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# Stock exchange brands as an influence on investor behavior

## Introduction

Scholars in behavioral finance have expended considerable effort in trying to understand investment choices. Much of this research has focused on the decision-making behavior of the actors involved in the financial markets, particularly the institutional investors who account for the bulk of the activity (Gabaix et al., 2006; Gompers and Metrick, 2001). One strand within this research, at the finance and marketing interface, has investigated the effect of brands and brand variables in investment choices, both for individual and institutional investors (Frieder and Subrahmanyam, 2005; Huberman, 2001; Keloharju et al., 2012).

The basic rationale underlying this research is that perceptions and sentiments towards corporate brands in the wider market spill over into investments in the stock market. For instance, prestigious brands (Billett et al., 2014; Frieder and Subrahmanyam, 2005), brands with high familiarity (Huberman, 2001); with high advertising spend (Grullon et al., 2004); brands with loyal customers (Keloharju et al., 2012), with high customer satisfaction, and a strong corporate reputation (Himme and Fischer, 2014), have been found to be more likely to be chosen as equity investments.

While these studies have made an important contribution in identifying the link between consumer behavior and investor behavior, and the significant role of brands in both arenas, they ignore the influence of the intermediaries, the financial markets -- and particularly the stock exchanges, through which the investment decisions are transacted. This research addresses a gap in the literature by approaching stock exchanges as brands that need

to develop compelling value propositions and to promote themselves to potential customers/investors (Jansson and Power, 2006; Kokosalakis et al., 2006). In this sense, it brings the marketing and finance disciplines together, by exchanging research approaches between the two.

It begins by considering the evidence on investor behavior from the finance and marketing literatures. It then develops a model of investor-based brand equity adapted from the well-known customer-based brand equity model developed by Aaker (1992). This research model is tested via an online survey of actual and potential private investors in two stock markets – Turkey and Ireland. The nature of the suggested interaction is discussed in the final section, together with the managerial implications of these findings.

### **Investor Perceptions and Behavior**

For a long time, the decision to invest in a financial asset was believed to exclusively rational, determined by the financial returns that investors might obtain. This traditional proposition has evolved in recent times to include some non-financial variables, particularly the perceptions and cognitive evaluations of customers. In this regard, both marketing (Barber and Odean, 2008; Billett et al., 2014) and finance scholars (Fama and French, 2007; Frieder and Subrahmanyam, 2005) have challenged the dominant influence of financial returns on investment decisions, and highlighted the role of customer perceptions and evaluations of companies and brands as a critical influencer on their decisions (Aspara and Tikkanen, 2010).

In this recent research, a special emphasis has been given to simplifying decision rules or heuristics that investors use in making investment decisions (Kahneman and Tversky, 1979; Kumar and Goyal, 2015). Empirical studies indicate that about 50% of people intuitively rely on heuristics (Huberman and Wei, 2006). One heuristic that investors often

use to cut down risk, for instance, is to opt for “blue chip” investments, i.e. the shares of companies that are long-established and have strong reputations.

The number of studies on the role of brands as simplifying heuristics or influencers in investor choices is increasing, but is still at an early stage (Huberman, 2001; Grullon et al., 2004; Keloharju et al., 2012). The common ground among such studies is that a more realistic understanding of investor behavior necessitates going beyond the financial returns of any investment and considering the interplay between product and capital markets with the former being a determinant of the latter and vice versa.

A closely related but largely neglected factor is the stock markets in which companies operate, or the stock exchanges on which they are listed. With the acceleration of the demutualization process from the 1990s onwards, stock exchanges have effectively been transformed into corporate brands (Ochere, 2006; Schich, 2003). As of 2012, the rate of demutualization and self-listing among the world stock exchanges reached 55% (WFE, Cost and Revenue Survey-2012). This demutualization and resulting competition in financial markets inevitably lead the stock exchanges to try to differentiate themselves as brands, and to try to enhance their brand reputation in an effort to attract additional business.

There has been little or no research on how investors perceive particular financial markets or stock exchange brands, and whether the reputation of these entities actually has any effect, positive or negative, in choosing particular investment instruments, or where to purchase and hold those instruments. This is the knowledge gap that is addressed in this study.

### **Investment Products as Brands**

Numerous studies have suggested that product-market characteristics spill over into the investment market and affect investors’ perceptions and consequent behavior. Huberman

(2001) suggested that familiarity with a company or brand, as a non-financial attribute, positively affects investors' choices. Grullon et al. (2004) found that the breadth of a firm's stock ownership increases in line with the firm's overall visibility with its investors, with advertising expenditure as a measure of brand visibility. Frieder and Subrahmanyam (2005) also found a preference for highly visible, brand name companies in stock choices in a study of 82 institutional holdings in the US.

Barber and Odean (2008) found that any brand already occupying a space in investors' consideration set as a result of some prominent feature has a propensity to be more easily picked out in the decision making process. Similarly, Aspara and Tikkanen (2011) found that an individual's identification with a company has a positive effect on their purchases of the company's shares, compared to other companies that have approximately similar financial risks/returns. Keloharju et al. (2012) found that investors are more likely to purchase and less likely to sell shares of companies they frequent as customers. Billett et al. (2014) found that familiarity or prestige in the product-market associates with "glamour" in the stock market, with a positive effect on investment decisions, in a study of over 1,200 brands among more than 20,000 customers,.

The common ground among all of these studies is the proposition that the profile or visibility of brands makes them more likely to be included in the consideration set of investors.

### **Stock Exchanges as Brands**

The research just discussed provides compelling evidence that corporate brands and reputation are an important influence on investor perceptions and behavior. However, the nature of the stock market is such that investors do not generally buy stocks directly; they

have to go through intermediaries, such as brokers, who execute a purchase transaction through a stock exchange. The number of steps in this supply chain suggests a complicated relationship with each step exercising some influence in the investment choices made. The question is: how much influence does each player in the supply chain exert on the investment choices and, in particular, what is the relative influence of the stock exchange through which the trade is transacted.

Several factors must be taken into account in arguing this point. Firstly, countries tend only to have single stock exchange which is in a monopoly position, so the choice of stock exchange tends to be synonymous with the choice of a particular country/ financial market. The investor is likely to have certain value perception towards a stock exchange – based on such factors as past experiences, cost-benefit expectations, risk evaluation (Virlics, 2013) and comparative reference groups. The opening up of the world's stock markets in recent years mean that investors are increasingly choosing to trade across national boundaries which requires them to make choices among stock markets and their respective stock exchanges. This suggests the importance of a country-of-origin effect in investor choices and the impact of a country's reputation on its stock market. The choice of a particular broker within a stock market seems likely to be a secondary issue following choice of country and market (Harrison et al., 2015; Kumar and Goyal, 2015; Yang, 2013).

A second argument is that the financial system at the capital market level operates like a distribution system where the role of the stock exchange relative to the corporation is akin to that of a distributor or retailer for merchandise goods. There is abundant research to indicate that the brand image and reputation of retailers spills over onto the merchandise brands that they stock, and can attenuate the brand value of their supplier brands in a positive or negative way (Schumann et al., 2014; Swoboda et al., 2013). In a similar way, the reputation of a stock

exchange may have some influence on the reputation of the corporate brands that it represents and, therefore, on investor choice.

To develop these propositions further, it is necessary to define two basic concepts in investment decision making: (1) Risk Perception and Country of Origin, and (2) brand and reputation of stock exchange.

### **Risk Perception and Country of Origin Effect**

The marketing literature suggests that country of origin (COO) is an important influence on product evaluation, preferences and resulting purchasing decisions (Chuang and Yen, 2007; Klein, 2002). It serves as an information cue in decision making (Katsumata and Song, 2016), similar to the simplifying heuristics discussed above. The mechanism works through a “matching” process, with positive evaluations when a country’s reputation matches the consumer’s beliefs about the product or brand (Cui et al., 2014).

