels through Macromill Embrain, one of the largest online research providers, during the period of October 8-20, 2015. A total of 3,000 respondents with cross-border online shopping experience were surveyed (1,000 per group for three types). These were Type A, consisting of those who have never purchased Korean products online; Type B, who have purchased Korean products only via Chinese platforms; and Type C, who have purchased Korean products via Korean platforms.<sup>10</sup> Table 3 summarizes the demographics of the survey respondents.

<sup>&</sup>lt;sup>10</sup>Comparing purchasing experiences via Chinese and Korean platforms may produce more reasonable results if the survey is conducted on Chinese consumers with the experience of either of the two platforms. However, cases involving the use of only Korean platforms are expected to be rare, suggesting difficulties when attempting to conduct such a survey. Thus, anyone with Korean-platform-use experience was classified as Type C and was asked questions about their purchasing experiences via Korean platforms.

| Variable             | Category        | Proportion (%) | Variable         | Category                           | Proportion (%) |
|----------------------|-----------------|----------------|------------------|------------------------------------|----------------|
| Gender               | Male            | 30.0           | Marital status   | Single                             | 31.2           |
|                      | Female          | 70.0           |                  | Married                            | 68.6           |
| Age                  | 20-29           | 56.0           |                  | Other                              | 0.2            |
|                      | 30-39           | 37.0           | Experience of    | Yes                                | 59.3           |
|                      | 40-49           | 7.0            | visiting Korea   | No                                 | 40.7           |
| Number of            | 0               | 37.7           | Experience of    | Yes                                | 25.4           |
| children             | 1               | 54.5           | staying in Korea | No                                 | 74.6           |
|                      | 2               | 6.3            | Education        | High school                        | 5.7            |
|                      | 3               | 1.0            |                  | Undergraduate                      | 5.6            |
|                      | 4               | 0.4            |                  | College degree                     | 80.6           |
|                      | 5 and more      | 0.1            |                  | Graduate degree                    | 8.1            |
| Monthly<br>household | Under 2,000     | 1.2            | Occupation       | Undergraduate/<br>Graduate student | 6.7            |
| income               | 2,000-4,000     | 5.0            |                  | Office worker                      | 37.9           |
| (RMB)                | 4,000-6,000     | 9.6            |                  | Sales/Promotion/<br>Service        | 6.6            |
|                      | 6,000-8,000     | 8.2            |                  | Freelancer                         | 7.2            |
|                      | 8,000-10,000    | 16.0           |                  | Production worker                  | 3.6            |
|                      | 10,000-12,500   | 14.9           |                  | Manager                            | 27.8           |
|                      | 12,500-15,000   | 13.9           |                  | Business owner                     | 2.9            |
|                      | 15,000-17,500   | 10.5           |                  | Housewife                          | 1.1            |
|                      | 17,500-20,000   | 7.4            |                  | Government officer                 | r 4.7          |
|                      | 20,000 and over | 13.3           |                  | Unemployed/Other                   | 1.5            |

TABLE 3—DEMOGRAPHIC PROFILE OF THE SURVEY SAMPLE

*Note*: 1) This sample includes all 3,000 survey respondents. 2) Experiences of visiting Korea were limited to the last five years.

According to the quota sampling survey<sup>11</sup> of each type, Type B (Chinese platform user) respondents filled the quota (1,000) first. At the same instance, the number of Type C (Korean platform user) respondents totaled 886, implying that Chinese consumers are more likely to only use Chinese platforms when purchasing Koreans products online rather than using Korean platforms. Moreover, among Type C respondents, 88.7% reported that they also use Chinese platforms. Together, it can be assumed that Chinese consumers' online shopping for Korean products is substantially driven by Chinese platforms.

#### B. Corporate Strategy to Induce an Initial Purchase

This subsection directly looks into the reasons why respondents chose not to buy (Type A) and to buy (Type B and C) Korean products online and establishes a model of the determinants of their purchase decision-making process. In doing so,

<sup>&</sup>lt;sup>11</sup>Unlike random sampling, in quota sampling, respondents are selected according to certain conditions. In this study, Types A, B and C each had a quota of 1,000 respondents, and the survey remained open only until answers are received from 1,000 respondents. As a result, once the type fills the quota and the survey of that specific type closes, there is no means of determining its distribution state in the population, representing a limitation of this sampling method. In recognition of this, I added extra data on responses of other types when one type reached its quota, meaning that I traced the number of respondents in each type during the same survey period such that the distribution state of each type can be assumed to some degree.

a corporate strategy can be developed that draws Chinese consumers' interest and induces the initial purchase of a Korean product.

1. Reasons for Purchases and Non-purchases

Table 4 and Table 5 present the results of the survey of Chinese consumers who have never purchased Korean products online (Type A). Among the Type A respondents, those who have visited a shopping website to buy Korean products – Type A2: interest but no purchase - (86.4%), and those who have never visited a shopping website – Type A1: no interest - (13.6%), are likely to have different reasons with regard to why they did not buy and their future purchase intentions; hence, their answers are given separately in each table. First, 57.4% of those showing "no interest" (Table 4) and 98.5% of those showing "interest but no purchase" (Table 5) answered positively when asked whether they would buy if certain obstacles were removed, highlighting the different possibilities of an expansion of e-commerce exports to new Chinese consumers.

