



# Consumers' stock preferences beyond expected financial returns

## The influence of product and brand evaluations

Consumers'  
stock preferences

Jaakko Aspara and Henrikki Tikkanen  
*Helsinki School of Economics HSE, Helsinki, Finland*

193

Received January 2009  
Revised October 2009  
Accepted November 2009

### Abstract

**Purpose** – The purpose of this paper is to examine the links between individual investors' subjective evaluations of certain companies' products and brands, on one hand, and their willingness and decisions to invest in those companies' stocks, on the other. The authors aim to challenge the traditional assumption that individuals would make stock investment decisions purely on the basis of expected financial returns and risks.

**Design/methodology/approach** – Survey data were collected from 293 individuals who invest in the stock market of a European country and analyzed with PLS path modeling.

**Findings** – In the clear majority of the consumers' stock investment decisions that were analyzed, the consumers exhibited some willingness to invest in a chosen stock beyond its expected financial returns/risk. Two variables are found to elicit willingness to invest in a company's stock beyond its financial returns: the personal relevance that the individual attaches to domains (activities or areas of interest; ideas or ideals) supported or represented by the company's products; and the individual's affective evaluation of the company's product brand.

**Research limitations/implications** – Replicating the study with different companies from different industries and with consumers from different countries will be important. Overcoming a potential retrospective bias in the reported study is also a task for further research.

**Practical implications** – The findings provide insights that can serve segmentation, targeting, and positioning when it comes to marketing a company in the stock market so as to attract investors.

**Originality/value** – The paper provides new evidence on the influence of product and brand evaluations in consumers' stock investment decisions – suggesting that positive product evaluations elicit extra willingness to invest in a company's stock, over and beyond its financial returns.

**Keywords** Brands, Europe, Consumer behaviour, Investments, Stocks

**Paper type** Research paper

### 1. Introduction

Traditionally, consumption markets and investment markets have been studied in distinct fields of research, i.e. marketing and finance, and considered to be rather isolated from each other. Only recently have marketing (Lovett and MacDonald, 2005; Schoenbachler *et al.*, 2004; Getzner and Grabner-Kräuter, 2004) and finance scholars (Clark-Murphy and Soutar, 2004; Frieder and Subrahmanyam, 2005; Garmaise, 2009) begun to point out that perceptions and evaluations of companies' products and brands may spill over into people's investment decisions in the stock market.

Many contributors have consequently called for the use of consumer theories and marketing research techniques so as to study individual investor preferences and decision making (Clark-Murphy and Soutar, 2004, 2005; Fama and French, 2007; Garmaise, 2009; Statman, 2004). What has been seen as a particularly promising area



for marketing/consumer researchers is the study of subjective investment preferences that go over and beyond objective financial returns and risks of stocks (Frieder and Subrahmanyam, 2005; Statman, 2004). Indeed, it has been argued that "some – perhaps most – investors have preferences that go beyond expected financial returns and risk" (Fisher and Statman, 1997, p. 48). Such investment motivations have been explained with the emotional or experiential utility (Beal *et al.*, 2005; Fama and French, 2007) or self-expressive benefits (Statman, 2004) that individuals may obtain from investing in certain kinds of stocks, in addition to the expected financial utility/benefits of the stocks. However, while this earlier research has mostly focused on self-expressive/emotional benefits obtainable from investments in socially responsible companies (ethicality) and companies based in one's home country (patriotism), there is lack of research into non-financial investment motivations that may stem from investors' subjective evaluations of companies' products and brands.

The purpose of this article is to provide new understanding about the effects of individuals' subjective evaluations of companies' products and brands on their willingness to invest in companies' stocks, over and beyond the expected financial returns and risks of the stocks. Evoking two rather basic concepts from consumer theories, the main claim of this paper is that individuals' willingness to invest in certain companies' stocks beyond financial returns can be influenced by:

- (1) The perceived personal relevance that individuals attach to domains supported or represented by the companies' products.
- (2) The individuals' affective evaluations of the companies' product brands.

