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# The Effects of County-of-Origin, BrandImage, and Corporate Image Dimensions on Brand Evaluations and Purchase Intentions of Smart Phones of Five Brands: A Comparative Study of China and Korea

Li Mo\*, Shuai Zhai\*\*

## Abstract

**Purpose** - In the academic literature, the researches on a comparative study on purchase behaviors of the consumers from emerging and mature markets remain limited. Therefore, this empirical study is attempted to examine the effects of country of origin (COO), brand image and corporate image on the purchase behavior of Chinese consumers (as from emerging market) and Korean consumers (as from mature market).

**Research Design, data, methodology** - In total, 615 valid questionnaires were collected from the main cities of China and Korea respectively, and a multiple group analysis was conducted to test the hypotheses with SPSS 16.0 and AMOS18.0.

**Results** - Chinese consumers are not influenced by country-of-origin effect, whereas Korean consumers are sensitive to it. Both Chinese and Korean consumers are sensitive to brand image, whereas corporate image does appear to influence Chinese consumers but not Korean consumers. The effects of country-of-origin are not more influential in less developed market (China) than more developed market (Korea).

**Conclusions** - According to the results of this empirical study, the country-of-origin effect does impact Korean consumers but not Chinese consumers' purchase behavior. Therefore, multinational companies are relatively free to make the decision, if Chinese consumers are the marketing targets, when choosing manufacturing sites.

**Keywords** : Country-of-Origin (COO), Brand Image, Corporate Image, Brand Evaluation, Purchase Intention.

**JEL Classifications** : C12, C88, M11, M31.

## 1. Introduction

The fast development of world's smart phone market has changed the face of the whole globe. New research shows that smart phone

sales will enjoy a compound annual growth rate of 28 percent from 2010 to 2020 (RCR Wireless News, 2010). China's smart phone market also witnessed a remarkable growth. China will become the leading country-level market for smart phone shipments in 2012, moving ahead of the current leader, the United States (IDC, 2012). On the other hand, Korea is known for having the world's fastest fixed-line broadband Internet, and its smart phone market was started by the I-Phone's launch in 2009 and expanded at a furious rate. The number of smart phone users reached 26 million in April, 2012 (AP Wire Service, 2012). Therefore, exploring how Chinese consumers and others in emerging Asian markets view products from their home and foreign countries is therefore important (Han, 1988; Wang and Chen, 2004). However, despite the numerous studies on consumers' buying behaviors, there's few focused on a comparative study on Asian consumers' purchase behavior. The research objectives of this empirical study are (a) to examine the effects of country-of-origin (COO), brand image and corporate image on Chinese and Korean consumers' brand evaluation and purchase intention; (b) to explore the relative importance of COO, brand image, and corporate image on Chinese and Korean consumers' perception of products; (c) to compare the effects of COO, brand image, and corporate image on Chinese and Korean consumers' brand evaluation and purchase intention, with Chinese market as less developed market and Korean market as more developed market; (d) to explore whether consumers are more likely to have higher brand evaluation and purchase intention on the products from domestic market.

## 2. Literature Review

### 2.1. Country-of-Origin (COO) and Purchase Intention

Since the mid-1960s, numerous studies have been conducted on Country-of-Origin (COO) (Han, 1989). Papadopoulos (1993) believes that the expression "country-of-origin" defines the COO and the thoughts created by these images in the consumers' minds. Laroche (2005) proposes that COO (Country-of-Origin) is a multi-dimensional construct represented by a three-factor model, reflecting: (1) a cognitive component, including beliefs about the country's level of industrial and technological development; (2) an affective component, namely consumer's emotional response towards people of that coun-

\* First Author, Assistant Professor, Business School, Xi'an International Studies University, Xi'an China, [moli116688@hotmail.com](mailto:moli116688@hotmail.com)

\*\* Corresponding Author, Assistant Professor, Business School, Huzhou Normal University, Huzhou China, [zsonny@aliyun.com](mailto:zsonny@aliyun.com)

try; and (3) a conative (motivational and volitional) components, reflecting consumers' desired level of interaction with that country. In addition, a number of different terms are used in the literature: "country image", "country of origin", "country equity", "made-in-country image" and "product-country-image" (Kleppe, Iversen and Stensaker, 2001). The author has chosen to focus on the concept "country-of-origin (COO)" at the national level in this paper.

