

# Factors Influencing Customer Perceived Quality and Purchase Intention toward Private Labels in the Vietnam Market: The Moderating Effects of Store Image

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## Abstract

This study aims to investigate how financial risk, performance risk, physical risk, store image and familiarity affect perceived quality and customer purchase intention toward private labels in Vietnamese context. Moreover, the moderating effects of store image are measured to gain deep knowledge into this proneness. The research model is designed to test in Ho Chi Minh City with 380 participants and collected data is analyzed by SEM method. The results indicate that performance risk, physical risk and store image significantly influence perceived quality. In addition, performance risk, physical risk and store image have indirect effect on purchase intention through perceived quality while only direct effect of familiarity on purchase intention is proved. Interestingly, the role of store image, which moderates the relationship between performance risk, physical risk and perceived quality, is strongly determined. Hence, store image is considered as a symbol of quality and risk reducer. From these findings, the research is expected to provide useful reference for retailers and marketers to come up with effective solutions associated with private labels. Lastly, this research still contains some limitations including sample size, product category and measurement scale, which need to be improved by further research.

**Keywords:** familiarity, perceived risk, perceived quality, private labels, purchase intention, store image

## 1. Introduction

### *1.1 Research Background*

The harsh competition in retailing market forces companies to have competitive strategies in order to differentiate their products from others rivals, achieve customers' loyalty and gain long-term profit. More seriously, most consumers gradually change their shopping habits due to the pressure of unfavorable economic condition and the increase of living costs. They become more sensitive to prices these days. Actually, while the shoppers try to spend less money purchasing, they still tend to seek higher quality from the products.

To deal with these difficulties, retailers globally start to produce products their own brand and only sell them in their stores. These products are also perceived as private labels. In fact, the more private label products are provided, the more alternatives the customers have. In other words, now customers have more choices to evaluate and purchase products with the same quality but at lower prices. The penetration of private labels is appreciated in most of the Western countries and regions; however, in the Asian-Pacific region consumers still refuse to buy private labels in spite of heavy promotional efforts (Sheau- Fen, Sun-May, & Yu- Ghee, 2012). Similarly, according to Euromonitor International, the vast US consumers evaluate that the quality of private labels is as good as that of national brands. By contrast, in Asia Pacific, the Middle East and Africa these products are perceived negatively (2013).

Concerning Vietnamese market, although the market size is relatively smaller than that of other Asian countries it is still expected to have vast growth owing to its population, improvement of consumers' income and distribution channels. After the entry of Metro Cash and Carry's products, private labels continue to be introduced by other big supermarkets namely Co.opMart, Big C and Vinatex Mart. Their product categories

focus on fresh and processed foods, household products and garments. A survey of Vinaresearch in Ho Chi Minh City and Hanoi shows that 81% of the informants used to buy private labels because of their attractive prices (2012). However, despite receiving big budget for promotional activities, the consumption of private labels in Vietnam market is not as high as other countries such as Thailand, Malaysia and Indonesia (Nielsen, 2011). It is because the consumers are lack of awareness of private labels and are afraid of risk.

### *1.2 The Research Problem*

With the potential growth of retailing market and the advantages of private label penetration, the question raised by retailers and marketers is what are the main reasons or key factors customers usually consider when they intend to buy private label products. Nevertheless, official studies having deep investigation into private labels in Vietnamese context remain limited. Hence, this study tries to fulfill these gaps by measuring the significant role of financial risk, performance risk, physical risk, perceived quality, familiarity and store image that influences customer purchase intention toward private labels. From research findings, managers and marketers gain good understanding about the behavior of Vietnamese buyers so that they can formulate effective strategies to improve products' quality, increase sales volume and enhance consumers' evaluation about private labels.

### *1.3 Theoretical Framework*

#### *1.3.1 The Concept of Private Labels*

The penetration of private labels has emerged for over 25 years. It is firstly perceived from the products with low quality and low prices to the offerings with acceptable quality in retailing environment (Burt, 2000). Traditionally, a private label (also called as store brand, own brand, house brand or distributor's brand) is early identified as "one which owned and controlled by an organization who primary economic commitment is distribution" (Schutte, 1969, p. 9). Sometimes private labels are owned, controlled and sold exclusively by a retailer (Raju, Sethuraman, & Dhar, 1995). Hoch (1996) conceptualizes that private labels have various forms, but they are usually carried by retailers such as an exclusive trademark, retailers' own name or other names that are only sold in the retailer's market.

#### *1.3.2 The Concept of Consumer Purchase Intention*

The phrase of purchase intention is used widely as an indicator of consumer purchase behavior after considering and evaluating the product (Grewal, Krishnan, Baker, & Borin, 1998). Ajzen defines: "intentions represent motivational components of a behavior, that is, the degree of conscious effort that a person will exert in order to perform a behavior" (1991, p. 201). In other words, purchase intention reflects the likelihood in which the consumers will buy certain products or services in the short-term buying decision (Wu, Yeh, & Hsiao, 2011).

#### *1.3.3 Summary of relevant research about private labels*

Several studies point out that perceived risk, perceived value for money, perceived quality, price-consciousness, trust, familiarity are determining factors that affect consumer attitude and purchase behavior toward private labels (Zeithaml, 1988; Dick, Jain, & Richardson, 1996; Baltas, 1997; Diallo, Chandon, Cliquet, & Philippe, 2013). Bettman's research early indicates that perceived risk, information and perceived-product-quality variables are seen as important factors that influence purchasing behavior (1974). Besides, some authors mention that customer attitudes toward private labels relate to their perception of prices (Burton, Lichtenstein, Netemeyer, & Garretson, 1998) while others argue that non-price factors may explain the private label proneness of consumers better than price indicator (Hoch & Banerji, 1993; Sheau-Fen et al., 2012).