Our choice to analyze these two factors, particularly, stems from their being among the most studied – if not the most studied – constructs of past decades' consumer research. Indeed:

- Perceived personal relevance of companies' products has been widely theorized in research related to consumers' involvement and identification with product categories (e.g. Michaelidou and Dibb, 2006; Zaichkowsky, 1985, 1994; Aspara *et al.*, 2008).
- Affective brand evaluations have been widely studied in research on consumers' attitudes towards brands (e.g. Assael, 1992; Keller, 1993; Tietje and Brunel, 2005).

Thus, our intention is to theorize and provide evidence on how these basic consumer behavior concepts may influence individual investors' investment behavior towards companies' stocks, over and beyond the stocks' expected financial returns. In so doing, we indeed respond to the call to introduce basic consumer theory concepts to the study of individuals' investment behavior.

Based on psychological theory related to the constructs, we develop a set of hypotheses about the influence of the two factors on individuals' willingness to invest in stocks. We then proceed to test our hypotheses with survey data collected from 293 individuals investing in the stock market of a European country (Finland). We find that stock investment willingness beyond financial returns/risks is manifested in up to 85 per cent of individuals' stock investment cases within the data. This finding evidently runs against the traditional finance notion that only financial returns and risks would matter. Specifically, we find evidence of two manifestations of willingness to invest in a stock beyond its financial returns as well as the influence of subjective product and

brand evaluations thereon. First, we find that the personal relevance of a company's product domain and affective evaluation of its product brand have positive effects on an individual's determination to invest in the company's stock rather than in other stocks that have approximately similar expected financial returns/risks. Second, the same factors are even found to elicit preparedness to invest in the company's stock with lower financial returns expected from the stock than from others.

## 2. Theory and hypothesis

### 2.1 *Personal relevance of domains represented by company's products*

The first psychological construct of interest to us relates to the degree of personal relevance that investors may attach to a company's products. Notably, personal relevance is a phenomenon to which consumer researchers refer widely when studying people's "involvement" with products and issues in general. Indeed, albeit that the involvement concept in itself has been subject to ambiguity (see Antil, 1984; Bloch and Richins, 1983; Michaelidou and Dibb, 2006; Mittal, 1995; Zaichkowsky, 1985, 1994), it is mostly agreed that involvement essentially has to do with the personal relevance, importance, and/or interest that a person attaches to a certain object.

Although some researchers assume that there may exist products which are inherently "high-involvement products", "high-importance products", or "high-relevance products", Antil (1984) notes that "it is not the product *per se* that is involving, but the personal meaning or significance the individual attributes to the characteristics of that product that results in involvement" (p. 204). Moreover, we specifically focus on personal relevance as implicated in enduring (or ego-)involvement (as opposed to situational involvement, which occurs, e.g. with food products in a hunger situation). In enduring involvement, the personal relevance of a product reflects its being related to the individual's identity, self-image, or self concept – and, therein, his[1] personally important interests, needs, and values (Bloch, 1981; Celsi and Olson, 1988; Zaichkowsky, 1985); leisure activities or areas of interest (Celsi and Olson, 1988; Havitz and Dimanche, 1997; Havitz and Mannell, 2005) – and/or "ideals", "themes" and "projects" of life in general (Coulter *et al.*, 2003; Huffman *et al.*, 2000).

Thus, there are actually two aspects to the phenomenon to consider:

- (1) The degree of personal relevance of a certain activity, area of interest, theme, or ideal to an individual and his identity – i.e. His identification with it. Note that from now on, we refer to such activities, areas of interest, ideas, and ideals – ones to which an individual may attach a degree of personal relevance – with the single term "domain", following Aspara *et al.* (2008).
- (2) The degree to which an individual perceives certain products (of a certain company) to represent or support the domain.