Furthermore, Han (1989) indicated that COO perception influences overall evaluations indirectly through beliefs (halo effect) and/or directly (summary effect). On one hand, when consumers are not familiar with the products they intend to buy, they tend to use halo images of a country to evaluate the quality and to form their brand beliefs. In general, a large number of studies have pointed to a systematic bias in favor of products from developed countries such as Germany, USA, Japan, Canada or Australia, while consumers are unfavorable of products from developing countries, such as Indonesia, Vietnam or China (Ahmed and d'Astous, 2007; Wang and Chen, 2004). Thus, consumers always feel that products from highly industrialized countries offer better quality and performance. According to Maheswaran (1994), consumers could be divided into experts and novices, and they differed in the extent to which they use stereotypical information. Experts could either use stereotypical or attribute information, while novices tended to rely more on stereotypical information when they made the purchase decision. Therefore it was found that nationality was a significant source of variation in response. In literature, numerous studies have proved that the effect of COO on purchase behavior varies across nations (Maheswaran and Sternthal, 1990; Sharma et al. 1995; Amine and Shin, 2002; Hsieh, 2004).

## 2.2. Brand Image and Purchase Intention

Keller (1993) defines brand image as perceptions about a brand as reflected by the brand associations held in consumer memory. According to Aaker (1997), the symbolic use of brands is possible because consumers imbue brands with human personality traits. What's more, consumers tend to attach personification to brand, and create user imagery. Brands are always connected with individuals; therefore, brand images are relatively enduring and distinct. COO effects and brand image have always been researched together, as the independent variables of researches. O'Cass and Lim (2002) examined consumer brand associations of the differences in price perceptions, self-image, and brand image for Western and Eastern brands of fashion clothing by young Singaporeans. According to the research results, the preference for brands of a developed economy was more dominant than the preference for brands of domestic brands. Generally speaking, previous studies have revealed that brand image has a significant influence on consumers' perception of the quality of the products and a positive brand image would increase consumers' trust on the products, and thus have higher purchase intentions of that product.

## 2.3. Corporate Image and Purchase Intention

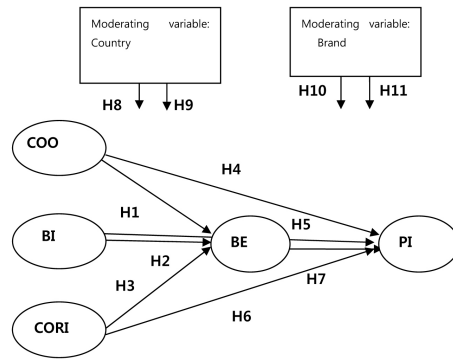
Corporate image is often interchangeable with corporate identity and may be defined as "the impressions of a particular company or [corporation] held by some segment of the public" (Johnson and Zinkhan, 1990). Keller (1993) defined corporate image as the thought of as consumers' memory associations to the corporation as a whole. The relationship between reputation and a sustained competitive advantage is widely acknowledged in the literature (Roberts and Dowling, 2002). Keller and Aaker (1992) indicated that corporate image positively affected product image and enhanced perceptions of a new product positioned on other image dimensions; advertising, and a corporate brand extension could also help to establish corporate images. Gurhan-Canli and Batra (2004) specified and empirically tested the moderating role of perceived risk in the relationship of corporate image and consumers' evaluations with the level of perceived risk as a mediating factor. The findings showed that corporate image associations with innovation and trustworthiness (but not social responsibility) influenced product evaluations more when consumers perceived high (values low) risk in the product purchase. Moreover, their findings extended previous research by identifying perceived risk as a moderator of the effects of corporate image on product evaluations.

## 3. Methodology and Hypotheses

### 3.1. Research Model

Zhou and Hui (2002) proposed an integrative model on the effects of COO and brand name on product evaluation and purchase intention. In their studies, they examined the effects of COO and brand name on electronic products from three countries, with favorable country-of-origin (Japan), less favorable (Mexico), and no country origin mention. Kim (2007) also attempted to investigate how COO and brand image of global restaurant brand affect the customers' purchasing intention in his doctor dissertation. Referring to the previous studies on the effects of COO, brand image, and corporate image on consumers' purchase behavior (Zhou and Hui, 2002; Kim, 2007; Park, 2009), the research model of this paper is designed and shown as below <Figure 1>:

In this model, two moderating variables are added, for a cross-nation study is made to investigate two countries: China and Korea, and a comparison is also made to compare consumers' perception on foreign and domestic brands.



Note: COO: Country-of-Origin  
 BI: Brand Image  
 CORI: Corporate Image  
 BE: Brand Evaluation  
 PI: Purchase Intention

<Figure 1> Research Model Proposed by the Author

## 3.2. Hypotheses

### 3.2.1. COO and Brand Evaluation

COO is one of the most important attributes in product evaluation (Okechuku, 1994). Previous studies have indicated that consumers in many markets are willing to pay a premium for manufactured products from more industrialized countries. COO having a strong effective component exerts a stronger influence on product evaluation than on product beliefs, and COO and product beliefs act simultaneously to influence product evaluations (Laroche Papadopoulos, Heslop and Mourali, 2005). Sufficient evidences have been given on the positive effects of COO on brand evaluation (Zhou and Hui, 2003; Kim, 2007; Han, 2005; Liu and Chang, 2009).

