

# EFFECTS OF COUNTRY OF ORIGIN AND PRODUCT FEATURES ON CUSTOMER PURCHASE INTENTION: A STUDY OF IMPORTED POWDER MILK

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## ABSTRACT

*This study aims to investigate drivers of purchase intention for imported powder milk by using the partial least squares-structural equation model approach to analyze a data survey of 369 customers in Vietnam. The results indicate that product attitude has the strongest positively effect on purchase intention; meanwhile, the country of origin has indirectly relationship to the purchase intention via product features. Specifically, group conformity also has significant relationship with purchase intention. Lastly, ethnocentrism has a negative effect on product quality and purchase intention. Specifically, the paper also conducts a qualitative study to support the empirical results. The findings enable suppliers or managers to identify key determinants to improve the business strategies in this market.*

**Keywords:** Ethnocentrism, Features, Product Quality, Country of Origin, Product Knowledge, Face Saving and Conformity and Purchase Intention.

## INTRODUCTION

As the recent growth of globalization and the widespread of international trade, many firms have explored opportunities for distributing their products around the world. In addition, consumers also have various choices among many products made in different countries. As a result, country of origin has become a vital part in customers' purchase decision-making process. Country-of-origin (COO) effect has explored extensively in the marketing literature (Aichner, 2014; Shankarmahesh, 2006, Balabanis et al., 2017, Bilkey and Nes, 1982; Han and Terpstra, 1988; Han, 1989; Schooler, 1971; and Anderson and Cunningham, 1972) and they propose that all import products are subjects to country-of-origin effect. In addition, Schooler (1971) shows that foreign products are rated more favorably for the elderly rather than the youth do. Specifically, females tend to evaluate imported goods more highly than males do. Moreover, Aichner et al. (2017) showed consumers' willingness to buy and willingness to pay when the actual origin is revealed.

In another aspect, Anderson and Cunningham (1972) claimed that people with better education will assess foreign products more highly than those with limited education. Furthermore, a correlation between country-of-origin effect and the level of economic development becomes stronger; products from developed countries are superior to those from developing countries. However, patriotic people would rate more favorably for products from their own country (Shimp and Sharma, 1987). Specifically, COO is considered an essential

mediator between the purchase-intention and product-patriotism (Shankarmahesh, 2006 and Hamelin et al., 2011).

Therefore, to compete successfully in the global trade, domestic firms have to consider customers' attitudes and perception towards origin of products and deeply understand their potential customers to take advantages of their patriotism. However, with a long historical study of country-of-origin effect, scholars did not pay ample attention on multiple aspects of product characteristics instead of the country of origin. In addition, a little study has explored a specific product of imported powder milk in Vietnam. Thus, this paper aims to combine many different aspects of a product into a model in order to provide a glimpse of how the country of origin influences on product features and purchase intention, and determines different effects of product features on purchase intention. This study also combines both quantitative and qualitative methodology to validate a measurement scale of the research model, and provide reasonable explanations and recommendations for managers in milk companies.

The next section reviews the theoretical backgrounds of previous studies. To describe and analyze data collection, the two following sections respectively provide the methodology and findings of both quantitative and qualitative methodology. The implications and limitations are derived in the last section.

## LITERATURE REVIEW

### Purchase Intention

Purchase intention is viewed as the motivation of each person to make an attempt to buy a product of the particular brand. In other words, it also means that consumers will purchase a product again after they review a product and realize that the product is worth to purchasing. MacKenzie et al. (1986) develop scales to measure purchase intention in relation to attitude to products to explore customer behaviors. There are a number of contextual facets resisting customers for intended behaviors (East, 1997). D'Astous and Ahmed (1999) indicate some resistances in relation to consumers' report in evaluating the actual influence of country of origin on behavioral consequences such as to be more rational in strengthening intrinsic product features and considering brand name as the source of country-of-origin (COO).

However, Cordell (1993) and Tse and Gorn (1993) show that country image and brand image are supposed to have direct and possibly compensative impacts on purchase intentions. Therefore, Diamantopoulos, Schlegelmilch and Palihawadana (2011) indicate that consumers' image of a particular brand from a country does not affect the image of that country, and this is precise for the reverse. In spite of independent effects on purchase intention, a favorable country image can counterbalance for a weak brand (Tse and Gorn, 1993). Furthermore, purchase intentions were examined among business executives in the United States and Turkey for particular brands made in West Germany, Japan, and Italy. As Peterson and Jolibert's (1995) findings, purchase intention has greater relation to personal commitment than perceptual evaluations, and hence, gauges more influencing antecedents. They declared that the purchase intention as the dependent measure to explore COO impact. In addition, other studies also demonstrate that a strong COO has a positive effect on consumers' willingness to buy when it enacts as a signal of product quality (Aichner et al., 2017). Therefore, based on the prior literatures, this study emphasizes on voluntary acquisition of information of COO as a part of a purchase decision process.

## Country of Origin (COO)

The international marketing literature demonstrates that consumers concern with where products are made to expect the quality (Parkvithee and Miranda, 2012). In other words, besides brand name, appearance, and design, COO is one of the most important indicators of product quality. COO is supposed to be an extrinsic determinant and the label for brand name, which guides the consumers to choose particular products (Michaelis et al., 2008; and Klein et al., 1998). In addition, with the increasing emergence of e-commerce, the rising significance of extrinsic cues is obvious because most of the Internet messages are extrinsic (Insch and McBride, 2004).

