**International Journal of Marketing, Communication and New Media**
ISSN: 2182-9306. Special Issue 4 – Luxury Marketing, NOV 2018
IJMCNM

# Buying Luxury Brands Online: The effect of money-back guarantee on perceived risk and purchase intention.

Muhammad Ashfaq*
Jiang Yun**
Abdul Waheed***
Amir Zaib Abassi****

## ABSTRACT

The purpose of this study is to investigate the effectiveness of money-back guarantee (MBG), quality label, and website quality on perceived risk and purchase intention based on the signaling theory. Primary data were collected using a convenience sampling technique and the online approach, where 210 responses were analyzed. Structural equation modeling (SEM) using SmartPLS3 was applied to determine the relationships among hypotheses. The findings confirmed that MBG and quality label influence risk perception, which in turn, enhance purchase intention. In addition, website quality has a positive effect on purchase intention, while website quality has a non-significant influence on risk perception. Perceived risk plays a mediating role in linking MBG, quality label, website quality, and purchase intention. Notably, we found that MBG is more useful and significant signal than a quality label and website quality in influencing buyers' intention to purchase luxury brand online and reducing consumers' risk perception. This research suggests that e-retailers can reduce consumers' risk perception and increase purchase intention by offering MBG to luxury products.

**Keywords:** Luxury products, money-back guarantee (MBG), quality label, website quality, consumers' buying behaviour, risk analysis, signaling theory.

* School of Business Administration, Dongbei University of Finance and Economics, Dalian, China. E-Mail: muhammad.ashfaq0209@gmail.com
** School of Business Administration, Dongbei University of Finance and Economics, Dalian, China. E-Mail: jiang.yun@dufe.edu.cn
*** School of Economics and Management, University of Science and Technology, Beijing, China. E-Mail: abdulwaheed168@gmail.com
**** Faculty of Management Sciences, Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology, Islamabad, Pakistan. E-Mail: aamir.zaib.abbasi@gmail.com

**Received on**: 2018.08.28

**Approved on**: 2018.11.24

Evaluated by a double blind review system

## 1. INTRODUCTION

In the present corporate world and technological environment, the Internet performs an indispensable role in all business activities (Waheed & Jianhua, 2018). Such trend to shop using the internet has become inseparable from society today (Beuckels & Hudders, 2016). Products which are sold online one-click away from the buyer, irrespective of space and time (Okonkwo, 2009). The luxury marketers also flinch from embracing the e-commerce environment for selling their luxury products to maximize the profit (Geerts, 2013). Nowadays, the presence of luxury brands on the internet is an essential and crucial for buyers' decision-making process in all phases together with information search, need recognition, the actual purchase, and evaluation of alternatives (S.-J. Chen & Chang, 2003; Holmes, Byrne, & Rowley, 2013). The online luxury fashion brands environments fluctuate from social networking sites, actual webstores or online informational websites (Hennigs, Wiedmann, & Klarmann, 2012; A. J. Kim & Ko, 2012). The luxury players are also arguing to go for e-commerce due to the downturn in traditional offline retail performance (McKinsey&Company, 2015). In addition, the Baston Consulting Group published a report with an entitled "Digital or Dei: The Choice of Luxury Brands" (Boston, 2016). According to Boston (2016), for luxury brands, digital initiatives have become compulsory to recruit young consumers, but they are also an increasingly mandatory way to appeal to older customers. Digital gives luxury products new ways to understand their customer better than ever (Boston, 2016). To capitalize on the e-commerce trend for luxury goods, the world leader in high-quality luxury products, the LVMH is also going to introduce its online site with all its brand under one luxury products site (Ellison, 2017).

However, shopping for luxury brands as well as non-luxury brands through the internet has raised some issues previously. For instance, the absence of feel or touch, tangible, trained staff, or direct access to products (Kluge & Fassnacht, 2015; Pappas, 2016). In an e-commerce environment, buyers cannot feel or touch the goods (B. Chen & Chen,

2017), while in brick-and-mortar (B&M) store, consumers can touch the product, fit the product, speak to a salesperson, check the product quality, and feel the product fabric. In contrast, shopping through online platforms, buyer trust in product information, video, image, and other consumers' comments or reviews (Gai, 2014; Yu, Hudders, & Cauberghe, 2018). The internet buyers are often more conscious, sensitive, and nervous about buying luxury products online. Therefore, e-commerce of luxury fashion brands is a difficult task and challenge for luxury marketers (Yu et al., 2018). Selling luxury brands online is a tough challenge for luxury players (Yu et al., 2018) because buyers need to pay a premium price. Therefore, high-risk level involved together with product quality uncertainty (Liu, Burns, & Hou, 2013; Wu, Chen, & Chaney, 2013). Buyers may also have a concern that the luxury brand is sold online may have inferior product quality, counterfeits or even worse (Yu et al., 2018). Consequently, the products purchased through an online often return due to wrong size or color or shape slightly differ from the customer expectations (Mostard & Teunter, 2006) and these goods are generally supposed to be turned out (S. Kim, 2013).

Online retailers have to find some sufficient ways to reduce perceived risk for luxury consumers. In this regard, Yu et al. (2018) suggested that a quality label (e.g., "100% premium quality guarantee", "100% authentic or premium label") for luxury brands reduce the perceived risk and can be the best risk-relieving strategy for luxury consumers. Van Noort, Kerkhof, and Fennis (2008) also proposed some safety cues (e.g., privacy policy, general terms, and conditions, safety warranty, customer reviews) which help retailers to abate the risk of consumers' and enhance purchase intention. Apart from the quality label and safety cues, Shen, Vel, and Khalifa (2016) reported that web design influences customer-based brand equity (CBE). Shen et al. (2016) confirmed that the web design aesthetic element like an aesthetic formality (e.g., "website simplicity and legibility") and aesthetic appeal (e.g., "hedonic web quality and the overall impressiveness") could obtain a luxury sense, which in turn influence positively CBE. Moreover, in an online environment, the quality of the website influences significantly consumers' risk perception, trust, and intention to purchase (Hsin Chang & Wen Chen, 2008).