H1. The products with more favorable COO will have higher brand evaluation.

### 3.2.2. Brand Image and Brand Evaluation

Much attention has been devoted to the effects of brand image on consumers' brand preference as well. Salciuviene, Lee and Yu (2007) investigated the relationship between brand image benefits (functional, experiential and symbolic) and brand preference. The results of this study indicated symbolic benefits of the brand played a prominent role in consumers' buying process through brand recognition and recall. Other studies also focused on the positive effects of brand image on brand evaluation (O'Cass and Lim, 2002; Han, 2005; Kim, 2007).

H2. The products with more favorable brand image will have higher brand evaluation.

### 3.2.3. Corporate Image and Brand Evaluation

There are a lot of empirical evidence that establish a positive relationship between firm public image/perception/reputation and its financial and equity market performance (Keller and Aaker, 1992; Suh and Yi, 2006). Moon (2008) attempted to investigate the relationship between the corporate image of a company and consumers' evaluations

on the company's brand. Data were collected from 347 undergraduate students, who were asked to offer their thoughts on two brands for each of 8 large Korean companies. The research findings showed that corporate image did positively affect brand trust, and thus increased consumers' brand evaluations on the products.

H3. The products with more favorable corporate image will have higher brand evaluation.

### 3.2.4. COO and Purchase Intention

Despite the different and inconsistent results on the effects of COO on consumer's purchase behavior, most studies indicated a positive relationship between COO and purchase intention (Han, 1989; Roth and Romeo, 1992; Zhou and Hui, 2003; Wang and Chen, 2004; Ahmed and d'Astous, 2007). Therefore, when consumers have a positive impression on a country, they tend to have a corresponding positive attitude toward the products of this country, and thus have a higher purchase intention (Hong and Wyer, 1989).

H4. Consumers will have higher purchase intention on the products with more favorable COO.

### 3.2.5. Brand Image and Purchase Intention

A lot of studies have revealed that brand image has a significant influence on consumers' perception of the quality of the products, and a positive brand image can increase consumers' trust on the products and thus have higher purchase intentions of that product (Batra and Homer, 2004; Chiang and Jang, 2006; Chang and Liu, 2009; Lim, 2009; Wang and Yang, 2010). Furthermore, COO and brand image sometimes are researched together as the independent variables of researches, and the interactive effects of the two variables on consumers' purchase behavior were examined as well (O' Cass and Lim, 2002; Han, 2005; Kim, 2007; Lim, 2009).

H5. Consumers will have higher purchase intention on the product with more favorable brand image.

### 3.2.6. Corporate Image and Purchase Intention

The relationship between corporate image and a sustained competitive advantage is widely acknowledged in literature (Fombrun, 1996; Roberts and Dowling, 2002). A good corporate image can lead to numerous strategic benefits such as lowering firm costs and attracting more customers (Fombrun, 1996); thus increase profitability. In general, previous studies have revealed the positive effects of corporate image on consumers' purchase intention (Keller and Aaker, 1992; Moon, 2008).

H6. Consumers will have higher purchase intention on the product with more favorable corporate image.

### 3.2.7. Brand Evaluation and Purchase Intention

Higher equity brands generate greater purchase intention consumers have (Cobb-Walgreen et al., 1995). As brand evaluation is one of the representing factors of brand equity, it could be inferred that brand evaluation would be reflected in purchase or usage intention. Other studies also tested the positive relationship between brand evaluation

and purchase intention (Devlin et al., 2002; Bailey and Ball, 2006; Kim, 2007). In general, the more positive the brand evaluation is the higher purchase intentions consumers have on the brand.

H7. Consumers will have higher purchase intention on the products with higher brand evaluation.

3.2.8. COO and Brand Evaluation Considering the Effect of Moderating Variable-Country

Previous studies suggested that the effect of COO on brand evaluation varies across nations (Sharma et al. 1995; Gurhan-Canli and Maheswaran, 2000; Amine & Shin, 2002; Hsieh, 2004). Among various macro factors, the level of market development, which is defined as the availability of international brands, is supposed to exert a certain impact on the relationship between consumers' perceptions of COO and their brand evaluation. In other words, the COO effects are supposed to be stronger in more developed markets (Korea) than in less developed markets (China) because market players tend to put more effort into product differentiations when the level of market development is high (Hsieh, 2004)

H8. The COO effect on brand evaluation is contingent on the level of market development of the country being investigated (The COO effect is stronger on Chinese consumers than Korean consumer in terms of their brand evaluation).