However, COO is a complicate issue in the global market. Some researchers consider COO of one product as the country where products are manufactured or assembled. Those researchers show that the consumer's decision to buy one product based upon the location, where the product was "made in" (Laroche et al., 2005). Meanwhile, other scholars indicate that COO of one product is the location of headquarters disregarding to where the firm gathered or manufactured products because the country that produced or assembled the products could vary over time or relate to many countries of assembly as a part of outsourcing (Hamzaoui-Essoussi et al., 2011). Therefore, in this study, COO of powder milk is considered as the location of headquarter of the brand.

In the pool of examining influential factors of the intention to buy a product, some researchers have yielded that consumers' perception on COO considerably influences consumers' purchase intention (Wang, et al., 2012; and Aichner et al., 2017). Moreover, in terms of effects of local brand and non-local origin on consumer attitudes in developing countries, Batra et al. (2000) have concluded that COO of imported products strongly influences on the consumer attitudes toward that brand. In addition, the study of Chao (1993) discovers that consumer's evaluations of product qualities are determined by country of design and country of assembly; in other words, the more sensitive about COO information customers are, the more positively they perceive about quality of the product. In addition to this, Peterson and Jolibert (1995) found that "the size of an observed COO effect was a function of whether the dependent variable was a quality or reliability perception or a purchase intention." Therefore, this paper hypothesizes that:

*H1a: COO has a positive impact on Perceived Product Quality*

*H1b: COO has a positive impact on Brand Attitude*

*H1c: COO has a positive impact on Purchase Intention of Imported Powder milk*

## Brand Attitude

In terms of "attitude", Strizhakova et al. (2011) describe it as a lasting general evaluation of people, objects, advertisements, or issue. This means that attitude could be made toward a particular brand of an organization that would then be called "brand attitude". In addition, it attributes to overall evaluation of a brand and involves affective, cognitive and behavioral intentions (Eagly and Chaiken, 1993; Olsen et al., 2014). With the good attitude toward one brand name, the consumer would take the form of perception in that product's quality (Rao and Monroe, 1988). Thus, the following hypothesis is proposed:

*H2: Brand Attitude has a positive impact on Perceived Product Quality.*

## **Ethnocentrism**

According to LeVine and Campbell (1972), ethnocentrism was originally a sociological concept, which then became a psychosocial construction related to individual-level personality systems and connected with general cultural- and social-analytic frameworks. Moreover, they also developed a more general definition of consumer ethnocentrism, which is defined as the phenomenon of customers' preference for domestic goods or their prejudice against import products.

Besides, the finding of Okechuku (1994) demonstrates that consumers in developed countries prefer their own domestic goods first. The more customers prefer domestic goods, the less positive they feel about foreign products. In addition, ethnocentric consumers believe that the purchase of imported products can hurt the domestic enterprises and cause unemployment as well as be unpatriotic (Netemeyer et al., 1991; Shimp and Sharma, 1987). As a result, ethnocentrism gives consumers feelings of belonging and guidelines for buying behavior, which can be acceptable to a group and contribute to various evaluations of foreign and domestic goods. Several studies also have the same conclusion that customers tend to evaluate domestic products more favorably than foreign ones. (Balabanis and Diamantopoulos, 2011; Juric and Worsley, 1998). However, in the recent study, Balabanis et al. (2017) suggest that ethnocentrism has no essential effect on the purchase intention of convenience or low-cost products. Thus, the following hypotheses are proposed:

*H3a: Ethnocentrism has a negative impact on Perceived Product Quality.*

*H3b: Ethnocentrism has a negative impact on Purchase Intention of Imported Powder milk.*

## **Foreign Product Knowledge**

Consumer knowledge is considered as a multidimensional construct in which various kinds of product-related experience causing various dimensions of knowledge, which have different impacts on product evaluations and customers' behavior for selection relying on particular conditions and work (Alba and Hutchinson, 1987). Furthermore, Marks and Olson (1981) define product knowledge as the cognitive proxy of consumers' experience in memory related to a particular product in the form of encrypted brands' presentation, product attributes, general product line news, and evaluation and choice rules. Meanwhile, when evaluating a product, familiarity and objective product knowledge together influence on the use of the COO cue (Schaefer, 1997). In addition, Darling and Kraft (1977) find that knowledge of COO influenced consumers' attitudes towards goods. The more knowledge they get about foreign products, the more they are willing to buy these products. In the recent study, Cakici et al. (2017) point out that consumers' product knowledge has a significant effect on their purchase intention. Therefore, the following hypotheses are proposed:

*H4a: Foreign Product Knowledge has a positive impact on COO.*

*H4b: Foreign Product Knowledge has a positive impact on Purchase Intention of imported powder milk.*

## Face Saving and Group Conformity

Face Saving and Group Conformity are first mentioned in Lee's study (1990) about the Confucian cultures in Asia. And these two elements have significant impacts on consumers' attitudes and behaviors in Confucian cultures. Later, Chung and Pysarchik (2000) confirm this finding. However, attitudes are a better predictor of behavioral intention than face saving and group conformity. Face saving is one's position in an individual's social system; meanwhile, group conformity is also a kind of social pressure, which means compliance with the group norm irrespective of a person's own idea (Jin and Kang, 2011). Thus, the following hypotheses are proposed:

*H5a: Face saving has a positive impact on Product Attitude.*

*H5b: Face saving has a positive impact on Purchase Intention of imported powder milk.*