However, regardless of an interest in the online purchase of Korean products, the improvements needed to capture new Chinese consumers do not differ greatly in the two cases. When asked about why they did not have interest in (Type A1) or did not buy (Type A2) Korean products online, nearly half of the respondents reported that they had no knowledge of Korean brands (47.8% in Table 4 and 45.1% in Table 5), implying that a lack of awareness of Korean brands is the largest obstacle to the initial purchase. Other major obstacles preventing the initial online purchase of Korean products include a lack of trust in authenticity (32.4% in Table 4) and concerns over post-purchase services, i.e., exchanges, refunds and after-sales service (henceforth AS) (25.7% in Table 4 and 33.2% in Table 5).

Meanwhile, brand preference, superior quality, and product authenticity are the reasons why Chinese consumers purchased Korean products online among the Type B and Type C respondents (Table 6). Table 7 reports the results from the question about the importance of influential factors when purchasing products

| Anomara  | 26.5<br>AS 25.7       |
|--|-----------------------|
| Answers  | No interest (Type A1) |
| Lack of knowledge of Korean brands                           | 47.8                  |
| Lack of trust concerning the authenticity of Korean products | 32.4                  |
| Poor image of Korea  | 26.5                  |
| Concerns about exchange, refunds, and AS                     | 25.7                  |
| Lack of trust concerning the quality of Korean products      | 16.2                  |
| Will purchase later  | 57.4                  |

TABLE 4—REASONS FOR NOT HAVING CONSIDERED PURCHASING KOREAN PRODUCTS ONLINE IN THE CASE OF "NO INTEREST"

*Note*: 1) Multiple-choice questions (max. three choices) were used; hence, the total may not equal 100. 2) There were more selectable answers in the survey, but the above table lists the five answers with the highest number of responses.

| Answers   | refunds, and AS 33.2<br>formation about products 28.8<br>27.8<br>23.0 |
|---|---|
| Allsweis  | Interest but no purchase (Type A2)                                    |
| Lack of knowledge of Korean brands                    | 45.1  |
| Concerns about exchanges, refunds, and AS             | 33.2  |
| Insufficient or inaccurate information about products | 28.8  |
| High shipping costs                                   | 27.8  |
| High product price                                    | 23.0  |
| Will purchase later                                   | 98.5  |

#### TABLE 5—REASONS FOR NOT HAVING PURCHASED KOREAN PRODUCTS ONLINE IN THE CASE OF "INTEREST BUT NO PURCHASE"

*Note*: 1) Multiple-choice questions (max. three choices) were used; hence, the total may not equal 100. 2) There were more selectable answers in the survey, but the above table lists the five answers with the highest number of responses.

|  | Proportion (%)                    |                                  |  |  |
|--|-----------------------------------|----------------------------------|--|--|
| Answers                                      | Chinese platform user<br>(Type B) | Korean platform user<br>(Type C) |  |  |
| Preference for Korean brands                 | 42.0                              | 51.2                             |  |  |
| Superior quality of Korean products          | 35.7                              | 39.5                             |  |  |
| Authenticity of products                     | 34.9                              | 37.7                             |  |  |
| Less expensive than similar Chinese products | 22.1                              | 27.9                             |  |  |
| Lack of product availability in China        | 27.7                              | 25.6                             |  |  |

| TABLE 6— REASONS FOR | PUDCHASING KODEAN  | PRODUCTS ONLINE  |
|----------------------|--------------------|------------------|
| TABLE 0 KEASONS FOR  | I UKUHASINU KUKEAN | I KODUCIS ONLINE |

*Note*: 1) Multiple-choice questions (max. three choices) were used; hence, the total may not equal 100. 2) There were more selectable answers in the survey, but the above table lists the five answers with the highest number of responses.

| Influencing factors                | No purchase<br>(Type A) | Chinese<br>platform user<br>(Type B) | Korean<br>platform user<br>(Type C) |
|------------------------------------|-------------------------|--------------------------------------|-------------------------------------|
| Product quality                    | 4.657                   | 4.735                                | 4.604                               |
| Authenticity                       | 4.613                   | 4.723                                | 4.571                               |
| Post-purchase services             | 4.224                   | 4.270                                | 4.208                               |
| Platform awareness and credibility | 4.155                   | 4.173                                | 4.157                               |
| User reviews & comments            | 4.148                   | 4.137                                | 4.118                               |
| Product brand                      | 4.071                   | 4.126                                | 4.194                               |
| Platform convenience               | 4.003                   | 3.987                                | 4.023                               |
| Product price                      | 3.961                   | 3.906                                | 3.935                               |
| Product design                     | 3.827                   | 3.732                                | 3.949                               |
| Product variety                    | 3.790                   | 3.699                                | 3.900                               |
| Sales rank                         | 3.542                   | 3.579                                | 3.764                               |
| Advertisement                      | 3.141                   | 3.116                                | 3.474                               |