Notably, both of these two aspects may and will vary from individual to individual (Laaksonen, 1994). Nevertheless, the product category of a company's products usually "fixes" at least some (2) perceptions of domains represented or supported by the products: For example, a car manufacturer's products are likely to be perceived (by most people) to support road traveling, whereas a pharmaceutical firm's products are likely to be perceived to support health and well-being. In contrast, the (1) degree of personal relevance attached to the domain, such as road traveling or well-being, is likely to vary much more across people.

In any case, how will the perceived personal relevance of a domain that a company's products support or represent then influence an individual's willingness to invest in the company's stock? Our application of the theory related to personal relevance is as follows. If one perceives a certain domain as personally relevant, one will identify with the domain to some extent and perceive it congruent with one's self or identity (Aspara *et al.*, 2008). One's identification with a certain object, in turn, tends to manifest in one's willingness to give supportive treatment to the object and one's scarce resources to its service (Aspara *et al.*, 2008; Bhattacharya and Sen, 2003; Scott and Lane, 2000). And one logical way through which the supportive treatment and giving of scarce resources can be pursued with respect to a certain domain is through investment in such a company's stock whose products support or represent the domain in question (Aspara *et al.*, 2008). Note that this kind of extra motivation or willingness to invest in a company's stock – stemming from one's willingness to support a domain that is relevant to one's identity – goes beyond (or, is somewhat independent of) the financial returns expected from the stock. As such, it reflects emotional or experiential utility (Beal *et al.*, 2005; Fama and French, 2007) or self-expressive benefits (Statman, 2004) that the individual obtains from the stock of the company (whose products support or represent a personally relevant domain) – not the financial utility or benefits expected of the stock.

This being the case, the positive influence that the personal relevance of a company's product domain has on an individual's willingness to invest in the company's stock is likely to manifest in two ways:

- (1) It should manifest in the individual's determination to invest in the company's stock rather than other companies' stocks that have approximately similar expected financial returns/risks. Namely, in addition to the baseline investment willingness that is due to the "mere" expected financial returns and is the same for the companies in this case (because of the similar expected financial returns), one will – as explained previously – have increased, extra willingness to invest the stock of the company whose product domain one finds personally relevant. Hence, one's "total investment willingness" should be higher for this company, and one should therefore be determined to invest in this company over the others.
- (2) The influence should even manifest in the individual's preparedness to invest in the company's stock with lower financial returns expected from the stock than from other companies' stocks (at a given risk level).

This is evident because it will be the respective, total benefits yielded by the stocks of the different companies that should determine one's investment. Thus, insofar as investing in the stock of the company whose product domain one identifies with yields self-expressive benefits, one may "accept" lower financial benefits from that company's stock and still obtain the same or higher level of perceived total benefits from that stock than from the stocks of other companies.

Summarizing the previous discussion, we propose:

- H1a.* The greater the personal relevance that an individual attaches to a domain supported or represented by a company's products, the greater is his determination to invest in/hold the company's stock rather than in another company's stock that has approximately similar expected financial returns/risks.

---

*H1b.* The greater the personal relevance that an individual attaches to a domain supported or represented by a company's products, the greater is his preparedness to invest in/hold the company's stock with lower financial returns expected from the stock than from another company.

Finally, it should be noted that the pursuit of the preferential and supportive treatment and giving of scarce resources to the company through stock investment might be unconscious and/or conscious. Accordingly, we view that the hypothesized effects may be direct as well as indirect, i.e. manifest directly and/or through the mediating variable of one's increased (and conscious) "willingness to support the company", by investing in its stock. Including this mediating variable in the empirical analysis enables verification of the very premise – stemming from the personal relevance and identification theories – that the influence of identification with an object on one's behavior occurs partly through one's desire to give supportive treatment to the object.