Many retailers offer a money-back guarantee (MBG) to attract buyers such as 30 days money-back guarantee. Customers' get their money back if they return the goods for any reason during a particular period (Davis, Gerstner, & Hagerty, 1995). In addition,

MBG signal (e.g., 100% money-back guarantee) helps to reduce consumers' risk perception, in turn, consumers' more likely to purchasing (Jeng, Huang, Chou, & Teng, 2014; Oghazi, Karlsson, Hellström, & Hjort, 2018). Previous studies showed that retailers could get benefits buy offering MBG (i.e., 30 days money-back guarantee or 100% money-back guarantee) in an offline environment (B. Chen & Chen, 2017; Jeng et al., 2014; Suwelack, Hogreve, & Hoyer, 2011). Furthermore, several studies suggested different ways such as website design and quality (Hsin Chang & Wen Chen, 2008; Shen, Vel, & Khalifa, 2016), privacy policy (Van Noort et al., 2008), product images, video, and customers' reviews (Gai, 2014; Yu et al., 2018), safety warranty (Van Noort et al., 2008), label quality (Yu et al., 2018), and MBG (Jeng et al., 2014; Oghazi et al., 2018) to diminish perceived risk and enhance purchase intention in different contexts. However, prior researchers have not studied the effects of MBG, quality label, and website quality on perceived risk and intention to purchase in the contexts of buying luxury fashion brands through the internet (B. Chen & Chen, 2017; Jeng et al., 2014; Oghazi et al., 2018; Yu et al., 2018). Also, research on MBG can influence buyers' risk perception, and purchase intentions towards online shopping of luxury brands do not exist.

Therefore, The first purpose of this study is to investigate the effectiveness of an MBG, quality label, and website quality on intention to purchase luxury brands online with the mediating role of risk perception. The second objective is to examine which factor (e.g., MBG, quality label, website quality) has more influence on consumers' risk perception, and in turn, purchase intention. We organized this article as follow: First, the brief academic literature on signaling theory, MBG, perceived risk, quality label, web quality, and purchase intention is provided. Subsequently, hypotheses and conceptual framework are developed. Then the research methodology is presented, and results are discussed. Finally, in concluding remarks, we propose implications and future study.

## 2. LITERATURE REVIEW AND HYPOTHESES FORMATION

### 2.1 Signaling Theory and MBG

Signaling theory in management explains how to use of signals effectively between individuals and organization and how to reduce the asymmetry information between two parties (Spence, 1973, 2002). This theory also implemented to explains the behaviour of candidates in job markets (Spence, 1973). In job markets applicant send a

signal to the company by showing their competitiveness, skills, and academic credentials during finding a job (Spence, 1973). In order to describe behaviour, "signaling theory is useful when two parties (sender and receiver) have an approach to different information" (Connelly, Certo, Ireland, & Reutzel, 2011). Scholars applied this theory in different contexts such as financial stock market (Zhang & Wiersema, 2009), luxury consumption and e-commerce (Drake, Hall, Cegielski, & Byrd, 2015; Hudders, De Backer, Fisher, & Vyncke, 2014), and e-commerce of luxury brands (Yu et al., 2018). In an e-commerce context, where the sellers (online retailers) have more hold on the products information source whereas the buyers (online shopper) are confronted with less information (Yu et al., 2018). Online shoppers rely more on the signal provided by the sellers to evaluate the product (Atkinson & Rosenthal, 2014). In the traditional offline environments, buyers can evaluate the product by touching, smelling, and even observing. Shopping through the internet, buyers can only judge the goods by evaluating the imperfect or incomplete information provided by the retailers (Yu et al., 2018).

Scholars have studied the relationships between MBG, risk perceived, and purchase intentions in different contexts (Jeng et al., 2014; Mitchell, 1999; Oghazi et al., 2018; Suwelack et al., 2011; Wood, 2001). In this corporate world and technological environment where asymmetry information available, consumer believes on a signal such as MBG, and quality labels provided by the sellers during purchasing (Jeng et al., 2014; Oghazi et al., 2018; Yu et al., 2018). In buyer decision-making process, the perceived risk concept plays a crucial role (Mitchell, 1999). Since sometimes buyers do not want to make mistakes, instead of capitalizing on their utility, perceived risk or risk perception generally prevents purchasing (Mitchell, 1999). MBG helps to reduce the negative influence of buyer risk and uncertainty (Wood, 2001). Scholars have confirmed that MBG assists as mechanisms of reducing-risk which increase seller profit and enhance demand in different contexts (McWilliams & Gerstner, 2006; Petersen & Kumar, 2009). For instance, MBG is a signal by the retailer believes in their products quality (Bonifield, Cole, & Schultz, 2010), it minimize consumers' risk perception and influence positively intention to purchase (Jeng et al., 2014; Oghazi et al., 2018), it affects positively emotional response, thereby consumers' willingness to pay a premium price and enhancing intentions to purchase (Suwelack et al., 2011), and it positively influences the buyer's responses to experienced products and search (Suwelack et al.,

2011). Therefore, based on the literature review, the researchers propose hypotheses as follow:

***Hypothesis 1:*** *Online shopping for luxury brands, MBG will reduce consumers' risk perception.*

***Hypothesis 2:*** *Online shopping for luxury brands, MBG will enhance consumers' purchase intention.*

**2.2 Quality Labels and Website Quality**

In marketing literature, the quality label displayed on the products received growing attention (Moussa & Touzani, 2008). Based on the signals, which displayed on the products such as quality label (e.g., "100% premium quality guarantee", "100% authentic or premium label"), seals of approval or certification marks, consumers infer the product quality (Moussa & Touzani, 2008). However, the scholars studied quality labels mostly in the food industry (Aprile, Caputo, & Nayga Jr, 2012). Aprile et al. (2012) confirmed that quality labels influence consumers' buying decision process, for instance, buyers are ready to pay more price for a good with a quality label. According to Akerlof (1997) asymmetry information evokes risk perception and uncertainty. Therefore, shopping through web-based online is riskier than through an offline channel (Grabner-Kraeuter, 2002). However, for e-retailers, the quality label might be an appropriate tool to decrease consumers' risk perception (Urban, Sultan, & Qualls, 2000). Hence, we have the following hypotheses regarding the effects of quality labels on risk perception and purchase intention.