In the case of financial investment, which involves high levels of risk (Aydin and Özer, 2005; Grewal et al., 1994; Sweeney et al., 1999), it is proposed that COO contributes to the ‘perceived risk’ of the investment, in addition to the inherent risk in the investment product itself. Perceived risk, in this sense, refers to the uncertainty that consumers face when they cannot foresee the consequences of their purchase decisions (Schiffman et al. 2011). Acting as a simplifying heuristics for investors, perceived risk has a strong impact on whether to make any investment at all, or whether to invest in a certain platform/instrument or not.

The COO effect tends to be discussed under two interpretations: a ‘halo effect’ – the value perception disseminating from country into product – and a ‘summary effect’ – that from product to country. Both explanations suggest that a country’s image serves as a cue to infer quality of products from that country (Chu et al., 2010). In the case of stock markets, this

interplay occurs between the financial market itself, and its stock exchange (Jacobsen, 2009; 2012). The first element concerns the nature and reputation of the financial market at a macro level, in terms of political risk/country risk, inflation, deficit, etc. The second element concerns the stock exchange itself, at a micro level, and includes factors such as the size of capitalization, level of trading volume, level of systematic risk, pricing policy and rate of volatility, and its record of financial returns. In all likelihood, these two elements are interdependent since most stock exchanges are effectively single, national entities that have a monopoly of trading in their country.

### **Investor-based Brand Equity**

Brand equity tends to be discussed in three basic ways in the literature: Customer-Based Brand Equity (Aaker, 1992; Berry, 2000; Farquhar et al., 1989; Keller, 1993), Financial Brand Equity (Barwise, 1993; Davcik and Sharma, 2015; Kapareliotis and Panopoulos, 2010; Kapferer, 1992), and a combination of these two approaches (Kim et al., 2003; Torres et al., 2012). These approaches still prevail in most product and service domains, but more recently the concept has been extended into the financial services domain, i.e. Investor-based Brand Equity (Jacobsen, 2009).

The rating that a country and its stock exchange receive on brand-related variables is filtered through investor perceptions, i.e. how investors, real or potential, consider the financial market and the stock exchange in their minds. The value in investor-based brand equity corresponds closely with the dimensions of the customer-based brand equity model advanced by Aaker (1991), i.e. brand awareness, brand associations, perceived quality and brand loyalty, which seem equally worthy of attention in an investment context. This approach sees the brand as a holistic experience, with the elements that make up the experience adding up to more than the sum of its parts (de Chernatony and Cottam, 2006).



In the case of this paper, we are considering brand equity as the sum of the values attaching to a stock exchange in any particular country that may influence investors in choosing to do business there. In our interpretation, brand equity is considered as a mechanism for reducing perceived risk and, thereby increasing intention to purchase. In other words, a stock exchange perceived to have high brand equity is likely to be associated with lower risk, and therefore increased attractiveness as a destination for investment. The following section presents a set of hypotheses concerning each of the elements of the brand equity model as they pertain to stock exchange brands.

### ***Brand Awareness***

The first and most fundamental element of the brand equity model is brand awareness, which is the customer's ability to recognize and recall that a brand pertains to a certain product category (Aaker, 1991). Consumers in search of a new product or service begin by establishing a consideration set of those brand(s) whose existence they know of and which already occupy a position in their minds. Moreover, it contributes to the reduction of perceived risk both for individual and corporate decision makers (Homburg et al., 2010). This leads to the following hypothesis:

*H<sub>1</sub>: The level of brand awareness of a stock exchange among actual and potential investors will be correlated with intention to invest (H<sub>1a</sub>), but this relationship will be mediated by perceived risk (H<sub>1b</sub>).*

### ***Brand Associations***

Consumers make choices about brands based on the associations stored in their memory (Hastak and Mitra, 1996). Associations refer to objective attributes and functions, as well as subjective utilities such as relative price, consumption quality, life style, rival

alternatives, and geographical environment (Aaker, 1991; Keller, 1993). The network of brand associations can be small and poorly developed or it can be large and elaborate. A key premise of the customer-based brand equity model is that there is a trade-off between positive and negative associations; the level of brand equity depends on the extent to which positive associations surpass negative ones (Burmam et al., 2009). Brand associations also evolve and change over time through a dynamic process which necessitates some external stimuli, such as advertising and publicity (Harrison- Walker, 2013). This suggests the following hypothesis:

***H<sub>2</sub>**: The brand associations connected with a stock exchange will be correlated with intention to invest; the higher the ratio of positive brand associations over negative associations, the greater the intention to invest ( $H_{2a}$ ), but this relationship will be mediated by perceived risk ( $H_{2b}$ ).*

### ***Perceived Quality***

The marketing literature is much concerned with identifying suitable metrics by which to measure the quality of brands (Wong and Merriless, 2008). This is a difficult challenge because perceived quality is multi-dimensional, and may be viewed through various lenses, from psychological to operational to financial. From a marketing point of view, brand quality may be considered as the effectiveness perceived by its stakeholders based on their own experience and/or on information from their environment (Hult et al., 2008). This viewpoint, also referred to as Customer-Based Brand Performance, describes the long-term effectiveness and reliability of the product or service (Huang and Sarıgöllü, 2014; Lassar et al., 1995). A full expression of the brand's power or success in the market would also take account of the success of marketing communications which may influence the assessment of the brand. This suggests the following hypothesis:

*H<sub>3</sub>: The brand quality or performance of a stock exchange will be correlated with the intention to invest—high quality/performance will be positively correlated with intention to invest and vice versa (H<sub>3a</sub>), but this will be mediated by perceived risk (H<sub>3b</sub>).*

### **Brand Trust**

Brand trust is the positive belief felt by the consumer towards a brand, product or company, which has a risk-decreasing effect and can be positively associated with purchasing behavior (Aydin and Özer, 2005). It tends to be used as one of the brand equity constituents in many empirical studies (Chaudhuri and Holbrook, 2001; Luk and Yip, 2008); (Kumar et al., 2013). Among the researchers who investigate brand trust within the conceptualization of brand equity are Blackston (1992; Lassar et al. (1995); Christodoulides et al. (2006); Burmann et al. (2009),

Trust is a particularly important variable in the context of investment products which, by definition, involve risk. Much of the literature on investor behavior is concerned with heuristics used to reduce risk and choosing well-known and trusted companies and brands is one key element of this. Similar stratagems seem likely in choosing a particular stock exchange in which to transact investments. This suggests the following hypothesis:

*H<sub>4</sub>: The brand trust connected with a stock exchange will be correlated with intention to invest; high trust will positively affect intention to invest, and vice versa (H<sub>4a</sub>), but this will be mediated by perceived risk (H<sub>4b</sub>).*

### **Brand Loyalty**

Brand loyalty is generally considered to have both behavioral and attitudinal components. Behavioral brand loyalty concerns the relative size or frequency of customer purchases, and therefore places a major emphasis on the previous purchase or usage experience (Aaker, 1991; Romaniuk and Nenycz-Thiel, 2013). Attitudinal brand loyalty refers to the customer's preference for a particular brand, manifested in a long-term commitment to it (Anisimova, 2007; Shankar et al., 2003). Brand loyalty in the context of a stock market or stock exchange is likely to have both elements, and a high score on both would suggest a high degree of brand equity, giving us the following hypothesis:

*H<sub>5</sub>: Brand loyalty in terms of previous experience of dealing with a stock exchange will be correlated with intention to invest (H<sub>5a</sub>); but this will be mediated by perceived risk (H<sub>5b</sub>).*

## **Research Methodology**

This study takes the form of a survey of individual, private investors in two stock markets, Turkey and Ireland. Private investors own a smaller percentage of stocks in many countries, eg. 40% in US; 18% in Japan, 11% in the UK (Çelik and Isaksson, 2013), but they still account for a significant portion of the trading activity and overall portfolio (Chuang and Susmel, 2011; Ivkovic and Weisbenner, 2005), and therefore merit study.

Turkey and Ireland were chosen as comparators because they are similar in terms of their market capitalization and are often chosen for comparison. Importantly, however, there is a low correlation between these markets (Aksoy et al., 2013), making the diversity ideal from a statistical point of view.

## ***Sampling***

A starting premise was that the population of private investors is likely to be drawn from the higher socio-economic groups, with high levels of education who are financially literate and well-informed, and who have surplus income to invest. University academics seemed to represent a good example of this type of individual and were therefore chosen as the sampling population in both countries.