*H6a: Group conformity has a positive impact on Product Attitude.*

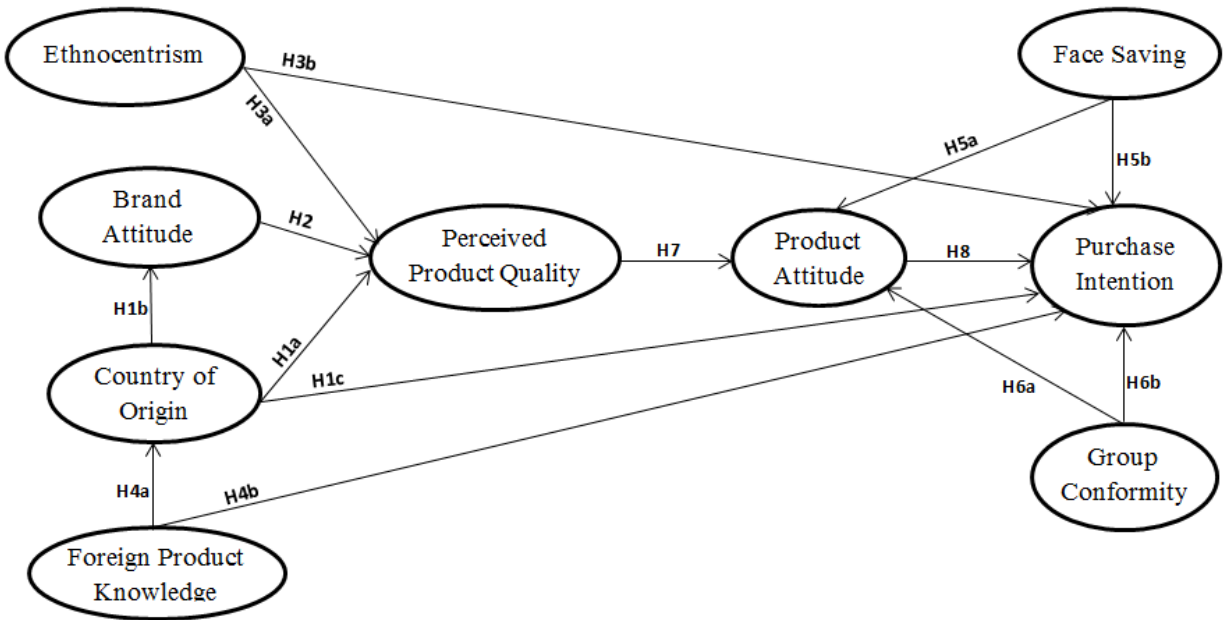
*H6b: Group conformity has a positive impact on Purchase Intention of imported powder milk.*

## Perceived Product Quality and Product Attitude

Aaker (1991) defines perceived quality as what customers perceive the product's overall quality or when they prefer a product or service to its alternatives for a particular purpose. Perceived quality is described through the subjective concept as the qualitative evaluation of a product, which is identified by a person's own judgment about the significance to that person, hence, differs from person to person. Perceived quality is built upon which consumers gather information from certain attributes. In respect of food product, consumers who well perceive about products' quality such as a nutritional value and taste would have positive attitude towards that product (Juric and Worsley, 1998). Meanwhile, consumers' attitudes toward a product are a function of consumers' evaluations of the attributes possessed by the product (Fishbein and Ajzen, 1975). Moreover, attitude is also defined by Ajzen and Fishbein (1980) as the conscious evaluation of emotions and action-oriented in the good or bad nature about a certain object or idea. Indeed, in prior literature of purchase intention, the better attitude toward the products, the more likely that they would buy them (Babin and Babin, 2001; Lee and Lee, 2009). Hence, the following hypotheses are proposed (Figure 1).

*H7: Perceived Product Quality has a positive impact on Product Attitude.*

*H8: Product Attitude has a positive impact on Purchase Intention of imported powder milk.*



Note Shows The Conceptual Framework, Which Includes All Above-Mentioned Hypotheses

**Figure 1**  
**CONCEPTUAL FRAMEWORK**

## METHODOLOGY

### Development of Measurements and Research Design

First, the scale of COO is adapted from Han and Terpstra (1988). Second, measure of purchase intention is developed from the studies of MacKenzie et al. (1986). Third, the scale of foreign product knowledge is combined from scales of Brucks (1985), Marks and Olson (1981), and Schaefer (1997). Fourth, the scale of ethnocentrism is condensed from Shimp and Sharma's (1987) scale. Fifth, this study also adapts measures of Lee (1990) and Chung and Pysarchik (2000) for group conformity and face saving. Sixth, measures of Brand Attitude are adapted by Ulgado and Lee (1993). Seventh, measurement scales of perceived product quality are modified from the studies of Chung and Pysarchik (2000) and Juric and Worsley's (1998). Finally, measures of Product Attitude are adapted from the study of Kim and Pysarchik (2000).

In addition, 5-point Likert Scale from (1) *Strongly Disagree* to (5) *Strongly Agree* is applied on the questionnaire to evaluate measurement indicators. The pilot test with 40 respondents is conducted to eliminate mistake and validate the translated questionnaire for correspondents easy to understand and answer.

The questionnaire is designed three main parts. Part I includes a list of imported powder milk brands and a filtering question to ask whether the customers used to buy any imported powder milk. Part II provides a main survey questionnaire relating to the measurement indicators. Finally, Part III covers correspondents' demographic information.