### *2.2 Affective evaluation of company's product brand*

The second psychological construct of interest to us, brand evaluation, is another major concept studied in consumer research – actually a concept that may have been studied more than any other single concept. Notably, brand evaluation is often addressed with the labels "brand attitude" and "attitude towards the brand", as well (Assael, 1992; Keller, 1993; Tietje and Brunel, 2005) – following the influential consumer psychologists Fishbein and Ajzen who tended to use the term "attitude" to denote consumers' overall evaluations of brands (or other attitude objects). In any case, the concept refers to an affective and valenced (positive vs negative) overall evaluation of the brand, or of the quality of the products sold under the brand (Keller, 1993). Here, we adopt the term "affective evaluation of a brand" (instead of brand attitude) especially because there is some emerging work in investor psychology that also adopts this term (MacGregor *et al.*, 2000; see also Slovic *et al.*, 2002, 2007).

Indeed, a person's affective evaluation of a brand is an overall attitude towards it: an index of how much a person likes or dislikes the brand (Ajzen and Fishbein, 1980), or a summary evaluation of the brand on bipolar dimensions of positive vs negative impressions, such as good-bad, pleasant-unpleasant, and likeable-dislikeable (Ajzen, 2001). Furthermore, the affective evaluation tends to have important behavioral implications, as it manifests in one's tendency to behave in a consistently favorable way with respect to the brand (Fishbein and Ajzen, 1975; Zajonc, 1980) – tendency to approach it rather than avoid it. Typical behaviors elicited by positive brand evaluations include purchase of the brand's products and positive word-of-mouth about the brand. Nevertheless, the behavioral implications of affective (brand) evaluation have recently been recognized by investment psychology research, as well, with respect to individuals' investment behavior. MacGregor *et al.* (2000), especially, suggest that individuals' affective evaluations of companies may be a major basis on which individuals make investment decisions – besides rational calculation of expected financial returns.

Actually, since an individual's ability to calculate all the pros and cons of various alternative stocks in terms of future financial returns is very limited, the influence of affective evaluation will be further emphasized, according to MacGregor *et al.* (2000). As individuals are able to make only very rough approximations of the return-risk profiles of stocks, they may just prefer to buy the stock of a company that they "like" – as

stemming from, e.g. the product brand liking – over other stocks deemed to have approximately similar risk-return profiles. This kind of investment decision making manifests the use of a mental shortcut to which Slovic *et al.* (2002, 2007) elsewhere refer as “affect heuristic”. That is, individuals will use their overall, readily available affective impressions such as brand evaluations as mental shortcuts to reach decisions, especially when the required judgment or decision is complex and/or mental resources are limited – as is the case with investments. Based on this discussion, our hypothesis becomes:

*H2a.* The more positive an individual’s affective evaluation of a company’s product brand, the greater is his determination to invest in company’s stock rather than in another company’s stock that has approximately similar expected financial returns/risks.

Furthermore, not only can affective brand evaluation determine an investor’s choice of one company stock over alternatives that have approximately similar financial returns, but it may also lead to actual desire to possess a company. Specifically, psychologists and sociologists who study consumers’ fondness of personal collections have shown that consumers often have the need and motivation to possess and surround themselves with objects towards which they have special affect (Danet and Katriel, 1989; Pearce, 1994). These researchers studying consumers’ collections also explicitly point out the close relationship between one’s affection for an object, on one hand, and will to possess the object, on the other – so as to acquire some felt dominance over the object through making it, in a sense, one’s personal belonging (Danet and Katriel, 1989; see Tuan, 1984). Now, we extend this theory to a company’s brand as a potential object to be “collected”, or possessed, through owning the stock of the company behind the brand[2]. In other words, it may be that having a stronger affective evaluation of a company’s product brand results in outright desire to possess the company, through investing in and owning the company’s stock.