In Asian-Pacific markets, Wu et al. (2011) find that store image has a direct and positive effect on consumer purchase intention in Taiwan context. Jaafar and Laip (2012) also provide the evidence about consumer purchase intention toward private label food products, which is associated with several factors namely intrinsic cues, extrinsic cues and consumer attitude. Finally, a finding investigated into hair care products in Malaysia by Sheau-Fen et al. (2012) suggest that risk factors and familiarity have both influence on both perceived quality and purchase intention. Based on previous studies and the research of Sheau-Fen et al. (2012), in this paper we develop a framework to measure the effects of consumer perceived risks on perceived quality and customer purchase intention toward private labels (food products) in Vietnamese market and the moderating effects of store image on these relationships. The relevant theories and previous findings to support our hypotheses are mentioned in the following section.

##### *a. Perceived quality*

Perceived quality is "the consumer's judgment about the superiority or excellence of a product" (Zeithaml, 1988, p. 4). May, Yoon and Kim also mention, "perceived quality refers to customer's evaluation of a product or a

brand that meet an individual's expectation" (2011, p. 273). Hoch and Banerji (1993) indicate that quality not price is the key success in the battle between national brands and private labels. In addition to this, some recent studies confirm that perceived quality is one of the most important criteria that affect consumer purchase intention toward private label products (Yang & Wang, 2010; Wu et al., 2011; Jaafar & Laip, 2012). By contrast, Chen (2008) argues, "consumers hope to spend less money on products, but they can acquire at least the same quality as other high-priced products" (p.27). Therefore, the different levels of quality perception of the consumers have different influences on their purchase intention. From that, the first hypothesis is:

H1: Perceived quality has a positive influence on consumer purchase intention toward private labels.

#### b. Perceived risk

The perception of risk originates from psychological field and this phrase is initially defined by Bauer (Bettman, 1973; Stone & Gronhaug, 1993; Wu et al., 2011). Bauer (1967) conceptualizes that "any action of a consumer will produce consequences which he cannot anticipate with anything approximating certainty, and some of which are likely to be unpleasant" (p. 14). In other words, this concept relates to situations in which the buyers have to handle the uncertainty of the new product involving both favorable and unfavorable outcomes (Stone & Gronhaug, 1993; Sheau- Fen et al., 2012). Consequently, when an individual feels that a typical product is risky, this person may decrease his purchase intention.

Prior studies consider perceived risk as multidimensional framework. Stone and Gronhaug (1993) measure it by six dimensions namely financial, performance, physical, psychological, social and time-related risks while Bettman (1973) separates it into two components including handled risk and inherent risk. In this research, three types of perceived are measured.

*Financial risk* describes the probability when the buyer is anxious about losing money after purchasing a particular product. Mitchell and Greg conceptualize: "financial risk includes concern about how much a shopping trip will cost relative to an individual's financial resources" (2005, p. 824).

*Performance risk* appears when consumers are afraid that the product does not perform satisfactorily or not provide benefits as promised. Bettman (1973) believes that consumers tend to use their own knowledge and experience to judge the performance of a specific product. Especially, if the consumers purchase a product at the first time, there is a significant increase in their risk perception due to lack of information or expert recommendation (Arslan, Gecti, & Zengin, 2013).

*Physical risk* reflects the concern of negative consequences that can damage the health or injure physically the users after using a typical product. Mitchell (1998) defines this phrase as a threat to consumers' health or appearance and it can be caused by unsafe products.

The effect of perceived risk on consumer purchase intention toward private labels has been widely observed. Semeijn et al. (2004) early confirm the negative effect of perceived risk on consumer's evaluation toward private label products. Thereafter, recent research also come up with the same findings (Mierer, Martin, & Gutierrez, 2006; Wu et al., 2011; Sheau- Fen et al., 2012; Arslan et al., 2013).

Moreover, Bettman (1973) early points out the unfavorable relationship between perceived risk and perceived quality. Sheau- Fen et al. (2012) mention that the feelings of uncertainty including performance risk and physical risk also negatively affect the perceived quality of the buyers, thus, it consequently decreases the likelihood of purchase decision. Finally, while the direct effects of perceived risk on consumer purchase intention are widely tested, its indirect effects through perceived quality have just been investigated by few studies, especially in Asian markets. Therefore, with the purpose of fulfilling this limitation, the next hypotheses of this study are stated:

H2-a: Financial risk has a negative influence on perceived quality

H2-b: Financial risk has a negative and indirect influence on customer purchase intention toward private labels through perceived quality.

H3-a: Performance risk has a negative influence on perceived quality

H3-b: Performance risk has a negative and indirect influence on customer purchase intention toward private labels through perceived quality.

H4-a: Physical risk has a negative influence on perceived quality

H4-b: Physical risk has a negative and indirect influence on customer purchase intention toward private labels through perceived quality.

### c. Familiarity

Familiarity is conceptualized that “the number of product related experiences that have been accumulated by the consumer” (Alba & Hutchinson, 1987, p. 411). These experiences come directly or indirectly from advertising exposures, interactions with salespersons, word of mouth communications or trial and consumption (Tam, 2008). With respect to private labels, familiarity is empirically proved as an important factor that motivates private label proneness by declining uncertainty. When private labels are more familiar to the buyers, the difference of risk perception between national brands and private labels becomes smaller (Mieres et al., 2006).

While the evidences of direct relationship between familiarity and purchase intention have been fully provided, the indirect relationship is only explored by few researchers. In the study of analyzing the difference between private labels and national brands, Mieres et al. (2006) believe that familiarity factor motivates the buyers to judge private labels as high quality alternatives when they lack experience about these products. This is to say, when consumers get more knowledge or information about private labels, they perceive their quality to be less different in comparison with national brands (Richardson, Jain, & Dick, 1996).

Lastly, Sheau- Fen et al. (2012) report that familiarity is the most significant determinant that has effect on consumer purchase intention toward private label directly and indirectly through perceived quality as well. Thus, according to this discussion above, the following hypotheses of this present study are:

H5-a: Familiarity has a positive and direct influence on customer purchase intention toward private labels

H5-b: Familiarity has a positive and indirect influence on customer purchase intention toward private labels through perceived quality.