## Data Collection and Sample Characteristics

This study is conducted within the setting of powder milk market in Ho Chi Minh City (HCMC), Vietnam. In the scope of this study, powder milk is considered as a kind of dairy product made from vaporizing milk to dryness used for children's food. Imported powder milk products, which are completely manufactured abroad and popular in the Vietnam market, include Mead Johnson, Abbott, Nestle, Fiesland Campina, Dumex, S26 (Australia), Hipp (Germany), Meiji (Japan), XO (Korea) and Pedia Sure (the United States).

The questionnaires are distributed directly to correspondents in kindergartens, zoos, maternity hospitals, children hospitals, supermarkets, and parks in different districts of HCMC. All correspondents have experiences to use powder milk in the last 12 months. Specifically, the researcher conducted seven in-depth interviews with five customers and two expertise, who have good knowledge about powder milk. Each interview prolonged from 30 min to 90 min. Consequently, this qualitative study provided more details of information about powder milk industry as well as customer behaviors in this market, which supported a further explanation of empirical results. It took almost 12 months (from March of 2014 to March of 2015) to complete this survey, including the pilot test period and seven in-depth interviews.

## The Data Set Description

The questionnaire survey was distributed to 400 correspondents. After eliminating invalid questionnaires, there were 369 valid observations left. The response rate is relatively high (92.25%, respectively), because this study just implements a personally survey. Regarding the research sample, more than half of the sample is female (68.8%). Most of the correspondents are at the marriage age: 61% from 25-35 years old. Approximately half of respondents get a Bachelor's Degree (48%) and are staff employees (40.4%). In respect of criteria on choosing the powder milk, the correspondents usually buy powder milk in the specialized store (51.1%). They choose the product mostly based on their own decision and on information on newspaper (27.8% and 29.4%, respectively). In addition, they also concern about nutrition values (29.5%) and the prestige of producer (18.2%).

## Data Analysis

In addition, to be more flexible in terms of data requirement, model complexity and relationship specification from covariance-based Structural Equation Model (SEM) procedure, partial least squares SEM (PLS-SEM) approach is used to explore links between purchase intention, COO and other predictors. SPSS software is also used to describe the demographic information. The study mainly uses SmartPLS software to test criteria of reliability, convergent validity and discriminant validity. In addition, bootstrap procedure is conducted to calculate standard deviation and create an approximate t-statistic (Chin, 1998).

## RESULTS

### Measurement Model Assessment

Table 1 show all outer loadings are above 0.7, which satisfies the theoretical requirement of Henseler, Ringle and Sarstedt (2012), except two items (COO5 and PPQ3). However, Hair et al. (2016) indicate that outer loadings below 0.7 (above 0.4) are sometimes retained to contribute the content validity if removing them does not significantly improve composite reliability; therefore, all items are kept for the assessment of the constructs internal consistency reliability. Cronbach's alpha and composite reliability are examined to evaluate reliability and convergent validity, which are all in a good range from 0.7 to 0.95 (Hair et al., 2014).

VARIABLES	MEAN	SD	FACTOR LOADING	CRONBACH'S A	RHO_A	CR	AVE
<b>Thresholds</b>				<b>≥ 0.6</b>	<b>≥ 0.7</b>	<b>≥ 0.7</b>	<b>≥ 0.5</b>
<b>Country of Origin</b>	<b>3.315</b>	<b>0.430</b>		0.758	0.767	0.837	0.508
COO1	4.22	0.687	0.745				
COO2	4.04	0.712	0.760				
COO3	3.82	0.868	0.714				
COO4	4.22	0.776	0.714				
COO5	4.10	0.716	0.620				
<b>Brand Attitude</b>	<b>3.890</b>	<b>0.763</b>		0.819	0.826	0.917	0.847
BA1	3.88	0.837	0.929				
BA2	3.90	0.821	0.911				
<b>Ethnocentrism</b>	<b>2.600</b>	<b>0.704</b>		0.814	0.821	0.868	0.569
ETH1	3.04	0.981	0.730				
ETH2	2.54	0.961	0.744				
ETH3	2.38	0.911	0.757				
ETH4	2.37	0.878	0.757				
ETH5	2.66	0.924	0.783				
<b>Foreign Product Knowledge</b>	<b>3.824</b>	<b>0.723</b>		0.746	0.749	0.855	0.663
FPK1	4.01	0.757	0.812				
FPK2	3.65	1.003	0.831				
FPK3	3.81	0.892	0.799				
<b>Face Saving</b>	<b>2.542</b>	<b>0.860</b>		0.750	0.796	0.887	0.797
FS1	2.69	0.950	0.859				
FS2	2.39	0.972	0.925				



<b>Group Conformity</b>	<b>2.607</b>	<b>0.865</b>		0.770	0.775	0.897	0.813
GC1	2.71	0.984	0.892				
GC2	2.50	0.936	0.911				
<b>Perceived Product Quality</b>	<b>3.683</b>	<b>0.675</b>		0.805	0.817	0.865	0.564
PPQ1	3.90	0.893	0.801				
PPQ2	3.59	0.977	0.803				
PPQ3	3.40	0.901	0.635				
PPQ4	3.90	0.854	0.739				
PPQ5	3.62	0.873	0.763				
<b>Product Attitude</b>	3.320	0.738		0.875	0.876	0.909	0.668
PA1	3.33	0.938	0.807				
PA2	3.31	0.985	0.804				
PA3	3.14	0.848	0.875				
PA4	3.18	0.876	0.844				
PA5	3.64	0.877	0.751				
<b>Purchase Intention</b>	<b>3.289</b>	<b>0.747</b>		0.866	0.868	0.903	0.651
PI1	3.13	0.952	0.834				
PI2	3.58	0.991	0.766				
PI3	3.70	0.824	0.801				
PI4	3.09	0.918	0.825				
PI5	2.95	0.941	0.806				