### ***Questionnaire Design***

The survey instrument used was a web-based questionnaire, using scale items which were proven to be valid and reliable in previous studies. The questions were prepared in both languages, namely, Turkish and English. All the scales were measured in 5-point Likert scales (Hair et al., 2009).

### ***Data Collection***

An online survey was used for this study, which was completed over a 4 month period in each country. The survey link was sent to 23,115 academics in Turkey, and 12,377 in Ireland across all subjects. Following two reminders, the total number of usable questionnaires obtained was 1578 in Turkey and 396 in Ireland, a response rate of 6.8% and 3.2%, respectively. Given the fact that the research populations are more than 10,000 and dispersed equally well in every city/county in both applications, the samples can be inferred to represent the populations successfully (Malhotra and Birks, 2007).

### ***Independent Variable: Brand Equity***

Brand equity tends to be measured by a multi-dimensional approach in the branding literature (Berry, 2000; Cobb-Walgren et al., 1995; de Chernatony et al., 2004; Farquar, 1989; Keller, 1993; Lassar et al., 1995; Yoo and Donthu, 2001). While researchers mostly use

Aaker's or Keller's brand equity models, it is not uncommon for the dimensions to differ according to the research context. This research relies mainly on the Aaker model, adopting the variables of Brand Awareness, Brand Association, Perceived Quality and Brand Loyalty, and further investigates Brand Trust as one of these dimensions due to the importance of the concept in financial decisions (Chaudhuri and Holbrook, 2001; Luk and Yip, 2008).

***Dependent Variable: Intention to Invest***

The dependent variable for this study was intention to invest. The validity of using intentions as predictors of behavior is well rooted in theory and commonly used in research (de Canniere et al., 2010). The intention to purchase in financial services refers to an expression of a person's inclination towards making an investment in a particular platform via a financial instrument. A number of studies have shown that the relationship between the intention to purchase and actual purchase behavior is valid in many financial product and service domains (Blut et al. 2015; Lim et al, 2013).

***Mediating Variable: Perceived Risk***

Perceived risk has a strong impact in explaining consumer behavior since consumers are more often motivated to avoid mistakes than to maximize utility in purchasing (Mitchell, 1999). Financial decisions inherently involve high levels of risk, generally higher than other types of purchase (Noussair et al., 2014). This suggests a negative correlation between perceived risk and purchase/investment intention, i.e. the higher the perceived risk, the lower the investment intention (Awais et al., 2016). A fundamental premise of this study is that strong brand equity may contribute to risk deduction by reducing perceptions of risk. This view accords with the suggestion by Erdem et al. (2004) and Erdem and Swait (1998) that consistency in brand positions over time increases the credibility of a brand and may decrease

perceived risk. Our hypotheses suggest a relationship in which perceptions of brand equity affect intention to invest, and this is mediated by perceived risk (Grewal et al., 1994; Sweeney et al., 1999).

### ***Data Analysis***

The statistical method used to analyze the data in this study was structural equation modeling (Byrne, 2009). A two-step approach was used to test the hypotheses, as suggested by Anderson and Gerbing (1988); confirmatory measurement, or factor analysis, and structural model formation. Bootstrapping method was used to validate the multivariate model by drawing a large number of sub-samples and estimating models for each subsample (Hair et al, 2009).

Customer-based brand equity (CBBE) was measured on a multi-dimensional scale in this research, which comprised of the 5 core facets/dimensions of brand awareness, brand associations, perceived quality, brand loyalty (Aaker, 1991) and brand trust. Some empirical studies treat brand equity as multiple-item and/or one-dimension scales (Eckert et al., 2012 [as brand-equity-associated brand utility]; Hsu and Lawrence, 2016 [as brand reputation]; Qui and Leszczyc, 2016; but the multi-dimensional approach used here is the most frequently used method in the literature (Erdem and Swait, 1998; Netemeyer et al, 2004; Yoo and Donthu, 2001; Washburn and Plank, 2002).

## **Results**

### ***Comparative Demographics and Investment Experience***

Descriptive statistics for the two samples are shown in Table 1.

### **[Table 1]**

There was a degree of dispersion in the demographics of the two samples, perhaps reflecting different interest levels in the financial investment topic (Bijmolt et al., 2014). Male participants outnumbered females, with the disparity being higher in the Turkish sample ( $\Delta\%$  Turkey=40;  $\Delta\%$  Ireland=12). The participation rate decreased with age in the Turkish sample while the opposite was true in Ireland. Similarly, most of the participants were married in both cases. Both samples exhibited advanced education levels (app.95% having post-grad degrees) as a result of the nature of the research population. However, there was a significant gap between the monthly income levels of the equivalent academic positions between the countries, with Ireland more than double the Turkish counterpart.

The investment experience of the samples is presented in Table 2.

### **[Table 2]**

What was striking was that approximately 25% of both samples were currently investing in their national stock markets. This was high compared to national levels in countries such as the UK where 13% of the adult population invest in the stock market. In contrast, it is low compared to the US, where 55% invest ([www.statistica.com](http://www.statistica.com)).

All respondents were asked which investment instrument they would invest in, if they had €50,000TL. Their primary investment preferences are shown in Table 3.

### **[Table 3]**



This question produced contrasting results; 33% of the Irish respondents chose equities as their top choice, but only 8% of the Turkish sample chose equities. It seems that equity investment is not an attractive choice in Turkey even for the higher socio-economic groups.

### ***Validating the Model – Confirmatory Factor Analysis***

The reliability measure used in this research was composite reliability (CR), which is the reliability measure derived from confirmatory factor analysis (Hair et al., 2010). To be considered reliable, the CR score should be above the 0.70 (Bagozzi and Yi, 1988; Nunnally 1987).

Validity was assessed in two-ways: convergent validity and discriminant validity (Kline, 2010). Among the most important indicators of convergent validity is the Average Variance Extracted (AVE), which should be above 0,50 (Bagozzi and Yi, 1988). There are 3 main conditions for discriminant validity; (1) maximum shared variance (MSV) lower than AVE; (2) average shared variance (ASV) lower than AVE; (3) square root of AVE higher than the inter-factorial correlations (Hair et al., 2010). The reliability and validity results of the scales are shown in Table 4 for Turkey and Ireland.

#### **Table 4**

With regard to reliability, all CR figures were found to be above 0,70, thus meeting the reliability requirements for the scales.

The entire Brand Association scale was not used any further in either sample because of a lack of item correlations. Also, Perceived Quality and Brand Trust scales were grouped

under the same factor in both cases. It seems that trust towards the stock exchange is closely associated with stock quality or performance in this financial decision context. Therefore, these variables have been combined under one summary construct labeled Brand Quality (BQ).

With regard to convergent validity, scale items weighted below 0.50 were eliminated. The AVE results were found to be above 0,50 as an indication of no convergent validity issues for Turkey. The only AVE condition not met in the Irish sample was Brand Quality; however since the value (0,489) was found to be high together with the item correlations, the scale was kept in the subsequent analysis. Since the threshold of 0.50 is a conservative criterion in convergent validity, the remaining items are believed to successfully represent the scales; in other words, the scales are measuring the intended concept (Hair et al., 2010).

Moreover, all 3 conditions for discriminant validity were also met in each sample, proving that the scales were perceived as different entities by the samples.

The scales in each sample were also checked for common method bias using Harman's Single Factor Test (Podsakoff et al., 2003). The highest variance explained by a single factor in the Turkish sample amounted to 37.762%, and 30.051% in the Irish sample, indicating no common method bias issues in either sample.

In sum, the two major prerequisites of the structural model, being reliability and validity were met for both samples.

### ***Testing the Relationships – Structural Equation Model***

#### ***Direct Effects***

The first step in testing the structural model was to examine the direct relationship between brand equity dimensions and intention to invest, without any mediating variable. Demographics were included as control variables in case these might have an effect on individuals' investment tendencies, as discussed in the literature (Finucane et al, 2000; Pandey et al., 2013).