### d. Store image

Martineau (1958) originally defines store image as “the way in which consumers perceive the store based on its functional quality and environmental attributes and covers service quality, price/value, convenience and product quality” (cited on Lin, 2013, p.191). In other words, the perception of store image is based on appraising the multi- attributes of a particular store (Wu et al., 2011). From that, consumers use store image to conclude their overall evaluation that can affect their attitudes toward private label proneness (Semeijn, Riel, & Ambrosini, 2004) or to judge private labels’ quality (Richardson et al., 1996).

Grewal et al. (1998) early point out the presence of positive relationship between the perceived quality of the brand and store image. Similarly, as the statement of Cudmore (2000), when the stores have favorable images, the quality of private labels from these stores is evaluated higher by the consumers. In addition, Vahie and Paswan (2006) clarify that two components of store image namely quality and atmosphere have positive effects on perceived quality of private labels. Apart from that, several authors are successful when they propose the effect of store image on customer purchase intention toward private label products (Wu et al., 2011; Diallo et al., 2013). However, the fact is that a numerous studies measure the direct effect of store image on purchase intention whereas the indirect effect through perceived quality remains unclear. Thus, two following hypotheses are stated in order to fulfill this limitation.

H6-a: Store image has a positive influence on perceived quality

H6-b: Store image has a positive and indirect influence on customer purchase intention toward private labels through perceived quality.

More attractively, the recent study of Rzem and Debabi (2012) enriches the foremost and diverse literature of store image by examining its moderating effect on the relationship between some perceptual variables including perceived risk, perceived quality, price consciousness, perceived value and consumer attitude toward private labels. The finding reveals that store image significantly modifies the relationship between perceived quality, perceived value, and price-consciousness and consumer attitude while the relationship between perceived risk and consumer attitude is not moderated by store image. Hence, this study attempts to explore the power of store image, which increases perceived quality and reduces perceived risk including financial risk, performance risk and physical risk in Vietnamese market again. The final hypotheses are proposed:

H7: Store image moderates the relationship between financial risk and perceived quality.

H8: Store image moderates the relationship between performance risk and perceived quality.

H9: Store image moderates the relationship between physical risk and perceived quality.

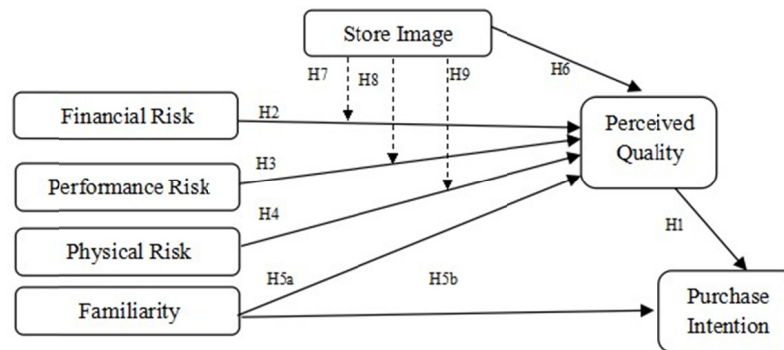


Figure 1. The research model

## 2. Research Methodology

### 2.1 Research Design

With the purpose of clarifying the research problem and confirming hypotheses as well, both qualitative and quantitative methods were employed to collect primary data in this research.

Regarding qualitative method, the predetermined questions were given to the informants by face-to-face interview. As a result, twelve of the fifteen respondents expressed that the uncertainty about quality, the reputation of retailers were important criteria when they were asked to evaluate about private label products. Hence, this first investigation provided strong confidence to confirm the suitability of research hypotheses and research model of this current study in Vietnamese context.

Following the finding of qualitative method, we designed the questionnaire to collect data in quantitative approach. In this research, the questionnaire was conducted from the literature review to test six factors that influenced consumer purchase intention towards private label food products. Compared to the former method, quantitative approach was far more popular because it could easily conclude and explain the research based on data analyzing results.

### 2.2 Product Selection

The study attempted to explore private label food products namely cooking oil, yogurt and cool meat, which were selected because of three reasons. Firstly, these products were usually sold in the investigated supermarkets, which had a wide range of both national brands and private labels. Secondly, they were relevant to the research model because it related to research factors, which the buyers used to concern when they decided to buy private labels. Lastly, these products were more familiar with the respondents. Hence, they had enough knowledge and experience to evaluate them and to provide accurate answers.

### 2.3 Participants Characteristics

The target sample for this survey included two large supermarkets in Ho Chi Minh City namely Co.opMart and BigC. They produced their private label products and sold them on their own stores. Moreover, in this survey the selected respondents had to satisfy three critical criteria namely: 1) either men or women aged 23 year olds and above, 2) had shopped in supermarkets for 3 months and 3) had known but had not bought private label products from two observed supermarkets above before.

### 2.4 Sampling Procedure

#### 2.4.1 Sample size

This study relied on some foundational theories to determine how many respondents taking part in. According to Harris (1985), the formula of calculating sample size associated to the standard of regression analysis is  $n \geq 104 + m$  (with  $m$  being the number of independent variables). However, to make sure that the sample was able to satisfy the requirement of Structural Equation Modeling (SEM), the total sample size in this research was finally determined at 400.

#### 2.4.2 Measurement scales

The questionnaire contained two main sections, which were originally designed in the English language and translated into Vietnamese version by the common method. Part I included five questions about the information of respondents and Part II composed 25 main items to measure seven variables by Five-point Likert scale (see

appendix A). All of the 25 items measuring seven variables were adapted from previous studies. Financial risk, performance risk and physical risk were adapted from Mieres et al. (2006) and Stone & Grønhaug (1993). Familiarity came from the research of Simonin and Ruth (1998) (as cited at Lin, 2013 and Dick et al., 1995). Next, Grewal et al. (1998) and Diallo et al. (2013) provided the measurement of store image variable. Perceived quality was adapted from Dodds, Monroe and Grewal (1991) and Jaafar & Laip (2012). Lastly, purchase intention was conducted from Grewal et al. (1998).