<b>Table 1a</b>	
<b>THE TESTING MEASUREMENT SCALE</b>	
<b>Code</b>	<b>Constructs and Indicators</b>
	<b>Country of Origin (ED)</b>
<b>COO1</b>	When buying the imported powder milk, the country of origin is the first piece of information that I consider
<b>COO2</b>	I look for country of origin information to choose the best imported powder milk available in the powder milk class
<b>COO3</b>	I find out the imported powder milk's country of origin to determine the quality of the imported powder milk
<b>COO4</b>	When buying a kind of expensive imported powder milk, I always seek to find out what country that powder milk was made in
<b>COO5</b>	If I have little experience with a kind of imported powder milk, I search for country of origin information about that imported powder milk to help me make a more informed decision
	<b>Ethnocentrism (EX)</b>
<b>ETH1</b>	Purchasing imported powder milk is un-Vietnamese
<b>ETH2</b>	It is not right to purchase imported powder milk because it puts Vietnamese people out of jobs
<b>ETH3</b>	We should purchase powder milk manufactured in Vietnam instead of letting other countries get rich from us
<b>ETH4</b>	Vietnamese people should not buy imported powder milk because it hurts Vietnamese business and causes unemployment
<b>ETH5</b>	I will buy only Vietnamese powder milk
	<b>Brand Attitude (ED)</b>
<b>BA1</b>	My general impression of the imported powder milk brand is that it represents a good quality product
<b>BA2</b>	My general impression of the imported powder milk brand is that it represents a prestigious product
	<b>Foreign Product Knowledge (EX)</b>
<b>FPK1</b>	I know a lot about powder milk from other countries that I am buying
<b>FPK2</b>	I do not need assistance when buying imported powder milk
<b>FPK3</b>	I am never confused when buying powder milk that are made from other countries
	<b>Face Saving (EX)</b>
<b>FS1</b>	My decision to buy imported powder milk would be influenced by how people who are important to me see me owning the imported powder milk
<b>FS2</b>	I feel that consuming imported powder milk will enhance my social status in Vietnam
	<b>Group Conformity (EX)</b>
<b>GC1</b>	I feel that most people around me expect me to comply with their decision to buy imported powder milk

<b>GC2</b>	My decision to buy imported powder milk would be influenced by whether consuming it would make me fit in with other people
	<b>Perceived Product Quality (PPQ)</b>
<b>PPQ1</b>	Imported powder milk has high nutritional values
<b>PPQ2</b>	Though much more expensive, imported powder milk has better value for money
<b>PPQ3</b>	Imported powder milk is good taste
<b>PPQ4</b>	Imported powder milk has a positive impact on the environment
<b>PPQ5</b>	Price of Imported powder milk is reasonable
	<b>Product Attitude (ED)</b>
<b>PA1</b>	My general impression of imported powder milk is that it is a good one
<b>PA2</b>	My general impression of imported powder milk is that it is worth my money
<b>PA3</b>	Buying imported powder milk is a wise idea
<b>PA4</b>	I like the idea of buying imported powder milk
<b>PA5</b>	To me, imported powder milk is pleasurable
	<b>Purchase Intention (ED)</b>
<b>PI1</b>	Compared with my friends, I intend to purchase more imported powder milk
<b>PI2</b>	I will buy imported powder milk this year
<b>PI3</b>	I feel happy buying imported powder milk
<b>PI4</b>	For me, there is a certain excitement about shopping for imported powder milk
<b>PI5</b>	I am pleasantly surprised when I see imported powder milk sold in remote places.

Table 1A describes the average variance extracted (AVE), which is used to measure the convergent validity. All AVEs are acceptable, which are higher than 0.5; in other words, the construct explains over 50% of the variance of its items. In addition, Table 2 shows that discriminant validity of the constructs is well confirmed when the square root of the average variance extracted exceeded the correlation between every pair of latent variables (Fornell and Lacker's criterion, 1981).

<b>Table 2</b>									
<b>DISCRIMINANT VALIDITY (FORMELL AND LACKER'S CRITERION)</b>									
	<b>FORMELL AND LACKER'S CRITERION (FL)</b>								
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
1. Country of Origin	<b>0.712</b>								
2. Brand Attitude	0.324	<b>0.920</b>							
3. Ethnocentrism	-0.043	-0.070	<b>0.754</b>						
4. Foreign Product Knowledge	0.548	0.260	-0.045	<b>0.814</b>					
5. Face Saving	0.104	0.197	-0.017	-0.002	<b>0.893</b>				
6. Group Conformity	0.121	0.228	-0.079	0.023	0.674	<b>0.901</b>			
7. Perceived Product Quality	0.304	0.569	-0.167	0.317	0.307	0.367	<b>0.751</b>		
8. Product Attitude	0.253	0.429	-0.153	0.227	0.434	0.480	0.741	<b>0.817</b>	
9. Purchase Intention	0.246	0.360	-0.287	0.233	0.385	0.530	0.644	0.703	<b>0.807</b>