The structural analysis for the Turkish application indicated that there is a positive and significant relationship between all three brand equity variables and intention to invest, before the introduction of perceived risk (PR). As indicated in Table 5, the highest (and positive) correlation among the three dimensions of brand equity belongs to the relationship between brand loyalty (BL) and intention to invest (ItoI) ( $reg=0,65$ ;  $p<0,01$ ), and the lowest correlation belongs to relationship between brand awareness (BA) and intention to invest ( $reg=0,05$ ;  $p=0,01$ ). Brand Quality positively affects the intention to invest higher than brand awareness but lower than brand loyalty ( $reg=0,07$ ;  $p=0,02$ ). Thus,  $H_{1a}$ ,  $H_{3a-4a}$  and  $H_{5a}$  are supported for the Turkish application.

Similar to the Turkish sample, the structural analysis for Ireland showed that all three brand variables positively and significantly affect the intention to invest in the equity market. While the brand loyalty of the stock exchange affects intention to invest positively and in the highest way ( $reg=0,36$ ;  $p<0,01$ ), the relationship between brand awareness and intention to invest is the lowest ( $reg=0,14$ ;  $p=0,009$ ). Brand Quality positively affects the intention to invest higher than brand awareness but lower than brand loyalty ( $reg=0,31$ ;  $p<0,01$ ). Thus,  $H_{1a}$ ,  $H_{3a-4a}$  and  $H_{5a}$  are also supported for the Irish application.

It is worth noting that the direct relationships between brand equity dimensions and the intention to invest follow similar patterns both in the Turkish and Irish applications, despite having different strengths. While all three dimensions of brand equity have an effect

on the intention to invest in a stock exchange, the strongest effects come from brand loyalty and the weakest (but statistically meaningful) come from the brand awareness. These results further suggest that the brand equity of a stock exchange is a valid concept that is systematically associated with likelihood of investment, irrespective of other differences between stock markets. The test results are shown in Table 6 for the Irish sample.

*Indirect Effects for Turkish Sample– Perceived Risk as Mediator*

**[Table 5]**

In testing the mediating effect of PR in the relationships between brand equity and ItoI, both Baron and Kenny and bootstrapping methods showed that the relationships between BQ and ItoI, together with BL and ItoI, were mediated through PR. Firstly, following the Baron and Kenny approach, the standardized regression between BQ and ItoI, which was 0.076 ( $p=0.022$ ) without PR, decreased to 0,062 when PR was introduced, and lost its statistical significance ( $p>0,05$ ). The path a (BQ - PR) and path b (PR - ItoI) were negative and significant at the same time, having  $\text{reg.}=-0,10$ ;  $p=0,005$  and  $\text{reg.}=-0,14$ ;  $p<0,01$  respectively. This signals a *full* mediation among the variables.

Secondly, the standardized regression between BL and ItoI without PR, which was 0,656 ( $p<0,01$ ), decreased to 0.596 when PR was introduced, but the relationship still retained its significance ( $p<0,01$ ). The paths (a) (BL - PR) and (b) (PR - ItoI) were negative and significant, being  $\text{reg.}=-0,40$ ;  $p<0,01$  and  $\text{reg.}=-0,14$ ;  $p<0,01$  respectively. This signaled a *partial* mediation. The relationships were further subjected to a Sobel Test, and both were found to be significant, with a p value above 0,05.

The bootstrapping also indicated that the significance of the indirect relationship between BQ and ItoI (0.013); and that between BL and ItoI (0.001), were both statistically important. This signals a statistically important indirect relationship between the variables with a p value of 0,001. Thus,  $H_{3b-4b}$  and  $H_{5b}$  are supported for the Turkish application.

The relationship between brand awareness and intention to invest is contradictory. In this case, the standardized regression between BA and ItoI without PR, which was 0.054 ( $p=0.016$ ), *increased* to 0.596 when PR was introduced although the relationship still retained its significance ( $p<0.01$ ).

Thus,  $H_{1b}$  is not supported for the Turkish application.

In the light of these findings, the structural model for the Turkish application is shown below.

### **[Research Model 1]**

As shown in model 1, perceived risk acts as a full mediator between Brand Quality and Intention to Invest, and as a partial mediator between Brand Loyalty and Intention to Invest, while there is no such an effect in the relationship between Brand Awareness and Intention to Invest. The variance explained in the dependent variable--intention to invest, by these relationships amounts to 52%, an indicator of the overall robustness among the relationships tested.

#### ***Indirect effects for Irish Sample– Perceived Risk as Mediator***

### **Table 6**

Very similar to the Turkish sample, the relationship between BQ and ItoI was found to be *fully* mediated by PR in the Irish model. The standardized regression between BQ and ItoI without PR was 0.31, but this decreased to 0.17 with the introduction of PR, and the relationship lost its significance ( $p=0,11$ ). This result was further confirmed by the Sobel Test statistics ( $p<0,05$ ) and the indirect significance in the bootstrapping method ( $p=0,001$ ). Another result that was common to both samples was the negative and significant effect of PR on ItoI (reg. $=-0,72$ ;  $p<0,01$ ).

Thus,  $H_{3b-4b}$  is supported for the Irish application.

The overall variance in ItoI explained by the structural model was 74%, a very strong result. This percentage decreased to as low as 40% without the effect of PR.

No mediating effect of perceived risk was found in the relationships between brand awareness and brand loyalty and intention to invest since the relationships between brand variables and perceived risk, as one of the conditions in Baron and Kenny approach (path a), is not meaningful for either variables ( $p>0,05$ ).

Thus,  $H_{1b}$  and  $H_{5b}$  are not supported for the Irish application.

The structural model for the Irish application is shown below.

### **Research Model 2**

## Discussion

The two structural models indicate that the brand equity embodied in the stock exchanges has a significant effect on the intention to invest, all other things being equal. However, this effect is strongly mediated through perceived risk in the developing Turkish Stock Market, while its role is much lower in the more developed Irish Stock Market.

In the Turkish sample, there is a direct relationship between each brand equity element and intention to invest. The influence of brand equity on the intention to invest is overshadowed, however, by the perceptions of risk toward the stock exchange (BIST). Perceived risk acts as a full mediator between brand quality, the second most important investment criterion for both samples, and intention to invest. In other words, the positive effect of product quality on the intention to invest disappears in the presence of high perceived risk.

Another striking result detected in the Turkish sample is the positive and significant relationship between brand awareness and perceived risk, compared to other studies which have found a negative relationship (Chang and Chen, 2014; Hanafizadeh and Khedmatgozar, 2012). The evidence from our study suggests that, as the participants know more about the BIST, they perceive higher risk. In contrast, there is a negative relationship between brand quality and brand loyalty and perceived risk.

Unlike the Turkish sample, the Irish sample was found to be much less influenced by perceived risk in the relationship between the brand equity and intention to invest in the ISE. Brand awareness and brand loyalty have direct and positive effects on the intention to invest without any link to perceived risk. In other words, even in the case where perceived risk eliminates the positive effect of brand quality, brand awareness and brand loyalty still

positively affect the overall brand equity of the ISE, with the latter having a higher effect than the former. Moreover, the total percentage of variance explained amounts to 74% in the ISE model, which is remarkably high, for social science research (Hair et al., 2009).

## **Conclusions**

There is a considerable body of research focused on the decision-making behavior of investors involved in financial markets. One strand within this research has investigated the effect of brands and brand variables on investment choices at individual and institutional levels (Frieder and Subrahmanyam, 2005; Huberman, 2001; Keloharju et al., 2012). The basic finding of these studies is that perceptions and sentiments towards corporate brands in the wider consumer market spill over into the stock market.

While these studies have made an important contribution in identifying the link between consumer behavior and investment behavior, and the significant role of brands in both arenas, they ignore the influence of the intermediaries, the financial markets and the stock exchanges, through which the investments are transacted. This study addresses this gap, by investigating the effect of perceptions towards the stock exchanges in their own countries, to examine whether these intermediaries mediate the influence of corporate brands in investment decisions.