Since the potential desire to possess the stock of a company due to brand affect evidently means extra willingness to invest in the stock – adding to the investment willingness determined by the expected financial returns of the stock – it should again manifest in the individual’s preparedness to invest in the company’s stock with lowered financial returns, as well. Thus, we propose:

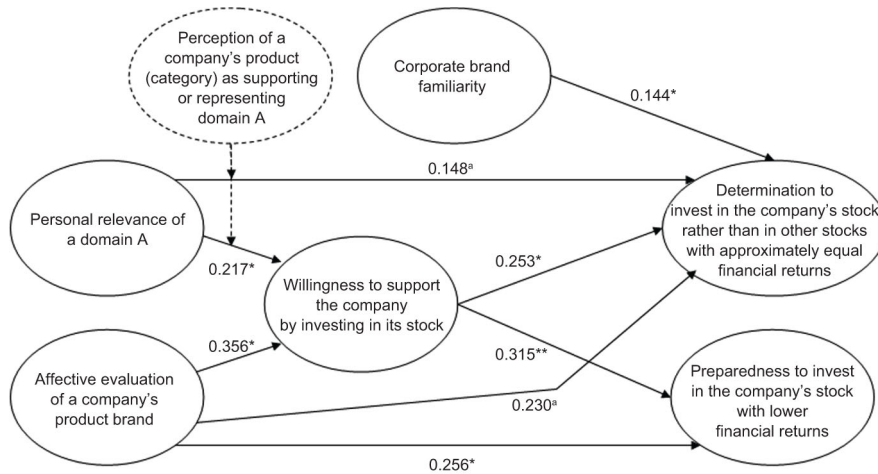
*H2b.* The more positive an individual’s affective evaluation of a company’s product brand, the greater is his preparedness to invest in/hold the company’s stock with lower financial returns expected from the stock than from another company.

Also the hypothesized effects of affective evaluation of a company’s product brand may be either direct, or channeled indirectly through (consciously) increased willingness to support the company by investing in its stock. Accordingly, tests of this mediating effect, besides the direct effects, will be included in our analysis (see Figure 1).

### 3. Method

#### 3.1 Data collection and sample

Learning about the effects of subjective product and brand evaluations on individuals’ willingness and decisions to invest in companies’ stocks requires data on individuals’



**Notes:** <sup>a</sup> $p < 0.10$ , \* $p < 0.05$ , \*\* $p < 0.01$ . Significant path coefficients are noted in the Figure. There were additionally several company-dummy control and moderator variables that were found to have significant effects

**Figure 1.** Results: simplified structural model of the effects of product evaluations on an individual's willingness to invest in a company's stock, beyond its expected financial returns/risk

subjective evaluations of the products of specific companies, as well as on the individuals' willingness/decisions to invest in those companies' stocks. In order to obtain data on individuals' real investment decisions concerning the stocks of specific companies, we pursued contact with individual investors who had recently invested in certain companies' stocks (less than 1.5 years in the past). Institutional investors were outside the present study's scope, both theoretically and samplewise.

We approached 300 individual/private investors per three consumer product companies (N, F, A) from different industries, listed in Helsinki Stock Exchange, Finland. As to the date, the Finnish stock market and investors operate on a fairly Anglo-American logic, with emphasis on shareholder value creation. Accordingly, Finnish investors have recently been investigated in many much-cited studies (e.g. Grinblatt and Keloharju, 2000, 2001a, b). The approached individuals were randomly sampled from a list of such stockowners of the companies who had become stockowners during the past 1.5 years. The three companies had well-known product brands at the national level, so that valid product evaluation data could be obtained. The individuals were sent a questionnaire via mail in the summer of 2007, with a prepaid reply envelope. A total of 293 usable questionnaires were returned, yielding a response rate of 32.5 per cent. The eventual sample size was adequate for the main data analysis method used, PLS path modeling (see Chin and Newsted, 1999).