TABLE 7— DIFFERENCES IN THE IMPORTANCE OF FACTORS INFLUENCING ONLINE PURCHASES

*Note*: 1) The importance of influential factors was measured using a Likert scale (1 for not important at all - 5 for very important). 2) There were more influential factors included in the survey, but the above table lists only those with an average importance value of four or more or those used in the estimation in Table 8.

online,  $^{12}$  and respondents, regardless of consumer type – i.e., regardless of the online purchase experience of Korean products or the platform type used, reported that product quality, authenticity and post-purchase services were the most important factors, in line with the results given in Tables 4-6. Moreover, Chinese consumers place a high value on user reviews and brands regarding products and awareness, credibility and convenience regarding platforms.

#### 2. Model Analysis of the Determinants of the Decision to Purchase

Here, the model is analyzed with regard to the determinants of online purchase decisions by Chinese consumers of Korean products and the platform choice based on the survey results. Table 8 reports the estimated results from the multinomial logit model used here to examine how demographic characteristics and online purchase-influencing factors affect the decision to purchase. The dependent variable is a categorical variable that is either 'not purchasing Korean products online (but purchasing other foreign products online)', 'purchasing Korean products via Chinese platforms' and 'purchasing Korean products via Korean platforms', and the base outcome is set to be 'not purchasing Korean products online.'

First, Model (1) in Table 8 indicates the estimation using the variables pertaining to the importance of purchasing factors only, excluding demographic variables. The results show that the more price-sensitive Chinese consumers are, the less likely they are to purchase Korean products online (note that the coefficients for product price on both Chinese and Korean platforms are significantly negative), while the more they care about sales rank, the more likely they are to purchase Korean products online (see that the coefficients for sales rank on both Chinese and Korean platforms are significantly positive). Moreover, as authenticity is considered as more important, they are more likely to choose Chinese platforms and less likely to choose Korean platforms. Furthermore, the probability of using Korean platforms increases when the brand and advertisements are seen as more important and when user reviews and comments are seen as less important.

The results reported in Table 8 can show in which areas each platform is relatively strong to induce initial purchases from Chinese consumers, at least indirectly.<sup>13</sup> If Korean platforms have a positive (resp. negative) coefficient of the importance of a specific purchasing factor, it can be said that the platform has strength (resp. weakness) for that factor.<sup>14</sup> According to this interpretation, Korean products are not competitive in the eyes of Chinese consumers in terms of product price because the estimation results show that price-sensitive consumers are less

<sup>&</sup>lt;sup>12</sup>Measured using a Likert scale (1 for not important at all - 5 for very important). Refer to Kim (2015) for further details.

<sup>&</sup>lt;sup>13</sup>Ideally, it would be easier to interpret the results if I an economic analysis was conducted using variables for platform characteristics and the average characteristics of products and consumers on each platform as independent variables. However, due to limitations in the current data, it was not feasible to conduct such an analysis.

<sup>&</sup>lt;sup>14</sup>This is due to the selection effect. In an extreme case where a consumer values only one certain purchasing factor, if he has chosen a product among many options, the selected product should then be superior to the others for that purchasing factor. The same interpretation can be applied to more general cases in which consumers consider multiple purchasing factors simultaneously.