3.2.9. COO and Purchase Intention Considering the Effect of Moderating Variable –Country

Hsieh (2004) indicated that at national level, COO effect seemed to be more significant on consumers'purchase behavior among nations where the availability of international brands is lower. Therefore, the consumers in the more developed market rely more on more complex information rather than just COO; on the contrary, the consumers from less developed markets rely more on COO to make their purchase decisions because less product-specific information is available. In general, previous studies have indicated that COO plays more significant role in terms of consumers'purchase behavior in less developed markets than in more developed market (Maheswaran and Sternthal, 1990; Sharma et al. 1995; Gurhan-CanliandMaheswaran, 2000; Amine and Shin, 2002; Hsieh, 2004)).

H9. The COO effect on purchase intention is contingent on the level of market development of the country being investigated (The COO effect is stronger on Chinese consumers than Korean consumer in terms of their purchase intention).

3.2.10 Consumers'Brand Evaluation on Domestic Products

According to Kaynak and Kara (2002), consumers' product attribute evaluations are always influenced by their national pride and ethnocentrism. Consumer ethnocentrism proposes that consumers prefer domestically-produced products, and it implies that purchasing imported products is wrong and unpatriotic. Thus, consumers with high level of consumer ethnocentrism are more likely affected by their nationalistic emotions when evaluating foreign products (Sharma, Shimp, and Shin, 1995). Evidences suggest that consumers tend to have positive attitudes and purchase intentions towards brands from their home country because of ethnocentric tendencies (Sharma, 1995; Hsieh,

2004; Shankarmahesh, 2006).

H10. Consumers are more likely to have higher brand evaluation on domestic products. (Korean consumers will have a higher brand evaluation on Korean smart phones.)

3.2.11. Consumers'Purchase Intention on Domestic Products

Consumers'national pride and ethnocentrism also affected their purchase intention. Shankarmahesh's (2006) review of the literature on ethnocentrism supports the view as he identified that previous research has found that ethnocentrism affects consumers' attitudes toward foreign products'purchase intentions, consumers with high level of consumer ethnocentrism are more likely affected by their nationalistic emotions when evaluating foreign products (Sharma, Shimp, and Shin, 1995).

H11. Consumers are more likely to have higher purchase intention on domestic products. (Korean consumers will have a higher purchase intention on Korean smart phones.)

4. Dada Collection and Analysis Results

This study is an empirical study focusing on Chinese and Korean consumers' purchase intentions on smart phone of five brands from five countries. The collection lasted for six months from February of 2012 to July of 2012. For Chinese consumers, in order to obtain larger samplings, data was collected from the respondents in Beijing, Shanghai, Chengdu, Chongqing, Xi'an, Hangzhou, Quanzhou by a survey on the website <http://www.sojump.com/jq/1224012.aspx>, and from the undergraduates and graduates of universities of these cities. For the Korean consumers, surveys were mainly done in Seoul, Daegu, Daejon in Korea. Firstly, Korean data were collected by using the mall intercept technique, which was commonly used by market researchers. Secondly, considering the main consumers and pursuers of smart phones are young people, data were also collected among the undergraduates of Daegu and Woosong universities with the help the professors of these two universities. The collecting result is shown in the following <Table 1>.

<Table 1> Data Collection

Chinese Consumers			Korean Consumers			Time
forms	cities	number	forms	cities	number	
Surveys made through QQ, and the help of friends, relatives, former classmates, and surveys made at the universities	Beijing, Shanghai, Hangzhou, Xi'an, Chengdu, Chongqing, Quanzhou, etc.	300	Surveys made using mall intercept technique	Seoul, Daegu, Daejon	100	Feb., 2012 —Jul., 2012
Survey made on the Internet	Different cities in China	200	Surveys made among the undergraduat	Daegu, Daejon	200	Feb.,2012 —Jun., 2012

			es in Daegu university and Woosong university			
Total number		500			300	
Valid number		360			255	

4.1. Demographic Characteristics

The demographic characteristics of Chinese and Korean consumers are listed in the <Table 2>. The socio-demographic data was the first part of the questionnaire, including gender, age, marital status, educational level, hometown, occupation, and monthly salary. The questions in the questionnaires of Chinese and Korean consumers are completely consistent in order to examine the differences and similarities between the consumers of two countries with Amos18.0.

As for the Chinese consumers, the male consumers account for 50.6%, and the female 49.4% of the total. The consumers mainly consist of people aged from -20 to 50, accounting for 98.6% of the total. As for the educational level, the high school diploma accounts for 4.2% (15), undergraduate college 29.2% (105), college diploma 32.5% (117), and graduate or more 34.2% (123). Data from consumers of Beijing (11.4%), Guangzhou (.3%), Xi'an (32.5%), Chengdu (7.5%), Chongqing (11.1%), Hangzhou (16.1%), Quanzhou (12.2%), and other places of China have been collected. Furthermore, consumers are from several walks of life, with students (32.8%), public servants (11.1%), engineers (8.6%), company employees (23.1%), service employees (9.4%), self-employed (0.3%), professors (14.2%), and others.