A description of the investors in the final sample – individuals who had invested in the three companies N, F, and A, respectively – is provided in Table I, in terms of a set of personal background variables. The background variables include gender, age, education, monthly income, total number of stocks owned, and stock following activity. The distribution of investor characteristics in the sample accords to an intuitive notion of individual investors: the distribution is bent towards middle-aged (rather than very young or old), college/university educated, and medium/high-income people. Most of the

	Overall sample	Company N's investors	Company F's investors	Company A's investors	Chi square	p-value
<i>Gender</i>						
Female	23.7	22.5	28.4	18.3	2.951	0.229
Male	76.3	77.5	71.7	81.7		
<i>Age</i>						
Below 15	0.6	0.8	0.8	0.0	13.022	0.111
15-25	2.4	2.3	1.6	3.7		
26-40	22.3	14.7	27.6	25.9		
41-60	44.5	45.7	39.4	50.6		
Over 60	30.3	36.4	30.7	19.8		
<i>Education (highest)</i>						
Middle school	9.5	8.7	11.8	7.3	12.686	0.123
High school	5.7	3.9	7.9	4.9		
Vocational school	11.6	15.8	9.5	8.5		
College/ bachelor	22.9	28.4	21.3	17.1		
University/ master	50.3	43.3	49.6	62.2		
<i>Monthly income (€)</i>						
Below 2,000	15.0	14.2	19.8	8.8	14.865	0.021
2,000-3,999	47.2	54.3	44.4	40.0		
4,000-5,999	21.3	19.7	21.4	23.8		
Over 6,000	16.5	11.8	14.3	27.5		
<i>Total no. of stocks owned</i>						
1-2	2.1	3.9	0.8	1.2	8.993	0.174
3-5	21.3	23.9	18.9	21.0		
6-10	37.0	40.8	37.0	30.9		
Over 10 stocks	39.6	31.5	43.3	46.9		
<i>Stock following activity</i>						
Daily	36.0	34.1	37.5	36.6	1.990	0.921
Weekly	44.8	48.1	44.5	40.2		
Monthly	14.8	14.0	13.3	18.3		
Yearly or less	4.4	3.9	4.7	4.9		

**Table I.** Description of the sample: personal characteristics of the investor-respondents

investors also have moderately diversified stock portfolios (with six or more stocks) and tend to follow their stocks at least weekly. We also analyze, in Table I, whether there were differences in the background variables between investors who had invested in the different companies included in the study. In most variables, no statistically significant differences were detected. This warrants a conclusion that the investors of the three companies included in the study did not differ significantly by the company but likely represent a rather general profile of (Finnish) individual investors. An exception was in the variable of monthly income, where some differences can be detected: specifically, company A's investors seemed to have somewhat higher average income.

3.2 Overall approach and study design

The overall design used to examine the hypotheses involved a survey approach, whereby each subject was:

- (1) asked to retrospectively recall the time when he had bought the stock of the focal, "investee company" (i.e. the company from whose stockowner register the contacts of the subject in question had been drawn for mailing the questionnaire);
- (2) presented with the name of another, real stock-exchange-listed company (i.e. a "comparison company");
- (3) requested to respond to questions pertaining to the psychological constructs (personal relevance; affective evaluation), concerning both the investee company and the comparison company; and
- (4) requested to ponder his investment as if it had been a choice between the invested company and the comparison company[3].

The dependent variables of the study were, indeed, framed as if the investment had been a choice between two stocks (investee vs comparison company). This thought experiment was necessary because our hypotheses were also framed in a corresponding way ("... rather than in another company's stock..."). Consequently, the independent predictor variables would also need to contrast the investee and comparison companies.