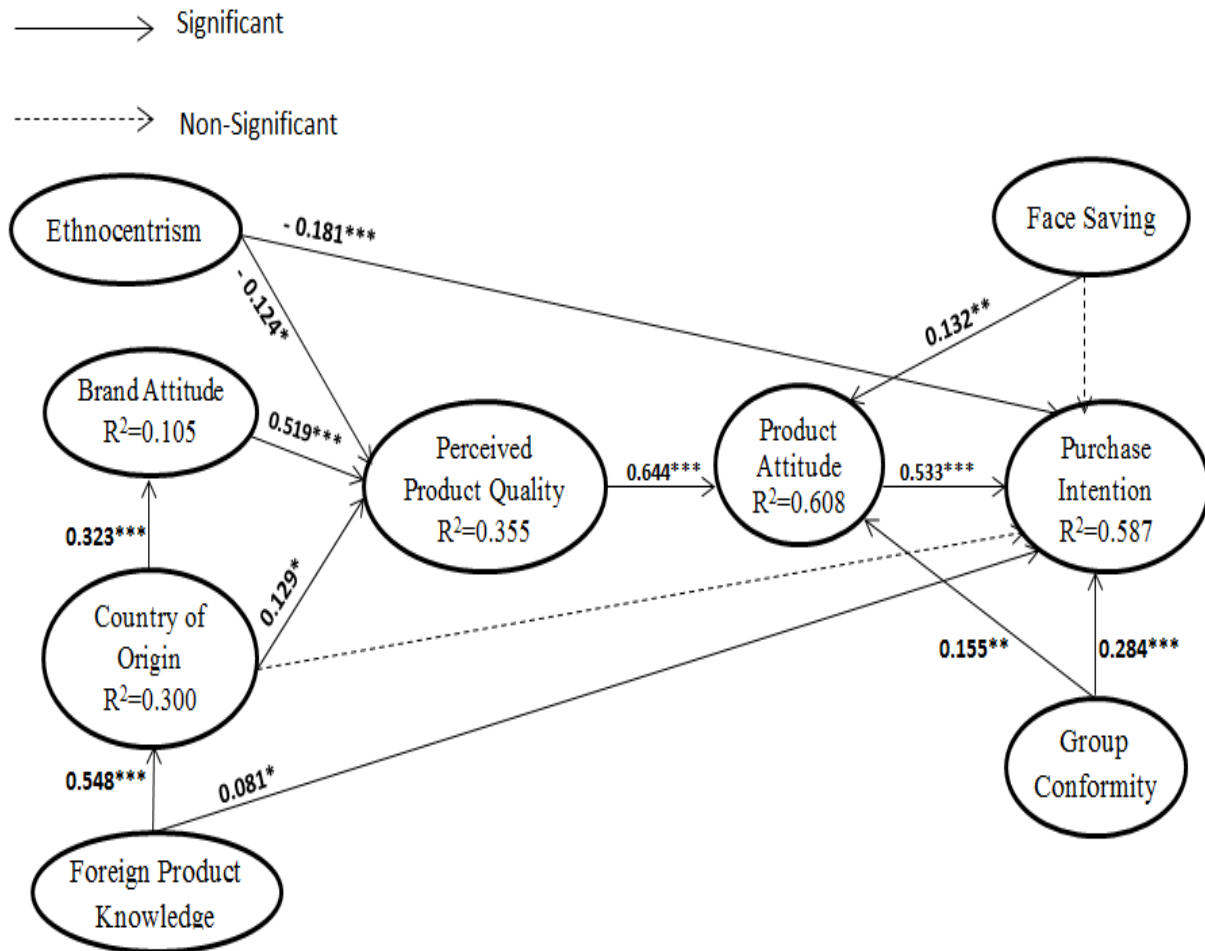
Note: Numbers on the diagonal (in Bold) show the square root of the AVE; numbers below the diagonal show construct correlations

Furthermore, Table 3 illustrates that the Heterotrait - Monotrait ratios are all below 0.85 (follow the threshold of Clark and Watson, 1995, Kline, 2011) except the HTMT ratios between group conformity and face saving (0.874) and between product attitude and perceived product quality (0.884). However, Gold et al. 2001 and Teo et al. 2008 propose a value of 0.90 so the HTMT ratio of Loyalty and WOM is still acceptable.

<b>Table 3</b>								
<b>DISCRIMINANT VALIDITY (HETEROTRAIT - MONOTRAIT RATIO)</b>								
	<b>HETEROTRAIT - MONOTRAIT RATIO (HTMT)</b>							
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
1. Country of Origin	<b>Criteria <math>\leq 0.85</math>, but <math>\leq 0.90</math> is still acceptable</b>							
2. Brand Attitude	0.402							
3. Ethnocentrism	0.101	0.105						
4. Foreign Product Knowledge	0.718	0.332	0.108					
5. Face Saving	0.140	0.251	0.077	0.065				
6. Group Conformity	0.162	0.285	0.115	0.077	<b>0.874</b>			
7. Perceived Product Quality	0.374	0.685	0.195	0.408	0.395	0.473		
8. Product Attitude	0.298	0.506	0.173	0.285	0.526	0.583	<b>0.884</b>	
9. Purchase Intention	0.296	0.427	0.336	0.290	0.467	0.646	0.773	0.806

### Structural Model Assessment

PLS-SEM does not have a standard for a goodness-of-fit statistic because its objective is prediction instead of evaluating model fit. Efforts for building corresponding statistics have been proven highly problematic (Henseler and Sarstedt, 2013). The coefficients of determination ( $R^2$ ) and path coefficient are alternative criteria to predict the endogenous constructs. The variance explained in endogenous constructs is 30% for the COO, 10.5% for brand attitude, 35.5% for perceived product quality, 60.8% for product attitude and 58.7% for purchase intention.