<Table 2> Demographic Characteristics (n=615, Chinese consumers=360, Korean consumers=255)

Chinese consumers				Korean consumers			
	Items	number	%	Items	number	%	
Gender	Male	182	50.6	Male	105	41.2	
	female	178	49.4	female	150	58.8	
Age	-20	52	14.4	-20	43	16.9	
	20-29	119	33.1	20-29	85	33.3	
	30-39	120	33.3	30-39	61	23.9	
	40-49	64	17.8	40-49	48	18.8	
	50-59	5	1.4	50-59	18	6.7	
				60-69	1	.4	
Marital status	Single	203	56.4	Single	133	52.2	
	married	155	43.1	married	122	47.8	
	Others	2	.6	others	0	.0	
Education Level	High school or less	0	.0	High school or less	3	1.2	
	High school diploma	15	4.2	High school diploma	4	1.6	
	Under graduate college	105	29.2	Under graduate college	117	45.9	

(unit: %)

	College diploma	117	32.5	Collegediploma	79	31.0
	Graduate or more	123	34.2	Graduate or more	52	20.4
Occupation	student	118	32.8	student	127	49.8
	public servant	40	11.1	Engineer	28	11.0
	engineer	31	8.6	company employee	49	19.2
	company employee	83	23.1	Service employee	21	8.2
	Service employee	34	9.4	Self-employed	1	.4
	Self-employed	1	.3	professor	21	8.2
	professor	51	14.2	others	8	3.1
	others	2	.6			
Monthly salary	1000 RMB or less	107	29.7	100 million Korean Won or less	122	47.8
	1000 ~ 2000RMB	14	3.9	200 million Korean Won or less	29	11.4
	2000 ~ 3000RMB	25	6.9	300 million Korean Won or less	66	25.9
	3000 ~ 4000RMB	59	16.4	400 million Korean Won or less	25	9.8
	4000 ~ 5000RMB	88	24.4	500 million Korean Won or less	12	4.7
	5000RMB or more	67	18.6	500 million Korean Won or more	1	.4

The Korean male consumers account for 41.2%, while the female account 58.8% of the total. The Korean consumers are mainly composed of people aged from -20 to 50, accounting for 99.6%. As for the educational level, the high school diploma accounts for 1.6% (4), undergraduate college 45.9% (117), college diploma 31% (79), and graduate or more 20.4% (52). Furthermore, consumers are students (49.8%), engineers (11.0%), company employees (19.2%), service employees (8.2%), self-employed (0.4%), professors (8.2%), and others.

4.2. CFA

In this paper, the consumers of China and Korea are involved, so the confirmatory factor analysis (CFA) was carried out with the multiple group analysis by using Amos 18.0 to test the cross validation between the Chinese and Korean consumers. The analysis results are shown in the <Table 3>:

<Table3> Model Fit Summary (n=615)

Model	X2	df	GFI	CFI	RMSEA	TLI	Δx2	Sig
(Model1) Unconstrained	97.083	16	.955	.944	.029	.853		
(Model 2) Measurement weights	97.229	18	.955	.945	.029	.872	.146 (2)	Not sig.
(Model 4) Structural covariances	167.226	33	.922	.907	.050	.882	70.143 (17)	Sig.
(Model 5) Measurement residuals	196.441	36	.912	.889	.057	.870	99.358 (20)	Sig.

Based on the  $\chi^2$  table, if  $p=.05$ ,  $df=2$ ,  $\chi^2=5.99$ ; however, the difference between Model 1 and model 2,  $\Delta\chi^2= 0.146$ , which is much smaller than 5.99, so model 1 and model 2 are not significantly different statistically. Therefore, this result shows that the Chinese consumers and Korean consumers understood every construct of questionnaires in the same way. As for the model 4 and model 5, the results are significant statistically, which means there are differences among the Chinese model and Korean model, so causal analysis is needed to be done to make further analysis, which is to be in the next part. Furthermore, the GFI of all models are above 0.9, CFI>0.9, RMSEA<0.8, and TLI>0.8; therefore, Chinese model and Korean model are equivalent statistically.