#### 2.4.3 Data Collection

In this research, the data was collected by using convenience-sampling method since it allowed a large number of respondents to be interviewed in a short period. Initially, 160 questionnaires with detailed guideline were distributed via Google Document, email and social network. Then, the results were automatically cleaned and summarized for analyzing process. The left 240 hard-copied questionnaires were delivered at some locations of the targeted supermarkets to access the respondents, especially household shoppers. The collectors explained and guided them to answer the survey and received the filled forms at once.

#### 2.5 Data Analysis

After collecting activities, all the available data was entered into software program. Prior to analyzing data, it was sure that there was no mistake occurring in accessing data. Besides, the reliability of data from the sample was also checked to satisfy the requirement of measurement scale. In general, this procedure included reliability test, EFA, CFA, SEM test and Bootstrap Estimate test. The SPSS 22.0 and AMOS 22 software were employed in this research.

### 3. Results

After the scanning step, totally 380 of appropriate questionnaires were used in analyzing process including two separated parts. In measurement scales test, data was initially evaluated by Cronbach's Alpha and EFA prior to accessing saturated model (CFA). In research model test, structural equation model (SEM) and Bootstrap estimates were employed to analyze the relationships between predictors and dependent variables. Besides, convergent validity, discriminant validity, composite reliability (CR) and average variance extracted (AVE) were calculated to confirm that measurement scales achieved reliability standard.

#### 3.1 Measurement Scale Test

##### 3.1.1 Cronbach's Alpha and EFA Results

All of seven variables had the Cronbach's alpha above 0.7, thus they achieved reliability test. However, to increase the index of perceived quality, the item - PQ1 was removed. Overall, 24 satisfied items were used in the following analysis techniques.

Thereafter, these items were analyzed by exploratory factor analysis (EFA) with Principal components method for extraction and Varimax method for rotation. The results presented that seven factors were extracted from measurement scales with extraction sum of squared loadings being about 67.7% (greater than 50%). The KMO index was significant at 0.889 and the Bartlett's Test of Sphericity had chi-square = 3807.376,  $df = 276$  and  $sig = .000$ .

##### 3.1.2 Confirmatory Factor Analysis (CFA) results

The model had 231 degrees of freedom with Chi-square = 372.820 at  $p = .000$ . The Chi-square/ $df = 1.614$  was less than two (Wheaton, Muthen, Alwin, & Summers, 1977) and three indices namely GFI (0.924), TLI (0.953) and CFI (0.961) were higher than 0.9 (Hopper, Coughlan & Mullen, 2008). The RMSEA was 0.040 ( $< 0.08$ , Hopper et al., 2008) and SRMR was 0.041 ( $< 0.05$ , Anderson & Gerbing, 1984). Generally, the results strongly indicated that research model received acceptable fit to the primary data. Besides, several indices to confirm the reliability and validity of measurement scales were also calculated in this part.

##### a. Convergent validity

To measure this criterion, standardized regression weights of 24 measurements were checked. Consequently, these loadings exceeded the recommendation of 0.05 (Anderson & Gerbing, 1984) with the highest and the lowest indices being 0.832 and 0.525. Furthermore, composite reliability (CR) and average variance extracted (AVE) were assessed. The findings indicated that seven variables had CR values above 0.6 (Bagozzi & Yi, 1988) and AVE more than 0.5 (Fornell and Larcker, 1981). Remarkably, AVE value of familiarity, store image and perceived quality were little below the standard of 0.05 at 0.450, 0.462 and 0.482 respectively, but they were acceptable (Sheau-Fen et al., 2012). Generally, these numbers adequately proved the convergent validity requirements. The detailed results of convergent validity test were presented at Table 1.

Table 1. Cronbach's alpha, composite reliability and AVE results

Factors	Cronbach's Alpha	Composite reliability (CR)	Average variance extracted (AVE)
Financial risk	0.840	0.841	0.638
Performance risk	0.829	0.833	0.624
Physical risk	0.829	0.831	0.621
Familiarity	0.700	0.705	0.450
Store image	0.746	0.752	0.462
Perceived quality	0.782	0.788	0.482
Purchase intention	0.817	0.818	0.600

### b. Discriminant validity

In terms of discriminant validity, the research tried to explore whether seven concepts were unrelated or not. The correlation coefficients and covariance of seven concepts conducted from CFA results were observed. At  $p$ -value <5%, all of the correlation of each pair of latent variables had the estimations below unity (Steenkamp & van Trijp, 1991, cited at Nguyen & Nguyen, 2011). In other words, they were exactly distinct.

#### 3.2 Research Model Test

To measure the moderating effects of store image, three interactions were computed by multiplying independent variables and moderators (Sauer & Dick, 1993). They were signed as FR\_X\_SI, PR\_X\_SI and PHYR\_X\_SI. Two types of model were analyzed including (1) the model in which three interactions were absent and (2) the model in which these interactions were present. Thereafter, difference of chi-square and  $p$ -value computed from two models were used to conclude the presence of moderator (Sauer & Dick, 1993).

##### 3.2.1 Theoretical Model without Moderating Effect (tested by SEM)

The structural model that carried all of seven main effects had degree of freedom= 235. The results were Chi-square = 422.302, Chi-square/df = 1.797,  $p$ -value = 0.000, GFI = 0.916, TLI = 0.939, CFI = 0.948, RMSEA = 0.046 and SRMR= 0.048. The chi-square/df below 2 was acceptable and GFI, TLI, CFI indices also achieved the recommendation which exceeded 0.9. Finally, RMSEA and SRMR adequately satisfied the cut-off suggestions of 0.05. Therefore, it was concluded that there was a satisfactory fit between the research model and the collected data.

In addition, the research model had  $R^2 = 0.685$  and the variance of perceived quality was approximately 68% of the predictors ( $R^2 = 0.676$ ). Performance risk, physical risk and store image were significant to explain the meaning of perceived quality whereas financial risk and familiarity had no meaning. In terms of effects on purchase intention, perceived quality and store image were significantly proved.