***Hypothesis 3:*** *Online shopping for luxury brands, a quality label will reduce consumers perceived risk.*

***Hypothesis 4:*** *Online shopping for luxury brands, a quality label will increase consumers purchase intention.*

Aladwani and Palvia (2002) defined web quality as "the users' assessment of whether a website features and characteristic conformed to their needs and imitated the overall web excellence." The quality of website influences the users' perception since it is retailer portal which can users use to make transactions (Ahn, Ryu, & Han, 2007). A well-designed and well-organized website leave a favorable impression, and positive impact since viewer replies to visual signals and the viewer with positive website impact are more expected to become a purchaser (Caruana, 2003; Napier, Judd, Rivers, & Wagner, 2001). The quality of a website affects risk perception, which in turn,

escalation consumers' intention to purchase in the online store environment (Hsin Chang & Wen Chen, 2008). Hsin Chang and Wen Chen (2008) found positive relationships between website quality, consumers' trust, risk, and intention to purchase.

Furthermore, website quality was measured by four dimensions (e.g., "technical adequacy, content quality, special content, and appearance") proposed by (Hsin Chang & Wen Chen, 2008). Technical adequacy designates that web-retailer adopted appropriate and latest technologies such as availability of navigation, valid links, ease of access, search facilities, and so on. Content quality means that usefulness, accurate, and complete information available on the website. Special content deals with specific attributes such as to findings of the products or services details, general information about the company (e.g., goals, owners), contact information, and so on. Appearance refers to the website visual attractiveness such as font, colours, attractiveness, and well-organized (Hsin Chang & Wen Chen, 2008). However, authors have studied the effectiveness of web quality on consumers' risk perception and intention to purchase in different contexts. Therefore, we propose hypotheses and conceptual framework (see Fig.1) as follow:

***Hypothesis 5:*** *Online shopping for luxury brands, website quality will reduce buyers risk perception.*

***Hypothesis 6:*** *Online shopping for luxury brands, website quality will enhance buyers purchase intention.*

***Hypothesis 7:*** *Online shopping for luxury brands, lessen the perceived risk will lead to higher purchase intention.*

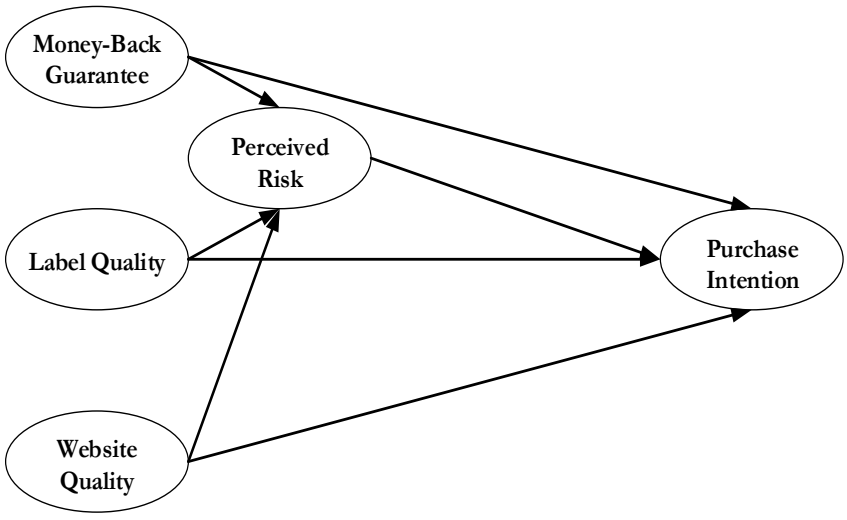


**Figure 1.** Conceptual Framework

## 3. METHODOLOGY

### 3.1 Subjects and Sample

The subjects of this study were customers who have experience with luxury fashion products through web-based online. Data from 210 male and female respondents in China were collected using the convenience sampling technique (non-probability sampling). As the researchers selected luxury products (i.e., Gucci and Hermès handbag and shoes), both male and female were invited to participate in the research. There were slightly more male (108 responses, 51.4%) than female (102 responses, 48.6%). There were also more young respondents aged between 21-30 years (141 responses, 67.1%). Their level of education was Bachelor (75 responses, 35.7%), Master (61 responses, 29.0%), Ph.D. (58 responses, 27.6%), and other (16 responses, 7.6%), respectively. Additionally, we included only respondents' which have income above ¥2000, as the researchers targeted to "luxury consumers" (¥2000-3000;124 responses, 59.0%). Furthermore, the demographic findings are presented in Table 1.