When it comes to the first independent variable, i.e. personal relevance of the domain supported by the company's products, we quasi-manipulated (selected): a certain domain as well as: a certain comparison company for each respondent to reflect on. The domain was selected for each investee company in the study to be such a domain that the respondents who had invested in the company would have perceived the company's products to support or represent. The comparison company, in turn, was selected to be a company whose products the respondents would not perceive to support or represent the domain in question. This quasi-manipulation was done on the basis of the industries and product categories of the companies, as illustrated in Table II. For instance, for a tire company, we manipulated the domain to be

Investee company	Investee company's industry/product category	Quasi-manipulated domain A to be supported/ represented by the investee company	Quasi-manipulated comparison companies not to be supported by the domain A	Quasi-manipulated comparison companies' industry/ product categories
N	Tires	Motoring/car-driving	M; F	Interior decoration; domestic free-time tools
F	Gardening and other domestic free-time tools	Gardening/visiting summer house	N; T	Car and other tires; food products
A	Sports equipment and apparel	A sport	F; M	Domestic free-time tools; interior decoration

**Table II.** Quasi-manipulation of the domains and comparison companies per invested companies

motoring/car-driving, since the product category of tires would likely be perceived to support motoring/car-driving. In this case, the comparison companies were, in turn, manipulated to include a company producing interior decoration items and a company producing domestic tools – product categories that would not likely be perceived to support the domain of motoring/car-driving. To enable better generalizability of the results and more varied investee company–comparison company combinations, we manipulated half of the respondents for each investee company to have one comparison company, while the other half to have another comparison company.

Should the previous quasi-manipulation be successful (reported in section 4.2), a subsequent analysis would be able to address the specific effects that the degree of the perceived relevance of a domain which the investee company's products were perceived to represent – but which the products of the comparison company were not perceived to represent (due to the very manipulation) – had on the dependent variables. Thus, it was that degree of personal relevance that would be entered into the analysis (PLS path model) as an independent predictor variable. The dependent variables would, in turn, readily contrast a subject's willingness to invest in the stock of the focal (investee) company vs that of the comparison company (see following section 3.3).

When it comes to the second independent variable, i.e. affective evaluation of the company's product brand, the quasi-manipulation setting explained previously allowed us to address the effects of this variable, as well (*H2a* and *H2b*). Specifically:

- the subject's affective evaluation of the company's product brand would be measured for both the focal investee company and the comparison company; and
- the difference of these measures would be calculated and entered into the analysis (PLS path model) as an independent predictor variable (and the effect of this difference variable on the subject's relative willingness to invest in the investee company's stock vs the comparison company's stock would be analysed).

Note again that for the first predictor variable (personal relevance of the company's product domain), we did not use a similar difference-based variable, since the particular quasi-manipulated domain to which the personal relevance measurement questions pertained was not represented by the comparison company's products in the first place (as per the quasi-manipulative selection of the comparison company). Hence, the degree of personal relevance of the domain in question would only affect investment interest in the focal company (whose products did represent the domain per the quasi-manipulation).

### *3.3 Analysis method and measures*

As our analysis method, we chose to utilize causal path modeling of latent variables. This is a structural equation modeling method which has in recent decades been used increasingly often, in psychological and consumer research, to test or confirm hypothesized effects of individuals' attitudes on their behaviors (Bagozzi, 1980; Baumgartner and Homburg, 1996; Bentler and Speckart, 1979; Bentler, 1980). The method is especially suited to analyzing latent variables, i.e. variables or constructs of interest (such as affective evaluation or personal relevance) which cannot be directly measured, but which the researcher measures with a number of manifest

---

variables/indicators. The causal modeling explains the statistical properties of the measured variables in terms of the hypothesized latent variables and their causal relationships (Bentler, 1980). In simple terms, the modeling yields statistical indicators concerning how well one latent variable is correlated with – and, hence, predicts – another variable, and so enables the testing of multiple causal hypothesis at once.

As our specific causal path modeling method, we apply partial least squares (PLS) path modeling (Fornell and Cha, 1994), which allows for the simultaneous testing of hypotheses while enabling single- and multi-item measurement (Fornell and Bookstein, 1982) – and does not require normally distributed or even interval-scaled variables. Specifically, we employ SmartPLS software (Ringle *et al.*, 2005), which has an easy-to-use graphic interface for outlining and calculating structural models. Our structural causal model contains, as predictor latent variables:

- the personal relevance of a domain supported or represented by a company's products (PERSONAL RELEVANCE OF PRODUCT DOMAIN); and
- the affective evaluation of a company's product brand (AFFECTIVE EVALUATION OF PRODUCT BRAND).