##### 3.2.2 Theoretical Model with Moderating Effect (Tested by SEM)

The findings of SEM indicated that the research model satisfied the requirement of model fit. Chi-square index was 493.809 ( $p = 0.000$ ) at 289 degree of freedom and chi-square/df was 1.709. The GFI, TLI and CFI achieved the standard of above 0.9. RMSEA= 0.043 and SRMR= 0.045 fulfilled the cut-off value of 0.5. As mentioned, the difference of chi-squares and  $p$ -value conducted from two types of model were found at 71.505 and 0.045 ( $p < 0.05$ ) respectively. The significance of difference chi-square confirmed the moderating effects of store image. The results of research model were showed at Figure 2 with the path and the estimates of standardized regression weights.

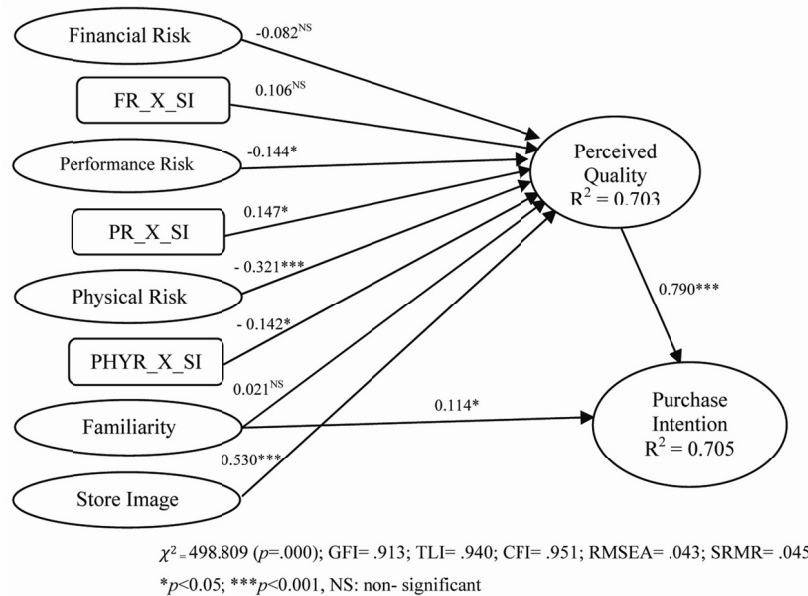


Figure 2. The SEM results of research model with moderating effect

Regarding to perceived quality, store image had the highest and positive effect on perceived quality with  $\beta = 0.530$ . Physical risk also played important role to explain perceived quality but in negative direction ( $\beta = -0.321$ ), which was followed by performance risk with  $\beta = -0.144$ . Thus, hypothesis 3a, 4a and 6a were accepted.

Turning to purchase intention, perceived quality had remarkable influence on purchase intention with  $\beta = 0.790$  at  $p < 0.001$ . Similarly, familiarity had  $\beta = 0.114$  at  $p < 0.05$ . In other words, hypothesis 1 and 5a were confirmed.

In another part of the research model, the relationship between financial risk and perceived quality was not significant with  $\beta = -0.082$  at  $p = 0.204$ . Hence, hypothesis 2a was definitely denied.

In terms of moderating effects, two of three interactions were found significant at the confidence level of 95%. The interaction of PR\_X\_SI had positive effects with  $\beta = 0.147$  whereas PHYR\_X\_SI had negative influence ( $\beta = -0.142$ ). The interaction FR\_X\_SI was not significant at  $p > 0.05$ . Finally, it was reasonable to confirm hypothesis 7, hypothesis 8 and reject hypothesis 9.

### 3.2.3 The Mediating Effects

To assess the indirect effects, the Bootstrap ML method with 1000 repeated sample was utilized (Cheung & Lau, 2008; Diallo et al., 2013). The findings presented that performance risk, physical risk and store image had significant influences on purchase intention through perceived quality at  $p < 0.05$  and  $p < 0.01$ . However, financial risk and familiarity had no effect on purchase intention through perceived quality at the confidence interval of 95%. To sum up, hypothesis 3b, 4b and 6b were accepted while hypothesis 2b and 5b were rejected.

Table 2. The results of indirect effects by Bootstrap estimate (standardized)

Relations				Estimate	p
Financial risk	→	Perceived quality	→	Purchase intention	-0.065 0.247
Performance risk	→	Perceived quality	→	Purchase intention	-0.113 0.038
Physical risk	→	Perceived quality	→	Purchase intention	-0.254 0.003
Familiarity	→	Perceived quality	→	Purchase intention	-0.097 0.738
Store image	→	Perceived quality	→	Purchase intention	0.292 0.005

## 4. Discussion

Perceived quality is the most important determinant affecting customer purchase intention. This finding is adequately fit with previous studies, which are conducted in private label context (Jaafar & Laip, 2012; Sheau-Fen et al., 2012). Furthermore, when being observed as a dependent variable, perceived quality is significantly influenced by three predictors. Among them, store image is considered as a momentous factor because the



consumers tend to evaluate the quality of private label products highly when they have good feeling about the image of the store. Hence, store image is viewed as an important symbol of quality in private label context, which is similar to many latest research findings (Richardson et al., 1996; Grewal et al., 1998; Cudmore, 2000).

Moreover, the indirect effect of store image on consumer purchase intention through perceived quality is also proved. In fact, Semeijn et al. (2004) accept that store image directly and positively influences consumer attitude about private labels; however, its indirect influence through perceived quality is still unrecognized. Thus, there is lack of evidence to compare the result conducted in Vietnamese context to other markets.