| **Characteristics** | **Distribution** | **Frequency** | **Percentage %** |
|---|---|---|---|
| Gender | Male | 108 | 51.4 |
| | Female | 102 | 48.6 |
| Age (Years) | < 20 | 29 | 13.8 |
| | 21-30 | 141 | 67.1 |
| | 31-40 | 35 | 16.7 |
| | 41-50 | 05 | 2.40 |
| Education | Bachelor | 75 | 35.7 |
| | Master | 61 | 29.0 |
| | PhD | 58 | 27.6 |
| | Other | 16 | 7.60 |
| Income/Month (RMB) | 2000-3000 | 124 | 59.0 |
| | 3001-4000 | 43 | 20.5 |
| | 4001-5000 | 13 | 6.20 |
| | 5001-6000 | 15 | 7.10 |
| | >6000 | 15 | 7.10 |

| | | | |
|---|---|---|---|
| Do you have online purchasing experience of luxury brands such as Gucci and Hermès (i.e., handbag or shoes)? | Yes | 210 | 100.0 |
| How long have you been shopping online for luxury brands? | <1 year | 110 | 52.4 |
| | 1-2 years | 42 | 20.0 |
| | 2- 3 years | 27 | 12.9 |
| | 3-4 years | 12 | 5.7 |
| | >4 years | 19 | 9.0 |

**Table 1.** Respondents' Characteristics (*n* = 210).

### 3.2 Measures and Selection

All variables used in this study have been tested by scholars in different contexts (see table 4). A seven-pint-Likert scale was used (1 = strongly disagree) and (7 = strongly agree). The questionnaire was based on 34 items in total; including 28 scale items (Table 4) and six demographic items (Table 1). The Cronbach's Alphas of all variable were above 0.85. First, perceived risk was measured by five items adapted from the study of Hsin Chang and Wen Chen (2008). MBG was measured by adapting four items using the scale developed by Jeng et al. (2014) and Suwelack et al. (2011). To estimate the website quality including (technical adequacy, content quality, special content, and appearance), the scale developed by Hsin Chang and Wen Chen (2008) was adopted. Label quality was assessed by four items adapted from the study by Vigneron and Johnson (2004). To measure purchase intention, three items were employed from the instruments developed by Hsin Chang and Wen Chen (2008). The factor loading (FL) of all items were above 0.70 which are significant statistically at the $p < 0.01$ level. All information about the variables which were used in this research, including scale items of each variable and source are shown in Table 4.

## 4. DATA ANALYSIS AND RESULTS

Data were analyzed using SPPS and SmartPLS3. Inter-correlation and descriptive statistics among the constructs were performed. As seen in Table 2, the mean ranged from 4.71 to 5.16, and SD ranged from 0.98 to 1.33. In addition, correlation is significant at the 0.01 Level (2-tailed) among variables. The results are summarized in Table 2.

| Variables | Mean | SD | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|
| Perceived Risk | 4.71 | 1.33 | **0.813** | | | | |
| Website Quality | 5.04 | 0.98 | .331** | **0.886** | | | |
| Quality Label | 5.16 | 1.11 | .390** | .741** | **0.853** | | |
| Money-Back Guarantee | 4.93 | 1.04 | .433** | .637** | .608** | **0.859** | |
| Purchase Intention | 4.96 | 1.11 | .197** | .645** | .626** | .609** | **0.884** |

**Table 2.** Correlation Matrix, Discriminate Validity, and Descriptive Statistics *(n = 210).*

***Notes:*** ***. Correlation is significant at the 0.01 level (2-tailed). AVEs square root is shown diagonally*

### 4.1 Measurement Model

Before examining the structural model, the overall model fitness was performed by using SmartPLS3. Root means square residual (SRMR) and normalized fit index (NFI) can test the model fitness (Byrne, 1998; Hu & Bentler, 1999). In this study, the value of the SRMR was 0.04, and the value of the NFI was 0.91 (Table 3). According to Hu and Bentler (1999), the cut-off value of SRMR is 0.08, whereas the value of NFI should be higher than 0.9 (Byrne, 1998). Hence, the overall model was fit and acceptable, as we found the values of SRMR 0.04 and NFI 0.91.

| Measures | Recommended Criteria | Structural Model | Scholars |
|---|---|---|---|
| SRMR | < 0.08 | 0.04 | (Hu & Bentler, 1999) |
| NFI | > 0.9 | 0.91 | (Byrne, 1998) |

**Table 3.** Results Model Fitness

Reliability and validity of the variables were measured by Cronbach's alpha (α), composite reliability (CR), and average variance extracted (AVEs) (see Table 4). The alphas of all the variables' were above the recommended 0.7 level (Nunnally, 1978). The composite reliability (CR) of the variables should be greater 0.7 (Hair, 1998). The CR of the variables was above the suggested 0.7 level (Hair, 1998). The AVEs and factor loading (FL) can examine convergent validity. All constructs have AVEs above the proposed level (Bagozzi & Yi, 1988). According to Hair (1998), items which have

FL above 0.50 were significant. However, FL of the items should be above 0.70, as suggested by Fornell et al. (1982). In the structural model, the FL of all research items were above 0.70 which were significant at the $p<0.01$ level. Therefore, validity and readability of the constructs were adequate in the model. In addition, to confirm the degree of differentiation among constructs, discriminant validity (DV) was examined using AVEs square root and inter-correlation between variables. As stated by Fornell and Larcker (1981) DV can be measured through the square root of AVEs. The AVEs square root should be higher than the correlation value of the variables (Fornell & Larcker, 1981). In this study, the AVEs square root is higher than the intercorrelation among constructs' (see Table 2). In summary, all results confirm alphas, CR, and AVEs (see Table 4).