### 4.3. Research Model and Hypotheses Testing

The hypotheses of this paper have been tested with Amos 18.0 and multiple regression analysis (SEM). The results of hypotheses 1 to 7 are indicated in <Table 4> and <Table 5>, as shown below:

<Table 4> Structured Equation Model (SEM) Analysis Results of Chinese Consumers (n=360)

Hypothesis	Variables	Standardized Estimate	S.E.	C.R.	P	Results
H1	COO→ Brand Evaluation	-0.175	0.209	-1.818	0.069	denied
H2	Brand Image→ Brand Evaluation	0.516	0.088	7.009	0.000	valid
H3	Corporate Image→ Brand Evaluation	0.261	0.085	3.866	0.000	valid
H4	COO→ Purchase Intention	-0.135	0.224	-0.604	0.546	denied
H5	Brand Image→ Purchase Intention	0.307	0.097	4.207	0.000	Valid
H6	Corporate Image→ Purchase Intention	0.182	0.089	2.874	0.004	valid
H7	Brand Evaluation→ Purchase Intention	0.403	0.054	8.219	0.000	valid

Note: \*p<0.05

In order to test hypotheses 8 and 9, multiple group analysis of Amos 18.0 was used to examine the significances among the paths between two countries, and the results are shown in the table 4-5. Based on the table of critical ratios, C.R. >1.96, the path is significant statistically. According to <Table 6>, the critical ratios of two paths are less than 1.96, so the two paths are not statistically significant. Therefore, it can be concluded that the hypotheses 8 and 9 are denied.

In order to test hypothesis 10 and 11, SPSS 16.0 and two independent samples T-test analysis is used. As shown in <Table 7>, in terms of the means of brand evaluations of Korean consumers, Samsung Galaxy Note ranks number one, with the mean of 4.2011, followed by I-Phone 4S (4.0958), Blackberry Bold (2.8756), HTC Raider (2.7905), and Nokia Lumia 710 (2.7720). Therefore, Korean consumers have a higher brand evaluation on Korean products. The hypothesis 10 is valid.

<Table 5> Structured Equation Model (SEM) Analysis Results of Korean Consumers (n=255)

Hypothesis	variables	Standardized Estimate	S.E.	C.R.	P	results
H1	COO→ Brand Evaluation	0.160	0.122	2.611	0.009	valid
H2	Brand Image→ Brand Evaluation	0.373	0.105	5.557	0.000	valid
H3	Corporate Image→ Brand Evaluation	0.049	0.115	0.733	0.463	denied
H4	COO→ Purchase Intention	-0.030	0.092	-0.598	0.550	denied
H5	Brand Image→ Purchase Intention	0.329	0.082	5.646	0.000	Valid
H6	Corporate Image→ Purchase Intention	0.100	0.085	1.810	0.070	Denied
H7	Brand Evaluation→ Purchase Intention	0.440	0.047	8.576	0.000	Valid

Note: \*p<0.05

<Table 6> Critical Ratios for Differences between Parameters (Unstrained) (n=615)

	a3_1	a4-1
a3-2	1.908	
a4_2		0.604

Note: \*C.R. >1.96

<Table 7> (Mean Score of Brand Evaluation) Group Statistics (n=615)

	COUNTRY	N	Mean	Std. Deviation	Std. Error Mean	t	Sig.
PV_S	CHINESE	360	3.3643	.75852	.03998	-14.381	.000
	KOREAN	255	4.2011	.63772	.03994	-14.809	.000
PV_N	CHINESE	360	3.7071	.66208	.03489	16.151	.000
	KOREAN	255	2.7720	.76687	.04802	15.753	.000
PV_I	CHINESE	360	4.1687	.57743	.03043	1.445	.149
	KOREAN	255	4.0958	.66635	.04173	1.411	.159
PV_H	CHINESE	360	3.3226	.69745	.03676	8.636	.000
	KOREAN	255	2.7905	.82473	.05165	8.394	.000
PV_B	CHINESE	360	3.3151	.69810	.03679	7.001	.000
	KOREAN	255	2.8756	.85474	.05353	6.766	.000

Note: \*p<0.05

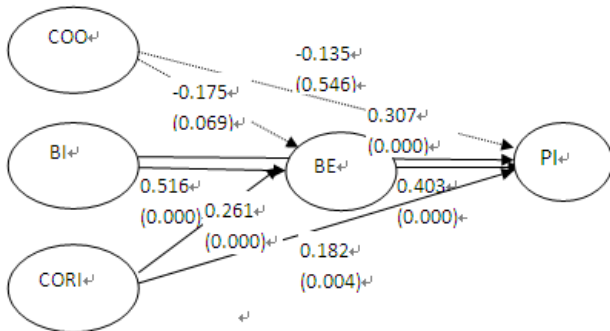
As shown in <Table 8>, in terms of the means of Korean consumers' purchase intention, Samsung Galaxy Note ranks number one, with the mean of 4.3020, followed by iPhone 4S (4.1522), Blackberry Bold (2.8698), Nokia Lumia (2.6416), and 710HTC Raider (2.5811). Therefore, Korean consumers have a higher purchase intention on Korean products. The hypothesis 11 is valid as well.