Next, while performance risk and physical risk have significant effect on perceived quality with negative direction, the effect of financial risk is definitely rejected. Besides, performance risk and physical risk also have negative and indirect effects on purchase intention through perceived quality. Hence, the current findings confirm the past studies, typically the research of Sheau- Fen et al. (2012) in Malaysian context. Actually, when people feel that private labels can or cannot meet their consuming expectation, they conclude the quality of private labels immediately. This phenomenon becomes more serious when the products are related to food because it can link directly with physical damage. Noticeably, despite the different product selections, the finding of the current research (choosing food products) is consistent with the conclusion of Sheau- Fen et al. (2012) (choosing hair care products). Hence, physical apprehension is considered as an important and sensitive matter, which the producers and retailers have to put more effort to handle.

By contrast, financial risk is found to have no influence on perceived risk and on consumer purchase intention indirectly. This result is different from previous findings (Semeijn et al., 2004; Mierer et al., 2006; Wu et al., 2011; Sheau- Fen et al., 2012; Arslan et al., 2013). This is because comparing to national brands, private labels in Vietnamese market are usually offered at competitive prices. This pricing strategy is the initial step to convince shoppers to turn into buying private label products, especially when consumers have to suffer high cost- living conditions these days. Thus, the fear of losing money when purchasing private labels is not present.

Familiarity is also found to have direct effect on purchase intention. In other words, when people are familiar with private labels, they will consider purchasing them. While other studies indicated that familiarity is the most powerful factor in predicting purchase intention toward private labels (Mieres et al., 2006; Sheau- Fen et al., 2012; Diallo et al., 2013), this factor is not strongly significant in this research. The fact is that private labels in Vietnamese context are not well realized by most people. Hence, it is not surprising that familiarity cannot be a signal of quality perception that motivates to buy private label products. As comment of Sheau- Fen et al. (2012), familiarity is still a challenge, which leads to less effect on consumer purchasing decision.

Interestingly, store image has moderating influence on the relationship between performance risk, physical risk and perceived quality. Noticeably, while the performance risk has negative effect on perceived quality, the value of its combination with store image is positive. In this case, the image of the store has huge power to change the fear of risk and increase the quality perception of the consumers. The better image the store is evaluated by buyers, the less performance risk occurs, which affects positively on perceived quality. Thus, store image becomes a strong risk reducer because it can guarantee the quality of private labels.

Differently, both the single effect of physical risk on perceived quality and the interactions have the same negative direction. It indicates that store image cannot change the negative relationship of physical risk and perceived quality completely. This is to say, when store image is evaluated higher, the fear of physical problem is perceived less, which still influences negatively on perceived quality. Actually, the issues associated with health concerns are still threats, which retailers have to control if they want to persuade shoppers to buy food products in general and private label food products in particular.

## **5. Conclusion and Limitations**

### *5.1 Conclusion*

Private label penetration now is an interesting field, which attracts numerous researchers and marketers from Western to Eastern regions. Compared to other Asian nations, this tendency has recently emerged in Vietnamese market and it still promises potential success. However, now private labels are facing some disadvantages, which may negatively affect quality perception of the consumer and decrease their purchase intention. One serious concern is the feeling of risk. This study finds that perceived quality, performance risk and physical risk are important factors that shoppers have to consider carefully prior to making purchase decision. In addition, the consumer's experience or familiarity level about private labels is not strong enough so that it is less meaningful to motivate them to buy these products. More surprisingly, the image of the store not only has positive influence on perceived quality but also has indirect influence on consumer purchase intention through perceived quality. In

addition, it is successful to determine the moderating effects of store image, which modifies the relationship between performance risk, physical risk and perceived quality. Hence, store image can be considered as a risk reducer, which guarantees and strengthens the quality of private label products.

### 5.2 Limitations

Although the study offers important information about private label proneness it still contains some limitations, which must be critically considered. Following that, future research can fulfill these drawbacks in order to make the research findings more valid. Firstly, the empirical research is conducted from supermarkets in Ho Chi Minh City, thus, its results may not absolutely reflect the consumer purchase intention toward private labels in Vietnam context. The reliability of this finding becomes higher if the survey is repeated in other cities with a bigger sample size. Secondly, the research only investigates food products, thus the results may not generalize the whole sights of private label proneness. The investigations from different product categories to make the comparison are recommended, for example kitchenware, body care or hair care. Lastly, the current research considers store image as uni- dimensional variable, thus, following research can deeply measure this concept with several components such as layout, merchandise, services (Semeijn, 2004; Ural, 2008).

### 6. Managerial Implications

Based on the research findings, some implications are suggested to boost the sales volume of private labels in the future.

Firstly, the study strongly demonstrates the important role of perceived quality that directly influences consumer purchase intention. Hence, it is obvious that the quality must be continuously improved to convince consumers and to compete with other brands. In order to receive high perception of quality, retailers should strictly manage the operation process and guarantee the quality standards.

Secondly, performance risk and physical risk are two critical factors that retailers have to put much effort to manage. The reality shows that private label cannot provide the confidence to consumers due to some failures in quality control process, especially in food products. It is necessary for producers to follow regulations related with food safety and quality management, provide transparent information about original producing, ingredients and quality standards. The production must be certified by the third party such as HACCP and ISO. Moreover, free samples and trial items should be used so that consumers can test and evaluate how the products perform subjectively. From that, the producers can receive the comments or recommendations of the buyers.

Thirdly, private label tendency has recently emerged in Vietnamese market, thus it cannot be denied that many people are unfamiliar. To eliminate the unfamiliarity of new and non-loyal shoppers, some promotional activities such as word-of-mouth, in-store experience or advantages of shelf space should be concerned to get the attention of buyers. This matter requires long-term actions to make private labels to be more popular in the market.

Finally, the retailers must remain and improve their images or prestige by some campaigns including service quality, the connection with clients and effective public relationships. From that, retailers can strengthen their brand name, create the confidence of consumers and acquire their loyalty. If all activities are applied and managed well, it not only leads to increase the perceived quality of the customers toward private labels but also reduces the fear of unsatisfactory consumption.