| **Instruments Items** | **Loading** | **α** | **AVEs** | **CR** |
|---|---|---|---|---|
| **Perceived Risk** (Hsin Chang & Wen Chen, 2008). | | 0.871 | 0.661 | 0.907 |
| I believe that online purchases of luxury brands are risky because the products delivered may fail to meet my expectations. | 0.861 | | | |
| I believe that online purchases of luxury brands are risky because the products delivered may be inferior. | 0.875 | | | |
| I believe that online purchases of luxury brands are risky because these purchases may lead to financial loss for me. | 0.825 | | | |
| I believe that online purchases of luxury brands are risky because these purchases may lead to a time loss for me. | 0.732 | | | |
| I believe that online purchases of luxury brands are 0risky because the products delivered may fail to fit well with my personal image or self-concept. | 0.763 | | | |

| | | | | |
|---|---|---|---|---|
| **Money-Back Guarantee** (Jeng et al., 2014; Suwelack et al., 2011). | | 0.883 | 0.739 | 0.919 |
| I believe if the online retailer promises a money-back guarantee, I will prefer to buy luxury brands online. | 0.845 | | | |
| I believe if the online retailer provides the money-back guarantee which is not strict at all, I will prefer to buy more luxury brands online. | 0.859 | | | |
| I believe if the online retailer offers a reasonable duration for a money-back guarantee, I will like to shop luxury brands online. | 0.863 | | | |
| I believe if the online retailer provides a credible and believable money-back guarantee, I will prefer to buy luxury brands online. | 0.872 | | | |
| **Website Quality** (Hsin Chang & Wen Chen, 2008). (Note: "X" was replaced by the name of the online retailer's luxury brands website in the questionnaire). | | 0.909 | 0.786 | 0.936 |
| ***Technical Adequacy*** | 0.891 | | | |
| X's website has adequate search facilities. | | | | |
| X's website is easy to access. | | | | |
| X's website is always up and available. | | | | |
| ***Content Quality*** | 0.902 | | | |
| The content of X's website is useful. | | | | |
| The content of X's website is accurate. | | | | |
| The content of X's website is complete. | | | | |

| | | | | |
|---|---|---|---|---|
| ***Special Content*** | 0.881 | | | |
| In X's web site, one can find contact information (e.g., email addresses, phone numbers etc.). | | | | |
| In X's website, one can find details about products and services. | | | | |
| In X's website, one can find the firm's general information (e.g., goals, owners). | | | | |
| ***Appearance*** | 0.873 | | | |
| X's website looks attractive. | | | | |
| X's website looks organized. | | | | |
| X's website uses colours properly. | | | | |
| **Label Quality** (Vigneron & Johnson, 2004). | | 0.876 | 0.729 | 0.915 |
| I think if the online luxury retailer displays the best quality label for luxury brands, it will reduce my risk and enhance intention to purchase (e.g., 100% premium quality guarantee). | 0.872 | | | |
| I think label quality for luxury products should be exceptional. | 0.856 | | | |
| I think if the online luxury retailer displays the well-crafted quality label for luxury brands, it will reduce my risk and enhance purchase intention. | 0.820 | | | |
| I think label quality for luxury products should be unique and impressive. | 0.865 | | | |
| **Purchase Intention** (Hsin Chang & Wen Chen, 2008). | | 0.861 | 0.783 | 0.915 |
| I intend to purchases luxury brands online. | 0.856 | | | |
| I expect to purchase luxury brands online through X's website in the future. | 0.900 | | | |
| It is likely that I will transact with X's website in the near future. | 0.897 | | | |

**Table 4.** Reliability and Validity Measures.

***Notes:*** *AVEs= Average Variance Extracted, a= Cronbach's Alpha, CR= Composite Reliability, Loading= Factor Loading of the Items.*

### 4.2 Structural Model

As measurement model fitness index satisfied the criteria of fitness index and the structural model estimate possibility was theoretically confirmed. As seen in Table 3, the SRMR and NFI were 0.04, 0.91.The results of SRMR and NFI were less/above the suggested <0.08, >0.9 level (Byrne, 1998; Hu & Bentler, 1999). Path coefficient among the constructs was examined to test hypotheses and path statistical significance. All path coefficients were statistically significant except for one path (website quality -> perceived risk). First, the effects of money-back guarantee (MBG) on perceived risk ($\beta = 0.324$, $t = 3.185$, $p < 0.001$) and purchase intention ($\beta = 0.328$, $t = 4.226$, $p < 0.001$) were statistically significant. Second, quality label had significant effects on perceived risk ($\beta = 0.230$, $t = 2.334$, $p < 0.05$) and purchase intention ($\beta = 0.270$, $t = 3.359$, $p < 0.001$). Third, the influence of website quality on purchase intention was also statistically significant ($\beta = 0.290$, $t = 3.562$, $p < 0.001$), while the effects of website quality ($\beta = -0.043$, $t = 0.338$, $p > 0.05$) on perceived risk was not statistically significant. Finally, perceived risk ($\beta = -0.15$, $t = 2.666$, $p < 0.01$) plays a mediating role in linking MBG, quality label, website quality, and purchase intention.

| **Hypotheses** | **Path Coefficient** | **t-Value** | **P-Value** | **Conclusion** |
|---|---|---|---|---|
| MBG ->Perceived Risk | 0.324 | 3.185 | 0.001 | Accepted |
| MBG ->Purchase Intention | 0.328 | 4.226 | 0.000 | Accepted |
| Perceived Risk ->Purchase Intention | -0.15 | 2.666 | 0.008 | Accepted |
| Quality Label ->Perceived Risk | 0.230 | 2.334 | 0.020 | Accepted |
| Quality Label ->Purchase Intention | 0.270 | 3.359 | 0.001 | Accepted |
| Website Quality ->Perceived Risk | -0.043 | 0.338 | 0.735 | Rejected |
| Website Quality ->Purchase Intention | 0.290 | 3.562 | 0.000 | Accepted |

**Table 5.** Results of Hypotheses Testing

The results supported hypotheses 1, 2, and 3. However, hypothesis 4 partially supported (website quality is the only construct not affecting perceived risk). Based on the finding from hypotheses testing, a model with a path coefficient was created (see Fig. 2). Figure 2 shows that are all path are statistically significant except for one path (website quality -> perceived risk).