This study was based on a comparative analysis of two stock markets that have a number of important similarities, i.e. the Turkish Stock Exchange, (BIST), and the Irish Stock Exchange (ISE). The results indicated that stock exchanges act as corporate brands for private investors similar to consumer brands for individual consumers, and possess differing levels of brand equity. The brand equity manifests itself through brand awareness, brand quality and brand loyalty variables, and these have significant impact on investors' intention to invest,



with the highest impact deriving from the brand loyalty in both contexts. In other words, any increase (decrease) in the level of brand loyalty affects intention to invest in the stock market.

Another important result was found in the mediating effect of perceived risk on the relationship between brand equity and intention to invest. The impact of this variable was largest in Turkey, a developing market, compared to a developed market like Ireland. This result was also compatible with the demographic results which pointed to equity investment as the last choice for the Turkish sample, while it was at the top of the list for the Irish one. All in all, the investors in a developing market context were found to be more inclined to perceive risk in their investment decisions than those in a developed market.

### **Theoretical Implications**

This research addresses a gap in the literature by approaching financial markets as brands (Kokosalakis et al., 2006) which need to work on their value propositions for potential customers/investors and to promote themselves to increase awareness (Jansson and Power, 2006). In this sense, it brings the marketing and finance disciplines together, mostly an ignored interdisciplinary area, by exchanging different approaches between the two.

By ascribing a brand value to stock exchanges beyond their basic financial role, it emphasizes the investor-based brand equity that the stock exchange gains throughout its operations with its customers/investors. The brand equity, as the sum of the values attached to a given stock exchange in this context, is also proposed to act as a simplifying short-cut or heuristics to smooth the investment decision making process.

This research further shows that the extent of perceived risk, thought to be a crucial determinant of financial decisions, differs significantly in financial markets according to their level of economic development. Its impact on investment decisions is found to be more

pervasive and more negative in a developing financial market context, while the strength of brand equity overshadows this effect in a developed one. This is effectively a country-of-origin effect which reflects onto the perceived risk for a stock market, with a resulting mediating role between brand equity and investment decision.

The results also show that proposing stock exchanges as corporate brands necessitates a holistic evaluation, going beyond the investor behavior and cognitive decision making process to include a wider approach onto the macro-economic conditions that the country, which hosts the stock exchange.

### **Practical Implications & Suggestions**

This research has revealed that people, regardless of being actual, potential or non-investors, have certain value perceptions, which can be expressed in terms of brand and brand equity, towards the stock exchange of their country of residence. These perceptions act either as an enabler or barrier to their intention to invest. This overlaps with the traditional viewpoint which sees well-known corporate brands as having brand equity deriving jointly from features of the brand itself and from customers' perceptions.

These results combine to suggest that efforts to market a stock exchange are as important as marketing efforts for any brand in the consumer market. This viewpoint calls for a professional approach, especially at the upper management level, to understand investor behavior and develop marketing programs, tailored to investor needs and expectations. A strong emphasis on 'trust' is especially important to contribute to the positive brand image of the stock market. This is true both at the developing and developed market contexts.

The results indicate a low level of market penetration for stock exchanges in both countries, which suggests room for growth. Any attempts to activate the private investor

market will only succeed, however, if the stock exchange has a strong brand image and equity, associated with high quality performance, trustworthiness, and therefore low risk.

Furthermore, the evidence provides insights into the differing roles of brand equity dimensions in altering market perceptions. For instance, any marketing attempt by the BIST management to increase brand awareness, as being supportive of brand equity, seems to result in a simultaneous increase in risk perceptions. Raising awareness is, therefore, suggested to be counter-balanced by an accompanying emphasis on trust and risk factors.

In the ISE context, brand awareness and brand loyalty is found not to be correlated with risk, so it is highly unlikely that any media coverage putting its major emphasis on risk will result in increased investment rates. Instead, there is a greater need to demonstrate performance so as to increase participation rates and build further loyalty.

In sum, it is believed that stock exchanges are of critical importance. In order to increase the investment potential of a stock market, thus contributing to the economic growth of any country. To achieve their potential, they need to be treated as corporate brands that need to be supported by marketing investment to build brand equity and enhance their reputation.

### **Limitations**

This research has certain limitations such as investigating individual, private investors as the basic unit of analysis, and thus leaving out institutional investors; evaluating investor behavior only from an equity-investment perspective and excluding other types of investment instruments such as government funds, treasury bills, bonds and currencies; not being a comparative study in the strict sense, in that the respondents were only asked about their own countries.

These limitations suggest opportunities for further research. It would be interesting and valuable to discover how institutional investors perceive individual stock exchanges and the extent to which these perceptions influence their purchasing decisions. It would also be very valuable to conduct a comparative study where investors are asked to rank different country markets on variables such as associations, quality of performance, and trust to assess their relative brand equity.

## References

- Aaker, D. A. (1992). "The value of brand equity", *Journal of Business Strategy*, 13(4), 27-32.
- Aaker, D. D. (1991). *Managing brand equity: Capitalizing on the value of a brand name*.  
New York: Free Press.
- Aksoy, M., Karatepe, S., Seçme, Z. O. & Benli, F. (2013). "Short- and Long-Term Links among Turkish and European Stock Markets: Portugal, Italy, Greece, Spain and Ireland", In Š. Bojnec, J. C. Brada, & M. Kuboniwa (Eds.), *Overcoming the Crisis: Economic and Financial Developments in Asia and Europe*, Koper: University of Primorska Press, 219-233.
- Anderson, J.C. & Gerbing, D.W. (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two - Step Approach", *Psychological Bulletin*, 103, 411-423.
- Anisimova, T. A. (2007). "The effects of corporate brand attributes on attitudinal and behavioural consumer loyalty", *Journal of Consumer Marketing*, 24(7), 395-405.
- Aspara, J. & Tikkanen, H. (2011). "Corporate marketing in the stock market". *European Journal of Marketing*, 45(9/10), 1446-1469.
- Aspara, J. & Tikkanen, H. (2011). "Consumers' stock preferences beyond expected financial

- returns". *International Journal of Bank Marketing*, 28 (3), 193-221.
- Awais, M., Laber, M. F., Rasheed, N. & Khursheed, A. (2016). "Impact of Financial Literacy and Investment Experience on Risk Tolerance and Investment Decisions: Empirical Evidence from Pakistan". *International Journal of Economics and Financial Issues*, 6(1), 73-79.
- Aydin, S. & Özer, G. (2005). "The analysis of antecedents of customer loyalty in the Turkish mobile telecommunication market", *European Journal of Marketing*, 39(7/8), 910-925.
- Bagozzi, R. P. & Yi, Y. (1988). "On the evaluation of structural equation models". *Academy of Marketing Science*, 16(1), 74-94.
- Barber, B. M. & Odean, T. (2008). "All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors". *Review of Financial Studies*, 21(2), 785-818.
- Baron, R. M., & Kenny, D. A. (1986). "The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations". *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Barwise, P. (1993). "Brand Equity: Snark or Boojum". *International Journal of Research in Marketing*, 10(1), 93-104.
- Berry, L. L. (2000). "Cultivating Service Brand Equity". *Journal of the Academy of Marketing Science*, 28(1), 128-137.
- Bijmolt, T. H. A. & Paas, L. J. & Vermunt, J. K. (2004). "Country and consumer segmentation: Multi-level latent class analysis of financial product ownership". *International Journal of Research in Marketing*, 21, 323-340.
- Billett, M. T., Jiang, Z. & Regoa, L. L. (2014). "Glamour brands and glamour stocks". *Journal of Economic Behavior & Organization*, 107, 744-759.