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### References

- AC Nielsen. (2011). *Global private label report: The rise of the value- conscious shopper*. Retrieved from <http://www.nielsen.com/us/en/newswire/2011/global-private-label-report-the-rise-of-the-value-conscious-shopper.html>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [http://dx.doi.org/10.1016/0749-5978\(91\)90020-t](http://dx.doi.org/10.1016/0749-5978(91)90020-t)
- Alba, J. W., & Hutchinson, W. J. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13(4), 411-454. <http://dx.doi.org/10.1086/209080>
- Anderson, J. C., & Gerbing, D. W. (1984). The effect of sampling error on convergence, improper solutions, and

- goodness-of-fit indices for maximum likelihood confirmatory factor analysis. *Psychometrika*, 49(2), 155-173. <http://dx.doi.org/10.1007/bf02294170>
- Arslan, Y., Gecti, F., & Zengin, H. (2013). Examining perceived risk and its influence on attitudes: a study on private label consumers in Turkey. *Asian Social Science*, 9(4), 158-166. <http://dx.doi.org/10.5539/ass.v9n4p158>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation model. *Journal of the Academy of Marketing Science*, 16(1), 74-94. <http://dx.doi.org/10.1007/bf02723327>
- Baltas, G. (1997). Determinants of private label choice: a behavioral analysis. *The Journal of Product and Brand Management*, 6(5), 315-324. <http://dx.doi.org/10.1108/10610429710179480>
- Bauer, R. A. (1967). Consumer behavior as risk taking. *Critical perspectives on business and management*, 3(3), 13-21.
- Bettman, J. R. (1974). Relationship of information- processing attitude structure to private brand purchasing behavior. *Journal of Applied Psychology*, 59(1), 79-83. <http://dx.doi.org/10.1037/h0035817>
- Burt, S. (2000). The strategic role of retail brands in British grocery retailing. *European Journal of Marketing*, 34(8), 875-890. <http://dx.doi.org/10.1108/03090560010331351>
- Burton, S., Lichtenstein, D. R., Netemeyer, R. G., & Garretson, J. A. (1998). A scale for measuring attitude toward private label products and an examination of its psychological behavioral correlates. *Journal of the Academy of Marketing Science*, 26(4), 293-306. <http://dx.doi.org/10.1177/0092070398264003>
- Cheung, G. W., & Lau, R. S. (2008). Testing mediation and suppression effects of latent variables: bootstrapping with structural equation model. *Organizational Research Method*, 11(2), 296-325. <http://dx.doi.org/10.1177/1094428107300343>
- Cudmore, B. A. (2000). *The effect of store image, package and price similarity on consumer perceptions of private label quality*. University of South Carolina. Retrieved from <http://search.proquest.com/docview/304628375/A9C0ED128BF74DF0PQ/1?accountid=63189>
- Diallo, M. F., Chandon, J. L., Cliquet, G., & Philippe, J. (2013). Factors influencing consumer behavior toward private labels: evidence from the French market. *International Journal of Retail & Distribution Management*, 41(6), 422-441. <http://dx.doi.org/10.1108/09590551311330816>
- Dick, A., Jain, A. K., & Richardson, P. S. (1996). How consumers evaluate private labels. *The Journal of Product and Brand Management*, 5(2), 19-28. <http://dx.doi.org/10.1108/10610429610119405>
- Dodds, W., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and private label information on buyers' product evaluation. *Journal of Marketing Research*, 28(3), 307-319. <http://dx.doi.org/10.2307/3172866>
- Euromonitor International. (2013). *The new face of private label: Global market trends to 2018*.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equations with unobservable variables and measurement errors. *Journal of Marketing Research*, 18(1), 39-50. <http://dx.doi.org/10.2307/3151312>
- Grewal, D., Krishnan, R., Baker, J., & Borin, N. (1998). The effect of store name, brand name and price discounts on consumers' evaluations and purchase intentions. *Journal of Retailing*, 74(3), 331-352. [http://dx.doi.org/10.1016/s0022-4359\(99\)80099-2](http://dx.doi.org/10.1016/s0022-4359(99)80099-2)
- Harris, R. J. (1985). *A primer of multivariate analysis* (2nd ed.). New York: Academic Press.
- Hoch, S. J. (1996). How should national brands think about private labels? *Sloan Management Review*, 37(2), 89-102. Retrieved from <http://sloanreview.mit.edu/article/how-should-national-brands-think-about-private-labels/>
- Hoch, S. J., & Banerji, S. (1993). When do private labels succeed? *Sloan Management Review*, 34(4), 57-67. Retrieved from <http://search.proquest.com/docview/224960867/980D2C3524D14226PQ/1?accountid=63189>
- Hopper, D., Coughlan, J., & Mullen, M. R. (2008). Structural Equation Modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Method*, 6(1), 53-60. Retrieved from <http://arrow.dit.ie/cgi/viewcontent.cgi?article=1001&context=buschmanart>
- Jaafar, S. N., & Laip, P. E. (2012). Consumers' perception, attitudes and purchase intention toward private label product in Malaysia. *Asian Journal of Business and Management Sciences*, 2(8), 73-90.