| ci i     | <b>X</b> 7 · 11         | Mo           | odel (1) |     | Mo       | odel (2) |     | Мо       | Model (3) |     |  |
|----------|-------------------------|--------------|----------|-----|----------|----------|-----|----------|-----------|-----|--|
| Choice   | Variables               | Estimate     | S.F      | Ξ.  | Estimate | S.E      | Ξ.  | Estimate | S.E       | Ξ.  |  |
|          | (Demographics)          |              |          |     |          |          |     |          |           |     |  |
|          | Dummy for being m       | arried       |          |     | -0.046   | 0.116    |     | -0.043   | 0.115     |     |  |
|          | Number of preschool     | ol children  |          |     | -0.172   | 0.090    | *   | -0.183   | 0.090     | **  |  |
|          | Education               |              |          |     | -0.185   | 0.078    | **  | -0.190   | 0.078     | **  |  |
|          | Income                  |              |          |     | -0.021   | 0.021    |     | -0.025   | 0.021     |     |  |
|          | Dummy for visiting      | Korea        |          |     | -0.003   | 0.110    |     | 0.167    | 0.107     |     |  |
|          | Dummy for offline p     | ourchase     |          |     | 0.987    | 0.117    | *** |          |           |     |  |
|          | Korean video viewin     | ng frequency |          |     | 0.135    | 0.025    | *** | 0.177    | 0.024     | *** |  |
|          | Dummy for staying       | in Korea     |          |     | -0.170   | 0.135    |     | -0.114   | 0.135     |     |  |
| Chinese  | (Importance of purc     | hasing facto | rs)      |     |          |          |     |          |           |     |  |
| platform | Product price           | -0.129       | 0.064    | **  | -0.069   | 0.067    |     | -0.097   | 0.066     |     |  |
|          | Brand                   | 0.063        | 0.071    |     | 0.018    | 0.076    |     | 0.030    | 0.074     |     |  |
|          | Authenticity            | 0.405        | 0.091    | *** | 0.352    | 0.096    | *** | 0.381    | 0.094     | *** |  |
|          | Product Design          | -0.193       | 0.069    | *** | -0.211   | 0.072    | *** | -0.202   | 0.071     | *** |  |
|          | User reviews & comments | -0.081       | 0.072    |     | -0.112   | 0.074    |     | -0.078   | 0.073     |     |  |
|          | Sales rank              | 0.115        | 0.065    | *   | 0.122    | 0.068    | *   | 0.106    | 0.067     |     |  |
|          | Advertisement           | 0.040        | 0.062    |     | 0.026    | 0.066    |     | 0.025    | 0.065     |     |  |
|          | Product variety         | -0.166       | 0.063    | *** | -0.198   | 0.067    | *** | -0.186   | 0.065     | *** |  |
|          | (Constant)              | -0.489       | 0.474    |     | -0.862   | 0.549    |     | -0.718   | 0.538     |     |  |
|          | (Demographics)          |              |          |     |          |          |     |          |           |     |  |
|          | Dummy for being m       | arried       |          |     | -0.092   | 0.126    |     | -0.084   | 0.124     |     |  |
|          | Number of preschool     | ol children  |          |     | 0.028    | 0.091    |     | 0.025    | 0.091     |     |  |
|          | Education               |              |          |     | -0.141   | 0.085    | *   | -0.145   | 0.085     | *   |  |
|          | Income                  |              |          |     | 0.018    | 0.023    |     | 0.015    | 0.023     |     |  |
|          | Dummy for visiting      | Korea        |          |     | 1.287    | 0.130    | *** | 1.521    | 0.127     | *** |  |
|          | Dummy for offline p     | ourchase     |          |     | 1.435    | 0.156    | *** |          |           |     |  |
|          | Korean video viewin     |              |          |     | 0.129    | 0.029    | *** | 0.177    | 0.028     | *** |  |
|          | Dummy for staying       | in Korea     |          |     | 0.441    | 0.124    | *** | 0.517    | 0.122     | *** |  |
| Korean   | (Importance of purc     | hasing facto | rs)      |     |          |          |     |          |           |     |  |
| platform | Product price           | -0.116       | 0.067    | *   | 0.017    | 0.073    |     | -0.017   | 0.072     |     |  |
|          | Brand                   | 0.193        | 0.076    | **  | 0.080    | 0.085    |     | 0.094    | 0.082     |     |  |
|          | Authenticity            | -0.148       | 0.082    | *   | -0.121   | 0.091    |     | -0.100   | 0.087     |     |  |
|          | Product Design          | 0.063        | 0.072    |     | -0.095   | 0.079    |     | -0.075   | 0.078     |     |  |
|          | User reviews & comments | -0.267       | 0.074    | *** | -0.227   | 0.084    | *** | -0.181   | 0.081     | **  |  |
|          | Sales rank              | 0.229        | 0.068    | *** | 0.190    | 0.074    | *** | 0.175    | 0.073     | **  |  |
|          | Advertisement           | 0.408        | 0.067    | *** | 0.291    | 0.074    | *** | 0.290    | 0.071     | *** |  |
|          | Product variety         | -0.026       | 0.067    |     | -0.122   | 0.074    | *   | -0.116   | 0.072     |     |  |

TABLE 8- ESTIMATION RESULTS OF ONLINE PURCHASE DECISIONS FOR KOREAN PRODUCTS

*Note*: 1) The sample includes all 3,000 survey respondents (1,000 with no experience of buying Korean products online, 1,000 Chinese platform users, and 1,000 Korean platform users). 2) Results of the multinomial logit model with the base outcome set to 'not purchasing Korean products online'. 3) \*\*\*, \*\* and \* denote significance levels of 1%, 5% and 10%, respectively.

\*\*

0.452

-0.886

-2.501

\*\*\*

0.574

-2.077

0.549

\*\*\*

(Constant)

likely to purchase Korean products online. Likewise, it can be interpreted that Korean platforms are strong in acquiring products of brands well known to Chinese consumers but weak in user reviews and comments. Specifically, these results present the possibility that Chinese consumers may trust (and choose) Chinese platforms more than Korean platforms in terms of their ability to provide authentic goods.

Models (2) and (3) include demographic variables in addition to purchasing factors. Model (2) includes a dummy variable for offline purchases, i.e., whether the respondents have bought Korean goods offline in China, and the estimated coefficient is statistically significant and positive. However, because its causality is not clear and thus endogeneity may be present, Model (3) was finally selected. According to the results, the frequency of watching Korean videos was positively correlated with the probability of choosing each platform. The marginal effects, calculated using the estimated results, can be interpreted to mean that a nearly twofold increase in frequency equals a 4%p increase in the likelihood of buying Korean products online (a 2%p increase in purchase probability via the Chinese and Korean platforms, respectively).<sup>15</sup> Of course, the tendency to watch Korean videos is not completely free from endogeneity issues, but this implies that the Korean Wave may actually be influential with regard to the online purchase of Korean products.