- Blackston, M. (1992). "Building brand equity by managing the brand's relationships". *Journal of Advertising Research*, 32(3), 79-83.
- Blut, M., Frenne, C. M., Mittal, V. & Mothersbaugh, D. L. (2015). "How procedural, financial and relational switching costs affect customer satisfaction, repurchase intentions, and repurchase behavior: A meta-analysis". *International Journal of Research in Marketing*, 32, 226-229.
- Burmann, C., Jost-Benz, M. & Riley, N. (2009). "Towards an identity-based brand equity Model". *Journal of Business Research*, 62, 390-397.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications and Programming*. (2nd Ed.). USA: Routledge.
- Chang, C. H. & Chen, Y. S. (2014). "Managing green brand equity: the perspective of perceived risk theory". *Quality and Quantity*, 48, 1753-1768.
- Chaudhuri, A. & Holbrook, M. B. (2001). "The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty". *Journal of Marketing*, 65(2), 81-93.
- Christodoulides, G., De Chernatony, L., Furrer, O., Shiu, E. & Abimbola, T. (2006). "Conceptualising and Measuring the Equity of Online Brands". *Journal of Marketing Management*, 22(7-8), 799-825.
- Chu, P. Y., Chang, C. C., Chen, C. Y., Wang, T. Y. (2010). "Countering negative country-of-origin effects", *European Journal of Marketing*, 44(7/8), 1055-1076.
- Chuang, S.C. and Yen, H.J. (2007). "The impact of a product's country-of-origin on compromise and attraction effects", *Marketing Letters*, 18 (4), 279-291.
- Chuang, W. & Susmel, R. (2011). "Who is the more overconfident trader? Individual vs. institutional investors". *Journal of Banking & Finance*, 35, 1626-1633.
- Cobb-Walgren, C. J., Ruble C. A., & Donthu N. (1995). "Brand equity, brand preference, and

purchase intent". *Journal of Advertising*, 24, 25-40.

Cui, A. P., Fitzgerald, M. P. and Donovan, K. R. (2014), "Extended self: implications for country-of-origin", *Journal of Consumer Marketing*, 31(4), 312-321.

Çelik, S. & Isaksson, M. (2013). "Institutional investors and ownership engagement". *OECD Journal: Financial Market Trends*, 2, 93-114.

Davcik, N. S. & Sharma, P. (2015), "Impact of product differentiation, marketing investments and brand equity on pricing strategies", *European Journal of Marketing*, 49(5/6), 760-781.

DeCanniere, M. H., De Pelsmacker, P. & Geuens, M. (2010). "Relationship quality and purchase intention and behavior: The moderating impact of relationship strength". *Journal of Business Psychology*, 25, 87-98.

deChernatony, L. & Cottam (née Drury), S. (2006). "Internal brand factors driving successful financial services brands". *European Journal of Marketing*, 40(5/6), 611-633.

deChernatony, L., Harris, F.J. & Christodoulides, G. (2004). "Developing a brand performance measure for financial services brands". *Services Industries Journal*, 24(2), 15-33.

Eckert, C., Louviere, J. J. & Islam, T. (2012). "Seeing the forest despite the trees: Brand effects on choice uncertainty". *International Journal of Research in Marketing*, 29, 256-264.

Erdem, T., Zhao, Y. & Valenzuela, A. (2004). "Performance of store brands: A cross-country analysis of consumer store-brand preferences, perceptions, and risk". *Journal of Marketing Research*, 41(1), 86-100.

Erdem, T. & Swait, J. (1998). "Brand Equity as a Signaling Phenomenon". *Journal of Consumer Psychology*, 7(2), 131-157.

Fama, E.F. and French, K.R. (2007). "Disagreement, tastes, and asset prices", *Journal of*

*Financial Economics*, 83, 667-89.

Farquhar, P. H. (1989). "Managing Brand Equity". *Marketing Research*, 1(3), 24-33.

Finucane, M. L., Slovic, P., Mertz, C. K., Flynn, J. & Satterfield, T. A. (2000). "Gender, race, and perceived risk: The 'white male' effect". *Health, Risk & Society*, 2(2), 159-172.

Frieder, L. & Subrahmanyam, A. (2005). "Brand Perceptions and the Market for Common Stock". *Journal of Financial and Quantitative Analysis*, 40(1), 57-85.

Gabaix, X., Gopikrishnan, P., Plerou, V. & Stanley, H. E. (2006). "Institutional Investors and Stock Market Volatility". *The Quarterly Journal of Economics*, 121(2), 461-504.

Gompers, P. A. & Metrick, A. (2001). "Institutional Investors and Equity Prices". *The Quarterly Journal of Economics*, 116(1), 229-259.

Grewal, D., Gotlieb, J. & Marmorstein, H. (1994). "The moderating effects of message framing and source credibility on the price-perceived risk relationship". *Journal of Consumer Research*, 21(1), 145-153.

Grullon, G., Kanatas, G. & Weston, J. P. (2004). "Advertising, Breadth of Ownership, and Liquidity". *Review of Financial Studies*, 17(2), 439-461.

Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2009). *Multivariate Data Analysis*. (7<sup>th</sup> Ed.). Upper Saddle River: Prentice Hall.

Hanafizadeh, P. & Khedmatgozar, H. R. (2012). "The mediating role of the dimensions of the perceived risk in the effect of customers' awareness on the adoption of Internet Banking in Iran". *Electronic Commerce Research*, 12, 151-175.

Harrison, R. T., Mason C. and Smith, D. (2015) "Heuristics, learning and the business angel investment decision-making process", *Entrepreneurship & Regional Development*, 27:9-10, 527-554.

Hastak, M. & Mitra, A. (1996). "Facilitating and Inhibiting Effects of Brand Cues on Recall, Consideration Set, and Choice". *Journal of Business Research*, 37, 121-122.



- Himme, A. & Fischer, M. (2014). "Drivers of the cost of capital: The joint role of non-financial metrics". *International Journal of Research in Marketing*, 31, 224-238.
- Homburg, C., Klarmann, M. & Schmitt, J. (2010). "Brand awareness in business markets: When is it related to firm performance?". *International Journal of Research in Marketing*, 27, 201-212.
- Hsu, L. & Lawrence, B. (2016). "The role of social media and brand equity during a product recall crisis: A shareholder value perspective". *International Journal of Research in Marketing*, 33, 59-77.
- <http://www.statista.com/statistics/323923/uk-share-of-global-private-equity/> (14/03/2016)
- Huang, R. & Sarigöllü, E. (2014). "Assessment of Brand Equity Measures". *International Journal of Market Research*, 56(6), 783-806.
- Huberman, G. (2001). "Familiarity breeds investment". *Review of Financial Studies*, 14(3), 659-680.
- Huberman, G & Wei, J. (2006). "Offering versus Choice in 401(k) Plans: Equity Exposure and Number of Funds". *Journal of Finance*, 61(2), 763-779.
- Hult, G. T. M., Ketchen, D. J., Griffith, D. A., Chabowski, B. R., Hamman, M. K., Dykes, B. J., Pollitte, W.A. & Cavusgil, S. T. (2008). "An assessment of the measurement of performance in international business research". *Journal of International Business Studies*, 39(6), 1064-1080.
- Ivkovic, Z. & Weisbenner, S. (2005). "Local does as local is: Information content of the geography of individual investors' common stock investments". *Journal of Finance*, 60(1), 267-306.
- Jacobsen, B. P. (2012). "Place brand equity: A model for establishing the effectiveness of place brands". *Journal of Place Management and Development*, 5(3), 253-271.
- Jacobsen, B. P. (2009). "Investor-based place brand equity: A theoretical framework".

*Journal of Place Management and Development*, 2(1), 70-84.

Jansson, J. & Power, D. (2010). "Fashioning a Global City: Global City Brand Channels in the Fashion and Design Industries". *Regional Studies*, 44(7), 889-904.

Kahneman, D. & Tversky, A. (1979). "Prospect Theory: An Analysis of Decision under Risk". *Econometrica*, 47(2), 263-292.

Kapareliotis, I. & Panopoulos A. (2010). "The determinants of brand equity". *Managerial Finance*, 36(3), 225-233.

Kapferer, J. N. (2012). *The new strategic brand management. Advanced Insights & Strategic thinking*. (5<sup>th</sup>ed.). London: Kogan Page.

Katsumata, S. and Song, J. (2016). "The reciprocal effects of country-of-origin on product Evaluation", *Asia Pacific Journal of Marketing and Logistics*, 28(1), 92-106.

Keller, K. L. (1993). "Conceptualizing, measuring and managing customer-based brand equity". *Journal of Marketing*, 57(1), 1-22.