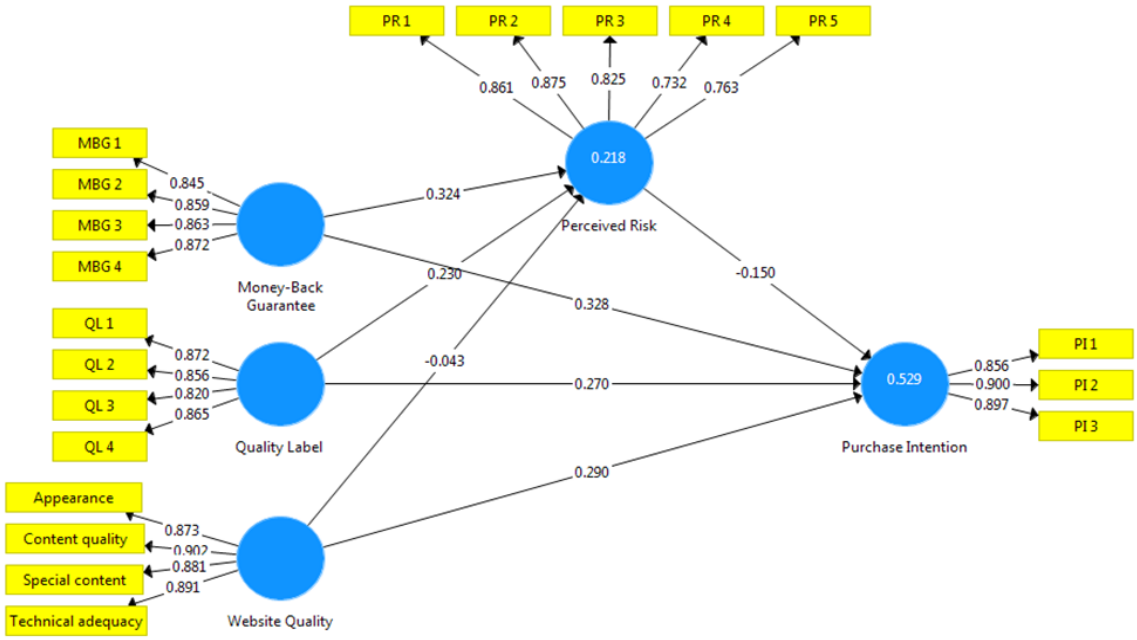


**Figure 2.** Results of SEM Analysis

## 5. DISCUSSION AND CONCLUSION

This research purpose is to explore the effectiveness of an MBG, quality label, and website quality on risk perception and intention to purchase luxury brands online. Also, which factor (e.g., MBG, quality label, website quality) has more influence on risk perception and purchase intention towards online purchasing of luxury brands. We assessed the total effects of each variable on perceived risk and intention to purchase. Findings from this study confirmed that MBG is affecting more strongly to risk perception and intention to purchase than the other variables (quality label, website quality). The total effects of MBG, quality label, and website quality on risk perception and intention to purchase are (0.324, 0.28), (0.23, 0.236), and (-0.043, 0.297) respectively. Except for one variable (website quality -> perceived risk), all variables effect risk perception and purchase intention positively, while the effects of website quality on perceived risk was insignificant (-0.043-total effects). Table 6 summarizes the results, the total effects of all constructs on perceived risk and purchase intention. In addition, this research supported the following implications.

| Constructs | Perceived Risk | Purchase Intention |
|---|---|---|
| Money-Back Guarantee | 0.324 | 0.28 |
| Perceived Risk | - | -0.15 |
| Quality Label | 0.23 | 0.236 |
| Website Quality | -0.043 | 0.297 |

**Table 6.** Results of the Total Effects

***Notes:*** *Direct Effects – Estimates (Direct Effects of Each Variable (Independent Variables) on Perceived Risk (Mediating Variable) and Purchase Intention (Dependent Variable). All Effects are Significant Except One Variable P > 0.05 (Website Quality ->Perceived Risk).*

First, MBG reduced perceived risk, which in turn, enhance purchase intention, supported by prior studies in different contexts (Jeng et al., 2014; McWilliams & Gerstner, 2006; Oghazi et al., 2018; Petersen & Kumar, 2009; Wood, 2001).The findings of this study confirmed that MBG effects positively risk perception $\beta = 0.324$ ($t = 3.185$, $p < 0.001$) and intention to purchase luxury products through the internet $\beta = 0.328$($t = 4.226$, $p < 0.001$). This study infers that online luxury retailers can be reduced luxury consumers' risk perception and enhance purchase intention by introducing MBG with certain conditions and regulations (e.g., 5 to 10% deduction on product return, 30 days money-back-guarantee). Second, quality label positively influenced risk perception and intention to purchase. In other words, for the online luxury consumers quality label can also be the best tool for reduced risk. This research results, accord with the previous studies findings (Aprile et al., 2012; Urban et al., 2000; Yu et al., 2018).The effects of quality label on perceived risk and purchase intention were $\beta = 0.230$ ($t = 2.334$, $p < 0.05$) and $\beta = 0.270$ ($t = 3.359$, $p < 0.001$). Perceived risk plays a mediating role in linking MBG, quality label, website quality, and purchase intention. It has effects in reverse on purchase intention $\beta = -0.15$ ($t = 2.666$, $p < 0.01$), the lower the consumer risk is higher the purchase intention towards e-commerce of luxury products. Finally, website quality positively influenced purchase intention $\beta = 0.290$ ($t = 3.562$, $p < 0.001$), while website quality was not affected positively perceived risk $\beta = -0.043$, ($t = 0.338$, $p > 0.05$). The similar findings were also found in Hsin Chang and Wen Chen (2008) study. They reported the effects of website quality on perceived risk $\beta = -0.029$ ($t = 0.29$, $p > 0.05$) and a total effects of web quality on intention to purchase (0.195), whereas we found a total effect of web quality on intention to purchase (0.297). Notably, MBG is a

more significant signal than a quality label and website quality in influencing consumers' intention to purchase luxury products through the internet and reducing risk perception (see Table 6).