In addition, the decision as to whether to use Korean platforms to buy Korean products is positively and significantly correlated with the user's experience of visiting or staying in Korea. Likewise, the calculated marginal effect shows that when users have been to Korea, they are 27%p (visit) and 11%p (stay) more likely to buy Korean products via Korean platforms. This implies that Korean platforms should focus their marketing efforts on Chinese tourists during their visits to Korea. Among the variables pertaining to the importance of purchasing factors, product price and brand lose significance after controlling for demographic characteristics. When put together, to attract new Chinese language support for user reviews and comments and verification system for product authenticity.

## C. Corporate Strategy to Promote Repurchases

While the above subsection deals with corporate strategy from the perspective of attracting new consumers (customer conversion), this subsection explores the retention of existing consumers (customer retention). I compare Chinese consumers' satisfaction levels with the buying of Korean products via Chinese and Korean platforms and then conduct a model analysis of the influence of the satisfaction level on their intent to repurchase.

<sup>&</sup>lt;sup>15</sup>Strictly speaking, it is the marginal effect of a one-unit increase in the variable for the frequency of viewing a Korean video. This variable is a categorical variable defined by '1=Never watched,' '2=Less than once a year,'..., '9=Once every 2-3 days' and '10=More than once a day.' A one-unit increase in this variable is equivalent to an increase of 1.7-2.8 times in the actual viewing frequency.

#### 1. Satisfaction and Repurchase Intention

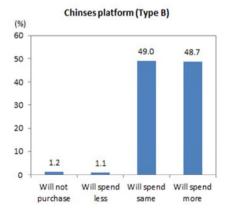
Table 9 compares how satisfied Chinese consumers were after having used either a Chinese or a Korean platform to purchase Korean products. Chinese platform users (Type B) showed the highest level of satisfaction in the order of payment convenience, product quality, platform convenience, the speed and safety of delivery, and product variety, while Korean platform users (Type C) showed the highest level of satisfaction in the order of product quality, product variety, payment convenience, product design, accuracy and sufficiency of product information. When the two platform types are compared, Chinese platforms exhibited a higher satisfaction level in the areas of payment and platform convenience, while Korean platforms exhibited a higher satisfaction level for the product characteristics of price, quality, and design and for the platform characteristics of accuracy/sufficiency of information and product variety. Korean platforms also showed a higher overall level of satisfaction.

Next, Figure 4 presents the results of a survey of Chinese consumers who have

| Variables                                       | Chinese platform user<br>(Type B) | Korean platform user<br>(Type C) |
|---|-----------------------------------|----------------------------------|
| Overall   | 4.102                             | 4.197                            |
| Payment convenience                             | 4.213                             | 4.068                            |
| Product quality                                 | 4.081                             | 4.249                            |
| Platform convenience                            | 4.071                             | 4.015                            |
| Speed and safety of delivery                    | 4.042                             | 4.028                            |
| Product variety                                 | 4.022                             | 4.088                            |
| Accuracy and sufficiency of product information | 3.948                             | 4.050                            |
| Product price                                   | 3.850                             | 4.007                            |
| Product design                                  | 3.821                             | 4.051                            |

| TABLE 9- | - DIFFERENCES | IN SATISFACTION | LEVELS BY ITEM |
|----------|---------------|-----------------|----------------|
|----------|---------------|-----------------|----------------|

*Note*: 1) Measured using a Likert scale (1 for very unsatisfied - 5 for very satisfied). 2) There were more items included in the survey, but the above table lists only those with a satisfaction level of 4 or over.



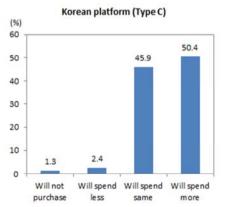


FIGURE 4. INTENT TO REPURCHASE AND INCREASE SPENDING

purchased Korean products online when asked about repurchase intentions. Surprisingly, nearly 99% answered positively regardless of which platform they used, and most intended to maintain or increase their amounts of purchases.

## 2. Model Analysis of the Determinants of Repurchase Intention

Preceding studies (see, e.g., Kim *et al.*, 2009) have found that satisfaction with previous purchase experiences significantly affects intent to repurchase in ecommerce. As such, this study conducts a model analysis to determine if satisfaction affects intent to repurchase for Chinese consumers' online purchases of Korean products as well and of the factors that determine the overall satisfaction level in an effort to suggest effective corporate strategies on how to retain existing consumers. The estimation results of how the satisfaction level with online purchases of Korean products influences repurchase intentions are reported in Table 10. The dependent variable is a ordinal variable that has a value of 1 to 4, as follows: 1=Will not repurchase, 2=Will spend less, 3=Will spend the same amount, and 4=Will spend more, and ordered logit models are run separately for Chinese platform users (Type B) and Korean platform users (Type C).