(Note: estimates of the path coefficient shown on the paths  
 \* p<0.05, \*\* p<0.01, \*\*\* p<0.001)

**Figure 2**  
**FINAL STRUCTURAL MODEL**

Figure 2 describes the final PLS-SEM results. The exogenous constructs are ethnocentrism, foreign product knowledge, face saving, and group conformity; the endogenous constructs are brand attitude, country of origin, perceived product quality, product attitude, and purchase intention. There are twelve out of fourteen hypotheses supported after running bootstrap (Table 4). The findings are consistent with the expectation of the positive effects of COO on product quality, and brand attitude, of brand attitude on perceived product quality as well as the positive effects of foreign product knowledge on COO and purchase intention. Moreover, results are also in line with the assumption of positive impacts of face saving, group conformity, and perceived product quality on product attitude and positive relationships of group conformity and product attitude on purchase intention. Furthermore, although the hypotheses of ethnocentrism’s negative effects on perceived product quality and purchase intention are also supported, findings also do not support the negative impact of ethnocentrism on purchase intention. In addition, the hypothesis of the positive effect of COO on purchase intention is not supported.

**Table 4**  
**RESULTS AFTER TESTING HYPOTHESES**

Hypothesis	Standardized Path coefficient	t-value	P-value	Results
<i>H1a: COO → Perceived Product Quality</i>	0.129	2.506	0.012	Supported
<i>H1b: COO → Brand Attitude</i>	0.323	6.214	0.000	Supported
<i>H1c: COO → Purchase Intention</i>	0.029	0.699	0.484	Not Supported
<i>H2: Brand Attitude → Perceived Product Quality</i>	0.519	11.808	0.000	Supported
<i>H3a: Ethnocentrism → Perceived Product Quality</i>	-0.124	2.980	0.003	Supported
<i>H3b: Ethnocentrism → Purchase Intention</i>	-0.181	5.373	0.000	Supported
<i>H4a: Foreign Product Knowledge → COO</i>	0.548	12.351	0.000	Supported
<i>H4b: Foreign Product Knowledge → Purchase Intention</i>	0.081	2.080	0.038	Supported
<i>H5a: Face Saving → Product Attitude</i>	0.132	3.455	0.001	Supported
<i>H5b: Face Saving → Purchase Intention</i>	-0.042	0.919	0.358	Not Supported
<i>H6a: Group Conformity → Product Attitude</i>	0.155	3.375	0.001	Supported
<i>H6b: Group Conformity → Purchase Intention</i>	0.284	5.911	0.000	Supported
<i>H7: Perceived Product Quality → Product Attitude</i>	0.644	20.066	0.000	Supported
<i>H8: Product Attitude → Purchase Intention</i>	0.533	11.817	0.000	Supported

According to Table 4, product attitude has the strongest effect on purchase intention with a standardized path coefficient of 0.533 and brand attitude has the strongest effect on perceived product quality with a standardized path coefficient of 0.519. In addition, perceived product quality also shows a very strong impact on product attitude with a high standardized path coefficient of 0.644. Although COO does not show any effect on purchase intention, its direct effects on brand attitude are higher than on perceived product quality (a standardized path coefficient of 0.323 versus 0.129). Similarly, face saving also does not have any effect on purchase intention and its effect on product attitude is not really high with a standardized path coefficient of 0.132. By contrast, group conformity shows moderating effects on product attitude and purchase intention (standardized path coefficient of 0.155 and 0.284, respectively). While foreign product knowledge performs a strong effect on the COO (standardized path coefficient of 0.323), its effect on purchase intention is relatively weak (standardized path coefficient of 0.081). Ethnocentrism is the only factor shows negative relationships; however, its effect on perceived product quality is a little smaller than on purchase intention, but both are relatively weak (standardized path coefficient of -0.124 and -0.181, respectively).

## IMPLICATIONS AND LIMITATIONS

### Theoretical Implications

The research contributes the insights of how COO and other predictors, including brand attitude, ethnocentrism, foreign product knowledge, group conformity, face saving, and product attitude affect purchase intention, which is one of the most important factors in the marketing literature. Specifically, the insights of interrelation among predictors are also explained and implemented in the Business-to-Consumer context of powder milk market.

Unlike previous researches (Wang, Li, Barnes and Ahn, 2012; Lee, 1990; Chung and Pysarchik, 2000), the empirical results from this study do not confirm the positive impacts of COO and face saving on purchase intention. However, some other previous studies pointed out that many people may not explicitly consider COO as a reason for buying a product (Hester and Yuen, 1987). In addition, Hugstad and Durr (1986) and Heslop (1993) reported the low relevance of COO for purchase intention. Furthermore, these insignificant relationships could be explained reasonably by the in-depth interviews. All correspondents confirmed that COO had been affected to their intention when buying powder milk and they had preferred imported powder milk until the domestic powder milk started to develop their brand names. In particular, at first the correspondents bought Abbott's powder milk because at that time Abbott was one of the most recognized brand names in the Vietnamese market, while domestic powder milk products have not improved the quality. However, when Vinamilk, the biggest domestic powder milk producer, carried out the successful revolution in popularizing the good and competitive quality of domestic product to obtain high trust by many Vietnamese consumers, many customers have been switching to this local brand name instead of buying foreign ones. In addition, the correspondents have appreciated the quality of Vinamilk's products. Moreover, the price and flavor of the domestic brands are adapted to fit Vietnamese tastes.