The critical issue is that buyers feel risky while buying online luxury brands. This study infers a likely way to minimize buyers' perception of risk by offering them the facility of MBG. For online luxury brands, MBG with certain conditions and regulations (e.g., 5 to 10% deduction on product return, 30 days money-back-guarantee) can enhance purchase intention due to lower risk. Thus, these findings contribute to academic studies as well as fill a void in the existing literature on e-commerce for luxury goods. In an e-commerce environment, this research also contributes as an extension of signaling theory. Online purchasing of luxury products indicates a higher risk level. However, MBG can minimize consumers' risk and increase intention to purchase online luxury goods. The findings from this study are useful, beneficial, and indispensable for online luxury players. Online luxury marketers can increase their luxury products sale by offering MGB signal (e.g., 100% Money-Back Guarantee).

This study contains certain limitations and restrictions which can be acknowledged in further research. First, in this study limited sample size (210 respondents) was used in data analysis. A future study might be performed with a large sample size. Second, the researchers collected data from only luxury consumers who have online experience of luxury products to examine the effectiveness of MBG, quality label, website quality on risk perception, and purchase intention. Apart from luxury consumers', it might be interesting to compare the impact of MBG on luxury consumers vs. potential-luxury consumers in an online environment. Last but not least, rather than the MBG, quality label, and website quality, scholars can be tested the effectiveness of some other safety cues (e.g., review system, online luxury products video review, bestseller label). For instance, for online luxury products, it would be interesting to examine whether other safety signals can also help to minimize the risk perception, and in turn, enhance purchase intention.

## REFERENCES

Ahn, T., Ryu, S., & Han, I. (2007). The impact of Web quality and playfulness on user acceptance of online retailing. *Information & management, 44*(3), 263-275.

Akerlof, G. A. (1997). The Market for" Lemons": Quality Uncertainty and the Market Mechanism. *Readings in Microeconomic Theory*, 285.

Aladwani, A. M., & Palvia, P. C. (2002). Developing and validating an instrument for

measuring user-perceived web quality. *Information & management, 39*(6), 467-476.
Aprile, M. C., Caputo, V., & Nayga Jr, R. M. (2012). Consumers' valuation of food quality labels: the case of the European geographic indication and organic farming labels. *International Journal of Consumer Studies, 36*(2), 158-165.
Atkinson, L., & Rosenthal, S. (2014). Signaling the green sell: the influence of eco-label source, argument specificity, and product involvement on consumer trust. *Journal of Advertising, 43*(1), 33-45.
Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the academy of marketing science, 16*(1), 74-94.
Beuckels, E., & Hudders, L. (2016). An experimental study to investigate the impact of image interactivity on the perception of luxury in an online shopping context. *Journal of Retailing and Consumer Services, 33*, 135-142.
Bonifield, C., Cole, C., & Schultz, R. L. (2010). Product returns on the Internet: A case of mixed signals? *Journal of Business Research, 63*(9-10), 1058-1065.
Boston. (2016). The Boston Consulting Group "Digital or Die: The Choice for Luxury Brands. Available at http://image-src.bcg.com/Images/BCG-Digital-or-Die-Sep-2016_tcm30-148835.pdf [Assessed August, 2018].
Byrne, B. M. (1998). *Structural Equation Modeling with LISREL, PRELIS, and SIMPLIS: Basic Concepts, Applications, and Programming*: Psychology Press.
Caruana, A. (2003). The impact of switching costs on customer loyalty: A study among corporate customers of mobile telephony. *Journal of Targeting, Measurement and Analysis for marketing, 12*(3), 256-268.
Chen, B., & Chen, J. (2017). When to introduce an online channel, and offer money back guarantees and personalized pricing? *European Journal of Operational Research, 257*(2), 614-624.
Chen, S.-J., & Chang, T.-Z. (2003). A descriptive model of online shopping process: some empirical results. *International Journal of Service Industry Management, 14*(5), 556-569.
Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of management, 37*(1), 39-67.
Davis, S., Gerstner, E., & Hagerty, M. (1995). Money back guarantees in retailing: Matching products to consumer tastes. *Journal of Retailing, 71*(1), 7-22.
Drake, J. R., Hall, D. J., Cegielski, C., & Byrd, T. A. (2015). An exploratory look at early online auction decisions: Extending signal theory. *Journal of theoretical and applied electronic commerce research, 10*(1), 35-48.
Ellison, H. A. a. J. (2017). *"LVMH Goes Digital with all its Brands under One Luxury Goods Site, FinancialTimes "*. Retrieved from https://www.ft.com/content/464b3de2-03cb-11e7-ace0-1ce02ef0def9 [Assessed August, 2018].
Fornell, C., Appelman, H. D., McKenna, B. J., Berkoff, H. A., Carpenter, E. W., Frey, C. F., . . . Lohr, L. L. (1982). A Second generation of multivariate analysis: classification of methods and implications for marketing research. *Solstice: An Electronic Journal of Geography and Mathematics, 5*(2).
Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 39-50.
Gai, L. (2014). The Selling Power Of Consumer-Generated Product Reviews: The Matching Effect Between Consumers'cognitive Needs And Persuasive Message Types. *Journal of Electronic Commerce Research, 15*(3), 200.
Geerts, A. (2013). Cluster analysis of luxury brands on the internet.
Grabner-Kraeuter, S. (2002). The role of consumers' trust in online-shopping. *Journal of Business Ethics, 39*(1-2), 43-50.
Hair, J. F. (1998). *Multivariate data analysis*. Upper Saddle River, N.J.: Prentice Hall.
Hennigs, N., Wiedmann, K.-P., & Klarmann, C. (2012). Luxury brands in the digital age–exclusivity versus ubiquity. *Marketing Review St. Gallen, 29*(1), 30-35.
Holmes, A., Byrne, A., & Rowley, J. (2013). Mobile shopping behaviour: insights into