First, Model (1) in Table 10 presents the estimation results for intended future purchases using all satisfaction levels by item as well as the overall level, analyzed separately for Chinese and Korean platform users. The overall level of satisfaction has a significantly positive influence on future expected spending on both platforms. On the other hand, satisfaction levels for each item do not have a significant effect, except for platform convenience on Chinese platforms, and product quality, accuracy/sufficiency of product information, and payment convenience on Korean platforms. The overall satisfaction level should be determined as a result of aggregating each item score such that detailed satisfaction levels by item do not appear to provide additional information in explaining repurchase intent once the overall satisfaction level is included in the model.

Hence, Models (2) and (3) in Table 10 do not include item-specific variables, only including the overall score along with the demographic variables. Demographic variables were added to the model for expected future spending because the evaluation criteria for satisfaction may differ according to demographics, and these variables may represent differences in the purchased products to some degree. Model (2) presents the results when using all demographic characteristics except for the offline purchase dummy (excluded due to the endogeneity issue, as in Table 8), and the frequency of viewing Korean contents is estimated to be the only significant predictor on both platforms among variables for experiences related to Korea. Intuitively, consumers' experiences of visiting or staying in Korea may affect their initial purchases of Korean products, but their repurchases may be affected more by previous buying experiences or their continued viewing of Korean videos.

Model (3) was finally selected, which only includes the frequency of viewing Korean contents. The analysis results show that overall satisfaction with previous purchases still has a positive influence on consumers' intentions to spend more on future purchases, proving the hypothesis, as in prior studies. It was also found that frequent viewers of Korean videos are more willing to repurchase or spend more,

| Maulaat             | Variables                                       | Model (1) |       |     |  |
|---------------------|---|-----------|-------|-----|--|
| Market              | variables                                       | Estimate  | S.E.  |     |  |
|                     | (Satisfaction level by item)                    |           |       |     |  |
|                     | Overall   | 0.487     | 0.166 | *** |  |
|                     | Product price                                   | -0.005    | 0.126 |     |  |
|                     | Delivery cost                                   | 0.027     | 0.114 |     |  |
|                     | Speed and safety of delivery                    | -0.050    | 0.115 |     |  |
|                     | Product quality                                 | 0.032     | 0.137 |     |  |
|                     | Product design                                  | 0.051     | 0.113 |     |  |
| <b>G1</b> :         | Accuracy and sufficiency of product information | -0.100    | 0.117 |     |  |
| Chinese<br>platform | Product variety                                 | 0.162     | 0.109 |     |  |
| plationin           | Payment convenience                             | 0.017     | 0.118 |     |  |
|                     | Customs procedure                               | -0.153    | 0.103 |     |  |
|                     | Platform convenience                            | 0.242     | 0.122 | **  |  |
|                     | Additional service                              | 0.106     | 0.103 |     |  |
|                     | Post-purchase services                          | 0.101     | 0.107 |     |  |
|                     | Cutoff 1  | -0.775    | 0.766 | -   |  |
|                     | Cutoff 2  | -0.109    | 0.744 | -   |  |
|                     | Cutoff 3  | 3.777     | 0.722 | -   |  |
|                     | (Satisfaction level by item)                    |           |       |     |  |
|                     | Overall   | 0.254     | 0.128 | **  |  |
|                     | Product price                                   | -0.013    | 0.117 |     |  |
|                     | Delivery cost                                   | -0.082    | 0.104 |     |  |
|                     | Speed and safety of delivery                    | 0.115     | 0.107 |     |  |
|                     | Product quality                                 | 0.271     | 0.118 | **  |  |
|                     | Product design                                  | 0.060     | 0.111 |     |  |
|                     | Accuracy and sufficiency of product information | 0.181     | 0.110 | *   |  |
| Korean              | Chinese language support                        | -0.060    | 0.111 |     |  |
| platform            | Product variety                                 | 0.066     | 0.119 |     |  |
|                     | Payment convenience                             | -0.195    | 0.101 | *   |  |
|                     | Customs procedure                               | 0.149     | 0.123 |     |  |
|                     | Platform convenience                            | 0.058     | 0.104 |     |  |
|                     | Additional service                              | 0.100     | 0.114 |     |  |
|                     | Post-purchase services                          | 0.143     | 0.094 |     |  |
|                     | Cutoff 1  | -0.111    | 0.722 | -   |  |
|                     | Cutoff 2  | 0.970     | 0.630 | -   |  |
|                     | Cutoff 3  | 4.358     | 0.635 | -   |  |

TABLE 10— ESTIMATION RESULTS OF EXPECTED SPENDING ON KOREAN PRODUCTS IN FUTURE ONLINE PURCHASES

*Note*: 1) The estimation was conducted separately for the 1,000 Chinese platform users (Type B) and the 1,000 Korean platform users (Type C). 2) Results of the ordered logit model 3) \*\*\*, \*\* and \* denote significance levels of 1%, 5% and 10%, respectively.

leading to the conclusion that the Korean Wave may have a positive impact on repurchases as well as initial purchases. According to the estimates, when consumers approximately double their viewing frequency of Korean videos, the probabilities of repurchasing and spending more increase by 0.4%p and 7%p respectively, for each platform. Again, these findings are not completely free from the endogeneity problem.