<Table 8> (Mean Score of Purchase Intention) Group Statistics (n=615)

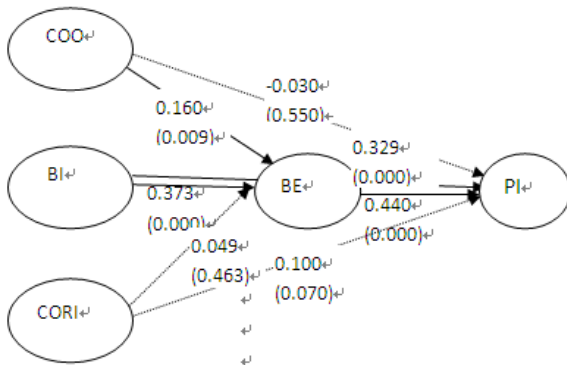
COUNTRY		N	Mean	Std. Deviation	Std. Error Mean	t	Sig.
PVI_S	CHINESE	360	3.1783	.96863	.05105	-15.880	.000
	KOREAN	255	4.3020	.69097	.04327	-16.790	.000
PVI_N	CHINESE	360	3.4828	.87142	.04593	11.594	.000
	KOREAN	255	2.6416	.90736	.05682	11.514	.000
PVI_I	CHINESE	360	4.1578	.74892	.03947	.089	.929
	KOREAN	255	4.1522	.80846	.05063	.088	.930
PVI_H	CHINESE	360	3.3467	.86171	.04542	10.454	.000
	KOREAN	254	2.5811	.93722	.05881	10.303	.000
PVI_B	CHINESE	360	3.1094	.82139	.04329	3.258	.001
	KOREAN	255	2.8698	.99795	.06249	3.152	.002

Note: \*p<0.05

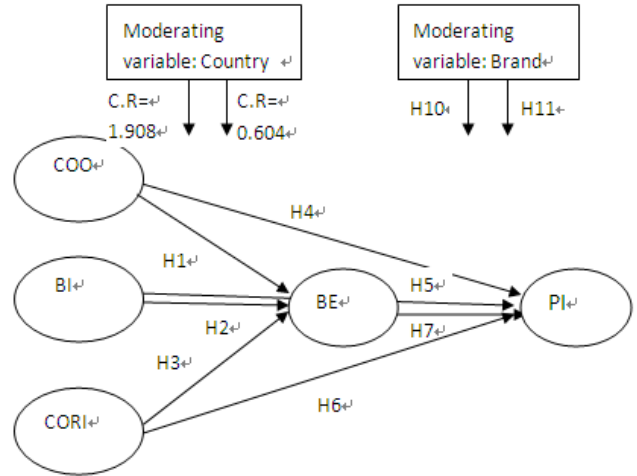
All of the above testing results are shown in the following models:



<Figure 2> Analysis Results of Chinese Consumers



<Figure 3> Analysis Results of Korean Consumers



Note: COO: Country-of-Origin  
CORI: Corporate Image  
PI: Purchase Intention

BI: Brand Image  
BE: Brand Evaluation

<Figure 4>Analysis Results of H8, H9, H10, and H11

#### 4.4. Research Findings

For the COO effects on consumers' brand evaluation and purchase intention. Based on the analysis results, it can be concluded that the country-of-origin (COO) doesn't appear to influence both Chinese and Korean consumers' purchase intention, whereas for the COO effects on consumers' brand evaluation, the study results diverged between Chinese and Korean consumers.

Both Chinese and Korean consumers are sensitive to brand image. For Chinese consumers, the estimates are 0.516 (p=0.000) for brand evaluation, and 0.307 (p=0.000) for purchase intention; therefore, brand image does affect Chinese consumers' brand evaluation and purchase intention significantly. As for Korean consumers, the estimates are 0.373 (p=0.000) for brand evaluation, and 0.329 (p=0.000) for purchase intention, so the effects of brand image on Korean consumers' brand evaluation and purchase intention are significant statistically as well.

As for the effects of corporate image on consumers' brand evaluation and purchase intention, the analysis results diverged between Chinese consumers and Korean consumers. For Chinese consumers, the estimates are 0.261 (p=0.000) for brand evaluation, and 0.182 (0.004) for purchase intention, so the effects of corporate image on Chinese consumers' brand evaluation and purchase intention are statistically significant. On the other hand, for Korean consumers, the estimates are 0.049 (p=0.463) for brand evaluation and 0.100 (p=0.070), which indicate that the effects of corporate image on Korean consumers' brand evaluation and purchase intention are very weak.