The correspondents indicate that although they highly perceive the COO of foreign products, this does not mean they will be loyal to foreign products and use them perpetually. If domestic products' quality is much more improved and is ensured, customers will be eager to buy domestic products and support domestic enterprises. In addition, interviewees also indicate that impressions from celebrity endorsements and social trend only affect their attitude to products, but when buying a product, they pay ample attention to nutritional values of powder milk.

By contrast, this paper investigates COO effect on perception of consumers toward product quality of imported powder milk for children, which makes a direct impact on product attitude. As a result, the study finds that COO has only an indirect effect via the impact of product attitude on purchase intention. In addition, foreign product knowledge is an important factor affecting COO level. When customers' foreign product knowledge level increases, then their awareness about COO of that product also increases. Besides COO effects, if customers are highly ethnocentric, they will feel negative about foreign products and also have no intention to buy those products. When customers' ethnocentrism is higher, they tend to buy domestic products rather than foreign products in order to protect domestic enterprises or business, so their purchase intention to foreign ones is low. This finding is consistent with the previous results (Balabanis and Diamantopoulos, 2011; Juric and Worsley, 1998), but it is not in line with the recent result of Balabanis et al. (2017). In addition, foreign product knowledge plays a significant role when customers' knowledge level is more and more diversified and they make efforts on searching information of imported products, especially new comers to take careful

consideration in the decision-making process. This finding is also consistent with the recent result of Cakici et al. (2017).

Group conformity is also an essential predictor for purchase intention and product attitude, in. Indeed, all correspondents agreed that each consumer has his/her own flavor and trust for which other people around customers can affect their decision and attitude. This result is consistent with the findings of Lee (1990) and Chung and Pysarchik (2000). Finally, the study shows that COO significantly influences on brand attitude. This result is in line with prior studies (Batra et al., 2000; Bilkey and Nes, 1982; and Han, 1989). This empirical result is also explained by the qualitative result of the product, which is made in the specific country. Therefore, this leads to change their attitude toward the perception of products' quality.

### **Practical Implications**

This study provides useful information for domestic milk enterprises as well as marketing companies for foreign brands to understand their customers' perception about domestic and foreign powder milk products. The findings will be useful for developing marketing strategies; health promotion strategies and government trade policies. Domestic products will be preferred to foreign ones if they attract more ethnocentric customers. The local enterprises could be more successful through nationalism advertising strategies. For example, one of very useful strategies currently is the "Vietnamese consume Vietnamese goods." Domestic enterprises can take advantages of this strategy to send out messages to potential customers to build up their image and reputation. Specifically, they should provide the strong guarantee for the quality of powder milk to enhance the positive attitude from consumers.

In addition, marketers should provide overall mix strategies combining factors such as brand image, ethnocentrism, product knowledge, and group conformity to encourage customers' intention in purchasing the domestic brand names instead of imported ones. Especially, marketing strategies should focus on strengthening positive attitudes from customers toward the brand image, which can lead to perception toward products' quality, then affect positive attitudes to products and intention to purchase as well. Although face saving does not directly affect customers' purchase intention of foreign products, it plays a vital role on product attitude, which has a very strong impact on purchase intention. Therefore, marketers should concern about aspects, which are implied for attributes of high social status into their advertisements to enhance customers' attitude to their products.

### **CONCLUSION**

This research investigates COO effects on customers' perception toward imported powder milk products for children through determining factors, which COO affects and how those factors influence purchase intention of imported powdered milk. In addition, although COO does not have a direct impact to customers' purchase intention, it does affect product attitude, which is a good predictor for purchase intention. Foreign product knowledge is an important factor affecting COO level. When customers' product knowledge level increases, then their awareness about COO of that product also increases. Besides COO effects, the findings illustrate that customers are highly ethnocentric; they will feel negative about foreign products and also have no intention to buy them. Otherwise, the findings indicate that product attitude has the strongest positively impact on purchase intention; meanwhile, group conformity and face saving also have significant relationship with purchase intention. Specifically, the paper also



conducts a qualitative study to support the empirical results. Finally, this research will provide useful information for domestic milk enterprises as well as marketing companies for foreign brands regarding potential customers in the Vietnamese market. Furthermore, the findings enable suppliers or managers to identify key determinants to improve the business strategies in this market.

## LIMITATIONS

One potential limitation of this research is that the scale is relatively small, which just focuses on one city and some popular foreign brands in Vietnam. Although the population in HCMC is diversified, its citizens' awareness is far different from other provinces in the countryside. Therefore, the results cannot cover all different Vietnamese characteristics and demographics. Another limitation is that the effect of COO is verified but this study just focuses on some aspects so the findings cannot contribute to the whole effect of COO in the marketing literature. As a result, future researchers should provide more COO's effects on other predictors; the direct effects of predictors and COO on product attitude should be examined, which can make valuable contribution to the marketing literature. In addition, the scale should be enlarged to conduct a more diversified sample size in different countries.

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