This leads to the question of what affects Chinese consumers' overall satisfaction

| Montrot             | Vorichlas                      | Model (2) |       |     | Model (3) |       |     |
|---------------------|--------------------------------|-----------|-------|-----|-----------|-------|-----|
| Market              | Variables                      | Estimate  | S.E.  |     | Estimate  | S.E.  |     |
|                     | (Demographics)                 |           |       |     |           |       |     |
|                     | Dummy for being married        | 0.265     | 0.166 |     | 0.282     | 0.165 | *   |
|                     | Number of preschool children   | -0.002    | 0.141 |     | 0.013     | 0.139 |     |
|                     | Education                      | -0.028    | 0.101 |     | -0.006    | 0.101 |     |
|                     | Income                         | 0.004     | 0.030 |     | 0.025     | 0.028 |     |
|                     | Dummy for visiting Korea       | 0.350     | 0.153 | **  |           |       |     |
| Chinese<br>platform | Korean video viewing frequency | 0.311     | 0.042 | *** | 0.325     | 0.041 | *** |
| plationin           | Dummy for staying in Korea     | 0.072     | 0.198 |     |           |       |     |
|                     | (Satisfaction level)           |           |       |     |           |       |     |
|                     | Overall                        | 0.572     | 0.143 | *** | 0.602     | 0.141 | *** |
|                     | Cutoff 1                       | 0.264     | 0.783 | -   | 0.534     | 0.771 | -   |
|                     | Cutoff 2                       | 0.943     | 0.760 | -   | 1.214     | 0.746 | -   |
|                     | Cutoff 3                       | 5.051     | 0.754 | -   | 5.309     | 0.744 | -   |
|                     | (Demographics)                 |           |       |     |           |       |     |
|                     | Dummy for being married        | 0.646     | 0.165 | *** | 0.639     | 0.164 | *** |
|                     | Number of preschool children   | -0.119    | 0.118 |     | -0.129    | 0.118 |     |
|                     | Education                      | 0.169     | 0.120 |     | 0.165     | 0.121 |     |
|                     | Income                         | 0.103     | 0.031 | *** | 0.101     | 0.031 | *** |
|                     | Dummy for visiting Korea       | -0.121    | 0.217 |     |           |       |     |
| Korean<br>platform  | Korean video viewing frequency | 0.334     | 0.045 | *** | 0.324     | 0.045 | *** |
|                     | Dummy for staying in Korea     | -0.187    | 0.138 |     |           |       |     |
|                     | (Satisfaction level)           |           |       |     |           |       |     |
|                     | Overall                        | 0.375     | 0.104 | *** | 0.375     | 0.104 | *** |
|                     | Cutoff 1                       | 0.962     | 0.684 | -   | 1.051     | 0.678 | -   |
|                     | Cutoff 2                       | 2.063     | 0.621 | -   | 2.152     | 0.615 | -   |
|                     | Cutoff 3                       | 5.600     | 0.640 | -   | 5.681     | 0.636 | -   |

TABLE 10 (CONTINUED)

Note: 1) The estimation was conducted separately for the 1,000 Chinese platform users (Type B) and the 1,000 Korean platform users (Type C). 2) Results of the ordered logit model. 3) \*\*\*, \*\* and \* denote significance levels of 1%, 5% and 10%, respectively.

|   | Chinese platform (Type B) |       |      | Korean platform (Type C) |       |     |
|---|---------------------------|-------|------|--------------------------|-------|-----|
| Variables                                       | Estimate                  |       | S.E. | Estimate                 | S.E.  |     |
| Product quality                                 | 0.213                     | 0.026 | ***  | 0.127                    | 0.029 | *** |
| Product price                                   | 0.160                     | 0.025 | ***  | 0.111                    | 0.028 | *** |
| Accuracy and sufficiency of product information | 0.064                     | 0.025 | **   | 0.088                    | 0.028 | *** |
| Post-purchase services                          | 0.048                     | 0.022 | **   | 0.036                    | 0.029 |     |
| Speed and safety of delivery                    | 0.045                     | 0.024 | *    | 0.027                    | 0.027 |     |
| Payment convenience                             | 0.043                     | 0.024 | *    | 0.056                    | 0.030 | *   |
| Product design                                  | 0.040                     | 0.025 |      | 0.049                    | 0.028 | *   |
| Delivery cost                                   | 0.039                     | 0.023 | *    | 0.057                    | 0.026 | **  |
| Platform convenience                            | 0.027                     | 0.025 |      | 0.061                    | 0.030 | **  |
| Customs procedure                               | 0.026                     | 0.022 |      | 0.085                    | 0.026 | *** |