Based on the comparison of the interactive effects of COO, brand image and corporate image, it can be summarized that for Chinese consumers, brand image appears to exert the strongest effects on Chinese consumers' brand evaluation and purchase intention, followed by corporate image, which also have some influences on Chinese consumers' purchasing behavior, whereas the COO appears to lose its

effect on Chinese consumers' purchase behavior. For Korean consumers, brand image appears to have the strongest effects, followed by COO, which also exerted some influence on Korean consumers' brand evaluation, whereas corporate image doesn't appear to affect Korean consumers' brand evaluation and purchase intention.

Many previous studies indicated that the COO effect on consumers' purchase behavior is contingent on the level of market development of the country being investigated. However, in this study, the analysis results indicated that there is no significant difference between the COO effects on Chinese consumers and Korean consumer (China as the emerging market, and Korea as the mature market). Based on the table of critical ratios, if  $C.R. > 1.96$ , the path is significant statistically. According to <table 6>, the critical ratios of two paths are less than 1.96, so the two paths are not statistically significant; therefore, there are no significant differences between Chinese consumers and Korean consumers statistically.

According to previous studies, consumers' product attribute evaluations are always influenced by their national pride and ethnocentrism (Sharma, Shimp, and Shin, 1995; Kaynak and Kara, 2002). The analysis results of this study indicated that Korean consumers tend to be more likely to favor domestic products. The two independent samples T-Test analysis of SPSS was used to test Korean consumer's score on brand evaluation and purchase intention of smart phones of five brands (Samsung Galaxy Note, Nokia Lumia 710, iPhone 4S, HTC Raider, and Blackberry Bold). Among the five brands of smart phones from five countries, Korean consumers favor Samsung Galaxy Note most (mean= 4.2011 for brand evaluation, mean= 4.3020 for purchase intention).

## 5. Conclusion

This study gives some insights on a comparison of Chinese and Korean consumers' perceptions on smart phones of five brands from five countries, with China as the emerging market and Korea as the mature market. To the author's knowledge, this kind of comparison hasn't been done before in the literature.

Specifically speaking, the COO effect doesn't have impacts on Chinese consumers' purchase behavior in this study. As for Korean consumers, the COO does affect their brand evaluation, but not purchase intention. The previous studies have shown different and inconsistent results concerning the COO effects on consumers' purchase behavior. Many studies showed that COO cue becomes neither as important nor as powerful as many have thought in the past (Piron, 2000, Wong, Polonsky and Garma, R., 2008). This study also cast possible doubt on the importance of COO for Chinese consumers. As the biggest market and manufacturing basis in the world, it can be incredibly hard to find the products of world-famous brands not manufactured or assembled in China. The concept of 'country' has become increasing obscure for Chinese consumers. Therefore, multinational companies can feel relatively free to make the decision when choosing manufacturing sites, if Chinese consumers are the marketing targets.

Second, as for Korean consumers, COO does appear to affect their

brand evaluation, but not purchase intention. When testing the causal relationship between COO and brand evaluation and purchase intention. The analysis result indicates that Korean consumers tend to have high brand evaluation on iPhone 4S, but just not buy (with low purchase intention). This finding shows that the factor of ethnocentrism appears to affect Korean consumers' evaluation on products and purchase intention. As the one of the most developed smart phone markets, Korean smart phone market is the target for the advanced smart phones. It is suggested that international smart phone companies should focus more on the development of high-tech smart phones with LTE and more functions available.

Third, among the factors of COO, brand image and corporate image, brand image appears to be most influential on brand evaluation and purchase intention for both Chinese consumers and Korean consumers. Therefore, based on the results of this study, compared with COO, brand image is a vital variable for the long-term success of the companies and brands. For managers, the brand of a product should be positioned as a high-quality, prestigious, good-function for both Chinese and Korean consumers, and consumers will expect that the product is superior, durable, and prestige-standing in the eye of public.

Fourth, as for corporate image, Chinese consumers and Korean consumers diverged concerning their perception on smart phones. For Chinese consumers, corporate image does affect their brand evaluation and purchase intention; for Korean consumers, corporate image doesn't appear to have effects on consumers' purchase behavior. This result reconfirms the previous conclusion that Korean consumers' product attribute evaluations are affected by their national ethnocentrism. Firms, after entering Korean market, while improving their corporate images, more attention should be paid on brand development and brand extensions.

In this study, only the COO effect, with the interactive influences of brand image and corporate image, is examined; therefore, the effects of the sub components of COO (country-of-origin), such as COM (country-of-manufacturing), COS (country-of-assembling), COD (country-of-design), COB (country-of-brand) need to be examined in further studies, since the products in the real markets are always hybrid products, with different country of manufacturing, country of brand, and country of design. Furthermore, five brands of smart phones were examined in this study; however, many previous studies showed that the influences of COO effect, brand image and corporate image differ across product categories. Therefore, different product categories need to be involved to examine the interactive effects of COO, brand image and corporate image in the future studies.

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