Keloharju, M., Knüpfer, S. & Linnainmaa, J. (2012). "Do Investors Buy What They Know? Product Market Choices and Investment Decisions". *Review of Financial Studies*, 25(10), 2921-2955.

Kim, H., Kim, W. G. & An, J. A. (2003). "The effect of consumer-based brand equity on firms' financial performance". *Journal of Consumer Marketing*, 20(4), 335-351.

Klein, J.G. (2002). "Us versus them, or us versus everyone? Delineating consumer aversion to foreign goods", *Journal of International Business Studies*, 33(2), 345-363.

Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling*. (3<sup>rd</sup> Ed.). USA: The Guilford Press.

Kokosalakis, C., Bagnall, G., Selby, M. & Burns, S. (2006). "Place image and urban regeneration in Liverpool". *International Journal of Consumer Studies*, 30(4), 389-397.

- Kumar, R. S., Dash, S. & Purwar, P. C. (2013). "The nature and antecedents of brand equity and its dimensions". *Marketing Intelligence & Planning*, 31(2), 141-159.
- Kumar, S. and Goyal N. (2015). "Behavioural biases in investment decision making-a systematic literature review", *Qualitative Research in Financial Markets*, 7(1), 88-108.
- Lassar, W., Mittal, B. & Sharma, A. (1995). "Measuring customer-based brand equity". *Journal of Consumer Marketing*, 12(4), 11-19.
- Lim, K. L., Soutar, G. N. & Lee, J. A. (2013). "Factors affecting investment intentions: A consumer behavior perspective". *Journal of Financial Services Marketing*, 18(4), 301-315.
- Luk, S. T. F. & Yip, L. S. C. (2008). "The moderator effect of monetary sales promotion on the relationship between brand trust and purchase behavior". *Journal of Brand Management*, 15(6), 452-464.
- Malhotra, N. K. & Birks, D. F. (2008). *Marketing Research: An Applied Approach*. (3<sup>rd</sup> Ed.) England: Pearson Education Limited.
- Mitchell, Vincent-Wayne (1999). "Consumer perceived risk: conceptualisations and models", *European Journal of Marketing*, 33(1/2), 163-195.
- Netemeyer, R. G., Krishnan, B., Pulliga, C., Wang, G., Yagci, M., Deane, D., Ricks, J. & Wirth, F. (2004). "Developing and validating measures of facets of customer-based brand equity". *Journal of Business Research*, 57(2), 209-224.
- Noussair, C. N., Trautmann, S. T. & Van De Kuilen, G. (2014). "Higher order risk attitudes, demographics and financial decisions". *Review of Economic Studies*, 81, 325-355.
- Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric Theory*. (3<sup>rd</sup> Ed.). USA: Mc-Graw-Hill.
- Otchere, I. (2006), "Stock Exchange self-listing and value effects", *Journal of Corporate*

Finance, 12(5), 926-953.

Pandey, S., Sharma, N. K. & Mittal, A. K. (2013). "Interactive Effect of Behavioral and Demographic Variables on Individual Investors' Search Behavior". *International Journal of Trade, Economics and Finance*, 4(2), 60-65.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y. & Podsakoff, N. P. (2003). "Common method biases in behavioral research: A critical review of the literature and recommended remedies". *Journal of Applied Psychology*, 88(5), 879-903.

Qiu, C. and Leszczyc, P. P. (2016), "Send-for-review decisions, brand equity, and pricing", *European Journal of Marketing*, 50(1/2), 145-165.

Romaniuk, J. & Nenycz-Thiel, M. (2013). "Behavioral brand loyalty and consumer brand Associations". *Journal of Business Research*, 66, 67-72.

Schich, S. (2003), "Prospects for Stock Exchanges", *Financial Market Trends*, 85, 89-117.

Schiffman, L. G., O'Cass, A., Paladino, A., D'Alessandro, S. & Bednall, D. (2011). *Consumer Behaviour*. (5th ed.). Pearson, Frenchs Forest.

Schumann, J. H., Wunderlich, N. V. & Evanschitzky, H. (2014). "Spillover effects of service failures in coalition loyalty programs: The buffering effect of special treatment benefits". *Journal of Retailing*, 90, 111-118.

Shankar, V., Smith, A. K. & Rangaswamy, A. (2003). "Customer satisfaction and loyalty in online and offline environments". *International Journal of Research in Marketing*, 20(2), 153-175.

Singleton, R. A. & Straits, B. C. (2009). *Approaches to Social Research*. (5<sup>th</sup> Ed.). New York, NY: Oxford University Press.

Sweeney, J. C., Soutar, G. N. & Johnson, L. W. (1999). "The Role of Perceived Risk in the

Quality-Value Relationship: A Study in A Retail Environment”. *Journal of Retailing*, 75(1), 77-105.

Swoboda, B., Berg, B. & Schramm-Klein, H. (2013). “Reciprocal effects of the corporate reputation and store equity of retailers”. *Journal of Retailing*, 89(4), 447-459.

Virlics, A. (2013). “Investment Decision Making and Risk”. *Procedia Economics and Finance*, 6, 169-177.

Washburn, J. H. & Plank, R. E. (2002). “Measuring brand equity: An evaluation of a consumer-based brand equity scale”. *Journal of Marketing Theory and Practice*, 10(1), 46-62.

World Federation of Exchanges, WFE (2013). Cost and Revenue Survey-2012, 1-41.

Yang, A. S. (2013). “Decision Making for Individual Investors: A Measurement of Latent Difficulties”, *Journal of Financial Services Research*, 44, 303-329.

Yoo, B. & Donthu N. (2001). “Developing and validating a multidimensional consumer-based brand equity scale”. *Journal of Business Research*, 52(1), 1-14.

**Table 1: Sample Demographics**

		Turkey*		Ireland**	
		Frequency	Turkey %	Frequency	Ireland %
<b>Gender</b>	Male	1093	69,3	211	54,4
	Female	485	30,7	163	42,0
<b>Age Category</b>	21 - 30	544	34,5	24	6,1
	31 - 40	531	33,7	96	24,3
	41 - 50	295	18,7	128	32,4
	51 and above	208	13,2	147	37,2
<b>Education Level</b>	Undergraduate	72	4,6	27	6,9
	Post-graduate	1506	95,4	367	93,2
<b>Marital Status</b>	Married	983	62,3	260	66,8
	Single	595	37,7	92	23,7
<b>Monthly Income</b>	375 €-below***	2	0,1	(1000 - 2500€) 59	15,0
	376 € - 750€****	16	1,0	(2501 - 4000€) 127	32,3
	751 € - 1124€	68	4,3	(4001 - 5500€) 47	12,0
	1125€ - 1498€	665	42,1	(5501 - 7000€) 46	11,7
	1499€ - 1873€	321	20,3	(7001 - 8500€) 47	12,0
	1874€ - above	506	32,1	(prefer not say) 67	17,0
<b>Occupational Category</b>	State University	1360	86,3	370	94,1
	Private University	209	13,2	6	1,5
	Retired	6	0,4	17	4,3

\*Turkey sample size = 1578; \*\*Ireland sample size = 396

\*\*\* In the Turkey application, the demographic question regarding the income is asked in the national currency (TL), however converted into Euro here for the easiness of comparison between the two samples.

\*\*\*\*EUR/TRY = 2.6737, as of Jan, 15, 2015

**Table 2: Investment Experience of Samples**

		Turkey		Ireland	
		Frequency	Turkey %	Frequency	Ireland %
<b>Investor Category</b>	Current Investor*	375	23,8	101	25,8
	Potential Investor**	198	12,5	58	14,8
	Lost Investor***	194	12,3	43	11
	Not Investor****	811	51,4	189	48,3

Turkey sample size = 1578; Ireland sample size = 396

\*Current Investors refer to those who are currently investing in the particular stock market actively.

\*\*Potential Investors refer to those who have not invested in the particular stock market before, but are planning to do so in near future.

\*\*\*Lost Investors refer to those who have invested in the particular stock market before, but are not considering doing so again in the future.