TABLE 11-ANALYSIS OF CHINESE CONSUMERS' OVERALL SATISFACTION LEVELS WITH ONLINE PURCHASE OF KOREAN PRODUCTS

Note: 1) Results of a normal regression analysis of overall satisfaction on its sub-variables are presented. Separate estimations for Chinese platform users (Type B) and Korean platform users (Type C) were made. 2) \*\*\*, \*\* and \* denote significance levels of 1%, 5% and 10%, respectively.

| Variables                | Chinese platform (Type l | B) Korean platform (Type C) |
|--------------------------|--------------------------|-----------------------------|
| variables                | Estimate S.E.            | Estimate S.E.               |
| Additional service       | 0.002 0.021              | 0.005 0.028                 |
| Product variety          | -0.011 0.023             | 0.078 0.028 ***             |
| Chinese language support |                          | 0.053 0.025 **              |
| Adjusted R <sup>2</sup>  | 0.308                    | 0.354                       |

TABLE 11 (CONTINUED)

*Note*: 1) Results of a normal regression analysis of overall satisfaction on its sub-variables are presented. Separate estimations for Chinese platform users (Type B) and Korean platform users (Type C) were made. 2) \*\*\*, \*\* and \* denote significance levels of 1%, 5% and 10%, respectively.

most significantly when purchasing Korean products online. Table 11 presents the results from a normal regression analysis of overall satisfaction on its sub-variables (detailed satisfaction levels by item), separately for Chinese and Korean platform users. In both platforms, the answers were product quality and price, fundamental factors of any product. Other than these two factors, information accuracy and sufficiency was also significant, suggesting that sufficient information on products should be made available to Chinese consumers.

## **V. Concluding Remarks**

#### A. Summary of Discussions

Overall, it appears that product quality plays a more significant role than price with regard to Chinese consumers' decision-making on an initial online purchase of Korean products, revealing that to attract more new Chinese consumers, Korean manufacturers should focus on building and marketing a powerful brand image which ensures product quality and authenticity, even if price competitiveness is slightly weakened. Moreover, a system that can guarantee post-purchase services in collaboration with platforms must be established while also taking full advantage of the Korean Wave. Additionally, Korean platforms should focus their marketing efforts on guaranteeing that they are fully embedded in the minds of Chinese tourists visiting Korea.

Product quality and the Korean Wave must also be emphasized, not only to attract more Chinese consumers but also to maintain existing consumers. In addition, product price and information provision, although not as important as product quality, can affect the overall satisfaction level of Chinese consumers; hence, they must not be overlooked.

Generally, e-commerce growth occurs by initially being driven by the expansion of consumers, followed by an increase in purchase frequency and volume levels. Given the fact that Chinese cross-border online shopping is in its infancy, customer conversion should be prioritized over consumer retention. Moreover, 99% of Chinese consumers who purchased Korean products online expressed their intent to repurchase, meaning that once they buy a Korean product, they are very likely to buy again. This also serves to highlight the importance of approaching new consumers.

#### **B.** Policy Suggestions

Although the Korean government has devised various support policies, establishing appropriate statistics on e-commerce exports is of the greatest urgency. The data released by Statistics Korea on e-commerce exports provide information only on e-commerce exports conducted via Korean platforms. This study finds that at present, e-commerce exports via Chinese platforms are considerable and as such, correlating statistics takes precedence. Improvements are possible through collaborations with China Customs to reduce cases of e-commerce export records being excluded from official statistics and providing exporters certain incentives to report simplified export declarations.

Reform of the settlement system<sup>16</sup> has laid the foundation for Chinese consumers to gain better access to Korean platforms; therefore, support should be given to manufacturers in the form of simplified logistics and clearance systems so that they can present competitive products to Chinese consumers. With reference to logistics, where an economy of scale is prevalent, it would be meaningful to consider establishing additional joint logistics centers in China to encourage SME e-commerce exports. Other efforts include the formation of an automated processing system that transfers transaction records to the Korea Customs Service's export reporting system to ease the manufacturing exporters' burden of administrative procedural costs, which could also contribute to improving e-commerce export statistics surveys and their efficiency. Furthermore, consistent efforts must be made to exempt tariffs and import reporting on Korean e-commerce products entering Chinese customs for clearance.

Various policies are currently in place to protect Korean exporters' overseas IPR and to resolve relevant disputes. However, these policies are mostly centered on the protection of Korean companies. As such, there is a need to reflect the perspectives of Chinese consumers, as consumer trust is a vital component in cross-border online shopping as well as in general e-commerce transactions. Moreover, as product authenticity and post-purchase services guarantee are critical in decisionmaking processes of Chinese consumers' decision-making processes, the possibility of developing a government-level system and assessing its effectiveness should be explored. Lastly, it is important to build a consensus with China on consumer issues arising from the growth in cross-border online shopping.

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<sup>16</sup>This is inclusive of the abolition of the mandatory use of authorized certificates for online purchases using credit cards (May 2014), the mitigation of several user identification regulations and the adoption of easy payment services (Dec. 2014), and launch of a non-ActiveX online payment service (Apr. 2015).

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