- Lin, Y. C. (2013). Evaluation of co-branded hotels in the Taiwanese market: the role of brand familiarity and brand fit. *International Journal of Contemporary Hospitality Management*, 25(3), 346-364. <http://dx.doi.org/10.1108/09596111311311017>
- Mieres, C. G., Martin, A. M. D., & Gutierrez, J. A. T. (2006). Antecedents of the difference in perceived risk between private labels and national brands. *European Journal of Marketing*, 40(1/2), 61-82. <http://dx.doi.org/10.1108/03090560610637310>
- Mitchell, V. W. (1998). A role for consumer risk perceptions in grocery retailing. *British Food Journal*, 100(1), 171-183. <http://dx.doi.org/10.1108/00070709810207856>
- Mitchell, V. W., & Greg, H. (2005). The importance of consumers' perceived risk in a retail strategy. *European Journal of Marketing*, 39(7/8), 821-837. <http://dx.doi.org/10.1108/03090560510601789>
- Nguyen Dinh Tho & Nguyen Thi Mai Trang. (2011). *Marketing Research: Structural Equation Modeling (SEM) Application* (2nd ed.). Ho Chi Minh City, Vietnam (in Vietnamese).
- Raju, J. S., Sethuraman, R., & Dhar, S. K. (1995). The introduction and performance of private labels. *Management Science*, 41(6), 957-978. <http://dx.doi.org/10.1287/mnsc.41.6.957>
- Richardson, P. S., Jain, A. K. & Dick, A. S. (1996). Household private label proneness: A framework. *Journal of Retailing*, 72(2), 159-185. [http://dx.doi.org/10.1016/s0022-4359\(96\)90012-3](http://dx.doi.org/10.1016/s0022-4359(96)90012-3)
- Rzem, H., & Debabi, M. (2012). Store image as a moderator of private label attitude. *Journal of Business Studies Quarterly*, 4(1), 130-148. Retrieved from [http://jbsq.org/wp-content/uploads/2012/09/JBSQ\\_Sept2012-9.pdf](http://jbsq.org/wp-content/uploads/2012/09/JBSQ_Sept2012-9.pdf)
- Sauer, P. L., & Dick, A. (1993). Using moderator variables in structural equation models. *Advances in Consumer Research*, 20, 636-640. Retrieved from: <http://acrwebsite.org/volumes/7532/volumes/v20/NA-20>
- Schutte, T. F. (1969). The semantics of branding. *The Journal of Marketing*, 33(2), 5-11. <http://dx.doi.org/10.2307/1249395>
- Semeijn, J., Riel, A. C. R., & Ambrosini, A. B. (2004). Consumer evaluations of private label: effects of store image and product attributes. *Journal of Retailing and Consumer Services*, 11(4), 247-258. [http://dx.doi.org/10.1016/s0969-6989\(03\)00051-1](http://dx.doi.org/10.1016/s0969-6989(03)00051-1)
- Sheau-Fen, Y., Sun-May, L., & Yu-Ghee, W. (2012). Private label proneness: Effects of perceived risks, quality and familiarity. *Australasian Marketing Journal*, 20(1), 48-58. <http://dx.doi.org/10.1016/j.ausmj.2011.10.014>
- Stone, R. N., & Gronhaug, K. (1993). Perceived risk: Further considerations for the marketing discipline. *European Journal of Marketing*, 27(3), 39-50. <http://dx.doi.org/10.1108/03090569310026637>
- Tam, J. L. M. (2008). Brand familiarity: its effects on satisfaction evaluations. *Journal of Services Marketing*, 22(1), 3-12. <http://dx.doi.org/10.1108/08876040810851914>
- Vahie, A., & Paswan, A. (2006). Private label brand image: its relationship with store image and national brand. *International Journal of Retail and Distribution Management*, 34(1), 67-84. <http://dx.doi.org/10.1108/09590550610642828>
- Vinasearch. (2012). The habits of using supermarkets' private label products of consumers. *W&S market research*.
- Wheaton, B., Muthen, B., Alwin, D. F., & Summers, G. (1977). Assessing Reliability and Stability in Panel Models. *Sociological Methodology*, 8(1), 84-136. <http://dx.doi.org/10.2307/270754>
- Wu, P. C. S., Yeh, G. Y., & Hsiao, C. R. (2011). The effect of store image and service quality on brand image and purchase intention for private label brands. *Australasian Marketing Journal*, 19(1), 30-39. <http://dx.doi.org/10.1016/j.ausmj.2010.11.001>
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22. <http://dx.doi.org/10.2307.1251446>

## Appendix A

### Measurement Scale and Sources

Concepts	Measurements	Sources
<b>Financial Risk</b>	<b>FR1.</b> I think buying private label food products will be a bad way to spend my money	Mieres et al. (2006)
	<b>FR2.</b> I concern that I will not get my money's worth from private label food products	Stone and Grønhaug (1993)
	<b>FR3.</b> I think it is not a wise way of spending money	(1993)
<b>Performance Risk</b>	<b>PR1.</b> I worry about whether private label food products will really perform as well as it is supposed to	Mieres et al. (2006)
	<b>PR2.</b> I am uncertain that private label food products will not provide real value that I expect	Stone and Grønhaug (1993)
	<b>PR3.</b> I am concern that private label food products are not going to give me a good result	
<b>Physical Risk</b>	<b>PHYR1.</b> I am afraid that private label food products may not be safe for my family and me	Mieres et al. (2006)
	<b>PHYR2.</b> I am afraid that private label food products may damage my health	
	<b>PHYR3.</b> I am concerned about some potential physical harm associated with private label food products.	
<b>Familiarity</b>	<b>FAMI1.</b> I am familiar with private label food products but I have not bought it before	Simonin and Ruth (1998)
	<b>FAMI2.</b> I can recognize private label food products	
	<b>FAMI3.</b> I had heard of private label food products before	Dick et al. (1995)
	<b>FAMI4.</b> I know available private label food products well	
<b>Store Image</b>	<b>SI1.</b> The store provides a wide range of products	Grewal et al. (1998)
	<b>SI2.</b> The products displayed in this store have good quality	Diallo et al. (2013)
	<b>SI3.</b> The products of this store are good value for money	
	<b>SI4.</b> The store carries high quality and prestige merchandise	
<b>Perceived Quality</b>	<b>PQ1.</b> I think quality is the prior criteria I consider when I buy private label food products	Dodds et al. (1991)
	<b>PQ2.</b> Private label food products provide clearly their ingredients	Jaafar and Laip (2012)
	<b>PQ3.</b> I think private label food products taste good	
	<b>PQ4.</b> Private label food products are reliable such as their original	
	<b>PQ5.</b> I think private label food products seem to be good in quality	
<b>Purchase Intention</b>	<b>PI1.</b> I will purchase private label food products	Grewal et al. (1998)
	<b>PI2.</b> I will consider buying private label food products	
	<b>PI3.</b> The probability that I will buy private label food products	

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