\*\*\*\*Not Investors refer to those who have not invested in the particular stock market before, and are not considering doing so in the future.

**Table 3: Primary Investment Preference of Samples**

Primary Investment Preference	TR Frequency*	TR TR %	Primary Investment Preference	IR Frequency**	IR IR %
Real Estate	572	36,3	Equity	129	32,7
Bank Deposit	282	17,9	Bank/Post. Deposit	112	28,4
Foreign Currency	271	17,2	Real Estate	80	20,3
Precious Metal	253	16,0	Precious Metal	23	5,8
Equity	124	7,9	Foreign Currency	7	1,8

\*Turkey sample size = 1578; \*\*Ireland sample size = 396

**Table 4: Reliability and Validity Results for Turkey and Ireland**

<b>TURKEY</b>									
	CR	AVE	MSV	ASV	Intention to Invest	Brand Aware	Brand Quality	Brand Loyalty	Perceived Risk
<b>Intention to Invest</b>	0,836	0,719	0,533	0,259	0,848				
<b>Brand Awareness</b>	0,816	0,604	0,082	0,056	0,250	0,777			
<b>Brand Quality</b>	0,887	0,531	0,471	0,233	0,522	0,265	0,729		
<b>Brand Loyalty</b>	0,829	0,552	0,533	0,321	0,730	0,287	0,686	0,743	
<b>Perceived Risk</b>	0,742	0,593	0,199	0,124	-0,410	0,089	-0,347	-0,446	0,770
<b>IRELAND</b>									
	CR	AVE	MSV	ASV	Intention to Invest	Brand Aware	Brand Quality	Brand Loyalty	Perceived Risk
<b>Intention to Invest</b>	0,804	0,674	0,558	0,316	0,821				
<b>Brand Awareness</b>	0,819	0,536	0,044	0,021	0,209	0,732			
<b>Brand Quality</b>	0,741	0,489	0,393	0,285	0,584	0,147	0,699		
<b>Brand Loyalty</b>	0,790	0,556	0,386	0,199	0,567	0,075	0,621	0,746	
<b>Perceived Risk</b>	0,746	0,596	0,558	0,262	-0,747	-0,113	-0,627	-0,287	0,772

**Table 5: Brand Equity and Intention to Invest: Turkey**

		<b>Independent Variable</b>	<b>Dependent Variable</b>	<b>Standardized Regression</b>	<b>Significance</b>
<b>Without Perceived Risk*</b>	<b>c<sub>1</sub> path</b>	Brand Awareness	Intention to Invest	0,054	0,016
	<b>c<sub>2</sub> path</b>	Brand Quality	Intention to Invest	0,076	0,022
	<b>c<sub>3</sub> path</b>	Brand Loyalty	Intention to Invest	0,656	***
<b>With Perceived Risk</b>	<b>a<sub>1</sub> path</b>	Brand Awareness	Perceived Risk	0,225	***
	<b>b<sub>1</sub> path</b>	Perceived Risk	Intention to Invest	-0,146	***
	<b>c<sub>1</sub> path</b>	Brand Awareness	Intention to Invest	0,087**	***
	<b>a<sub>2</sub> path</b>	Brand Quality	Perceived Risk	-0,108	0,005
	<b>b<sub>2</sub> path</b>	Perceived Risk	Intention to Invest	-0,146	***
	<b>c<sub>2</sub> path</b>	Brand Quality	Intention to Invest	0,062**	0,057
	<b>a<sub>3</sub> path</b>	Brand Loyalty	Perceived Risk	-0,408	***
	<b>b<sub>3</sub> path</b>	Perceived Risk	Intention to Invest	-0,146	***
	<b>c<sub>3</sub> path</b>	Brand Loyalty	Intention to Invest	0,596**	***

\*  $\chi^2/sd=6,5$ ; GFI=,94; AGFI=,92 NFI=,93; RFI=,91; IFI=,94; TLI=,93; CFI=,94; RMSEA=,05

\*\* Bootstrapping significance (BA-ItoI)=0,001; Bootstrapping significance (BQ-ItoI)=0,013; Bootstrapping significance (BL-ItoI)=0,001

\*\*\* < ,01

**Table 6: Brand Equity and Intention to Invest: Ireland**

		<b>Independent Variable</b>	<b>Dependent Variable</b>	<b>Standardized Regression</b>	<b>Significance</b>
<b>Without Perceived Risk*</b>	<b>c<sub>1</sub> path</b>	Brand Awareness	Intention to Invest	0,142	0,009
	<b>c<sub>2</sub> path</b>	Brand Quality	Intention to Invest	0,310	***
	<b>c<sub>3</sub> path</b>	Brand Loyalty	Intention to Invest	0,361	***
<b>With Perceived Risk</b>	<b>a<sub>1</sub> path</b>	Brand Awareness	Perceived Risk	-0,029	0,621
	<b>b<sub>1</sub> path</b>	Perceived Risk	Intention to Invest	-0,723	***
	<b>c<sub>1</sub> path</b>	Brand Awareness	Intention to Invest	0,195**	***
	<b>a<sub>2</sub> path</b>	Brand Quality	Perceived Risk	-0,723	***
	<b>b<sub>2</sub> path</b>	Perceived Risk	Intention to Invest	-0,723	***
	<b>c<sub>2</sub> path</b>	Brand Quality	Intention to Invest	-0,171**	0,116
	<b>a<sub>3</sub> path</b>	Brand Loyalty	Perceived Risk	0,168	0,061
	<b>b<sub>3</sub> path</b>	Perceived Risk	Intention to Invest	-0,723	***
	<b>c<sub>3</sub> path</b>	Brand Loyalty	Intention to Invest	0,442**	***

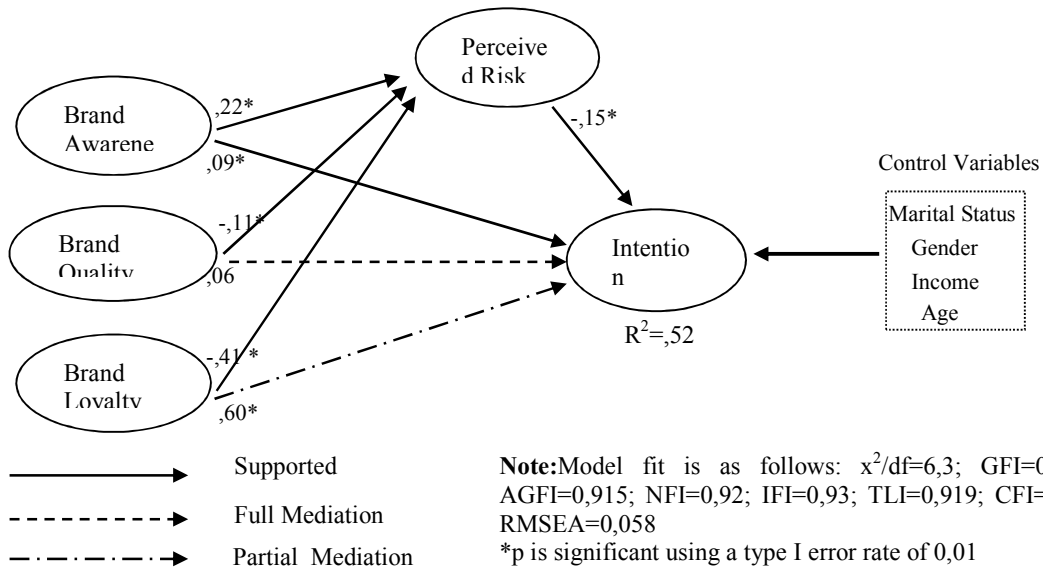
\*  $\chi^2/sd=2,5$ ; GFI=,93; AGFI=,90 NFI=,88; RFI=,85; IFI=,92; TLI=,90; CFI=,92; RMSEA=,06

\*\* Bootstrapping significance (BA-ItoI)=0,446; Bootstrapping significance (BQ-ItoI)=0,001; Bootstrapping significance (BL-ItoI)=0,847

\*\*\* < ,01



### Research Model 1: Structural Model for Turkish Application



### Research Model 2: Structural Model for Irish Application