attitudes, shopping process involvement and location. *International Journal of Retail & Distribution Management, 42*(1), 25-39.
Hsin Chang, H., & Wen Chen, S. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online information review, 32*(6), 818-841.
Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal, 6*(1), 1-55.
Hudders, L., De Backer, C., Fisher, M., & Vyncke, P. (2014). The rival wears Prada: Luxury consumption as a female competition strategy. *Evolutionary Psychology, 12*(3), 147470491401200306.
Jeng, S.-P., Huang, L.-S., Chou, Y.-J., & Teng, C.-I. (2014). Do consumers perceive money-back guarantees as believable? The effects of money-back guarantee generosity, store name familiarity, and perceived price. *Service Science, 6*(3), 179-189.
Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research, 65*(10), 1480-1486.
Kim, S. (2013). Online Retailers Tackle High Rate of Customer Returns. *ABC News*.
Kluge, P. N., & Fassnacht, M. (2015). Selling luxury goods online: effects of online accessibility and price display. *International Journal of Retail & Distribution Management, 43*(10/11), 1065-1082.
McKinsey&Company (Producer). (2015). "The opportunity in online luxury fashion Sales are rising, but what do consumers expect from a luxury digital experience?" Available at https://birdseyevieweu.files.wordpress.com/2015/04/150201-mckinsey-online-luxury-fashion_0.pdf [Assessed August, 2018].
McWilliams, B., & Gerstner, E. (2006). Offering low price guarantees to improve customer retention. *Journal of Retailing, 82*(2), 105-113.
Mitchell, V.-W. (1999). Consumer perceived risk: conceptualisations and models. *European Journal of marketing, 33*(1/2), 163-195.
Mostard, J., & Teunter, R. (2006). The newsboy problem with resalable returns: A single period model and case study. *European Journal of Operational Research, 169*(1), 81-96.
Moussa, S., & Touzani, M. (2008). The perceived credibility of quality labels: a scale validation with refinement. *International Journal of Consumer Studies, 32*(5), 526-533.
Napier, H. A., Judd, P. J., Rivers, O. N., & Wagner, S. W. (2001). Creating a Winning E-Business, Course Technology, Thomson Learning. *Inc., Boston, MA*.
Nunnally, J. (1978). C.(1978). *Psychometric theory, 2*.
Oghazi, P., Karlsson, S., Hellström, D., & Hjort, K. (2018). Online purchase return policy leniency and purchase decision: Mediating role of consumer trust. *Journal of Retailing and Consumer Services, 41*, 190-200.
Okonkwo, U. (2009). Sustaining the luxury brand on the Internet. *Journal of brand management, 16*(5-6), 302-310.
Pappas, N. (2016). Marketing strategies, perceived risks, and consumer trust in online buying behaviour. *Journal of Retailing and Consumer Services, 29*, 92-103.
Petersen, J. A., & Kumar, V. (2009). Are product returns a necessary evil? Antecedents and consequences. *Journal of Marketing, 73*(3), 35-51.
Shen, K. N., Vel, P., & Khalifa, M. (2016). Website design: place for luxury brands in cyberspace? *Behaviour & Information Technology, 35*(12), 1115-1129.
Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics, 87*(3), 355-374.
Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *American Economic Review, 92*(3), 434-459.
Suwelack, T., Hogreve, J., & Hoyer, W. D. (2011). Understanding money-back guarantees: Cognitive, affective, and behavioral outcomes. *Journal of Retailing, 87*(4),

462-478.
Urban, G. L., Sultan, F., & Qualls, W. J. (2000). Placing trust at the center of your Internet strategy. *Sloan Management Review, 42*(1), 39-48.
Van Noort, G., Kerkhof, P., & Fennis, B. M. (2008). The persuasiveness of online safety cues: The impact of prevention focus compatibility of Web content on consumers' risk perceptions, attitudes, and intentions. *Journal of Interactive Marketing, 22*(4), 58-72.
Vigneron, F., & Johnson, L. W. (2004). Measuring perceptions of brand luxury. *Journal of brand management, 11*(6), 484-506.
Waheed, A., & Jianhua, Y. (2018). Achieving consumers' attention through emerging technologies: The linkage between e-marketing and consumers' exploratory buying behavior tendencies. *Baltic Journal of Management, 13*(2), 209-235.
Wood, S. L. (2001). Remote purchase environments: The influence of return policy leniency on two-stage decision processes. *Journal of Marketing Research, 38*(2), 157-169.
Yu, S., Hudders, L., & Cauberghe, V. (2018). Selling luxury products online: The effect of a quality label on risk perception, purchase intention and attitude toward the brand. *Journal of Electronic Commerce Research, 19*(1), 16-35.
Zhang, Y., & Wiersema, M. F. (2009). Stock market reaction to CEO certification: The signaling role of CEO background. *Strategic Management Journal, 30*(7), 693-710.

## How to cite this article:

Ashfaq, M., Yun, J., Waheed, A. & Abbasi, A. Z. (2018). Buying Luxury Brands Online: The effect of money-back guarantee on perceived risk and purchase intention. *International Journal of Marketing, Communication and New Media*. *Special Issue 4 – Luxury Marketing*, 102 – 121. Available at http://u3isjournal.isvouga.pt/index.php/ijmcnm