As dependent variables, the model contains:

- an individual's determination to invest in the company's stock rather than in another company's stock that has approximately similar expected financial returns/risks (DETERMINATION TO INVEST WHEN EQUAL FINANCIAL RETURNS); and
- an individual's preparedness to invest in the company's stock with lower financial returns expected from the stock than from another company's stock (PREPAREDNESS TO INVEST WITH LOWER FINANCIAL RETURNS).

The model also contains a mediating variable for an individual's willingness to support the company by investing in its stock (WILLINGNESS TO SUPPORT THE COMPANY BY INVESTING) as explained in the theory section.

We also included one main control variable in the model, pertaining to an individual's familiarity of the corporation (CORPORATE BRAND FAMILIARITY), in order to control for the possibility that any found effects are actually due to individuals' differential familiarities with the companies, their products, and brands – rather than the hypothesized affective evaluations and personal relevances. In addition, we included in the model indicators of the investee companies and comparison companies as dummy control variables, in order to control the effect of investee-company-specificity and comparison-company-specificity (as well as domain-specificity) in the model. Furthermore, we included interaction terms of the predictor variables and the company dummy variables, in order to control for moderating effects of the investee-company-specificity and comparison-company-specificity.

The scales for the dependent measures of the model were new and developed for the present study, due to lack of earlier research in the area. The dependent variable DETERMINATION TO INVEST WHEN EQUAL FINANCIAL RETURNS was measured with a single-item indicator, whereby the subjects were asked:

If you had been convinced at the time of buying the (investee company's) stock that the financial returns from the (comparison company's) stock would absolutely certainly be exactly the same as those of the (investee company's), how would you have invested?

The responses were recorded on a bipolar seven-point scale anchored by 0 = “Which stock to invest in would have made no difference to me” and 6 = “I would still have invested in (investee company’s) stock”.

The other dependent variable PREPAREDNESS TO INVEST WITH LOWER FINANCIAL RETURNS was measured with a single-item indicator as well, by asking the subjects:

How much greater financial returns (assuming that the investment time horizon and investment risk would have stayed the same) should you have been promised from the (comparison company’s) stock, so that you would have chosen to invest in (comparison company’s) stock instead of (investee company’s) stock? Circle a percentage.

The responses were recorded by asking the subjects to choose a percentage out of the following: 1 per cent higher, 2 per cent higher, 5 per cent higher, 10 per cent higher, 20 per cent higher, 30 per cent higher, 50 per cent higher, 100 per cent higher. A logarithm transformation was performed on the reported percentage to obtain the variable value.

The mediating variable, WILLINGNESS TO SUPPORT THE COMPANY BY INVESTING, was measured by asking the subjects: “How strong a desire did you have to support (investee company’s) business by investing in its stocks?”. The responses were recorded on a seven-point bipolar scale, anchored by 0 = “no such desire at all” and 6 = “very strong desire”.

Concerning the determinant constructs, we measured the predictor variables PERSONAL RELEVANCE OF PRODUCT DOMAIN and AFFECTIVE EVALUATION OF PRODUCT BRAND with reflective two- and six-item scales, respectively. The control variable CORPORATE BRAND FAMILIARITY was measured with a two-item reflective scale. The predictor variable scales were partly adapted from earlier research. The scale items for those variables are presented in Table III.

The measurement items were pre-tested with a group of marketing researchers and professors, and refined on the basis of this pretest. The items reported previously were the final measurement items used in the questionnaire sent to the investors. In general, the reliability of the measurement scales resulted to be satisfactory. For the reflective scales used for the dependent variables PERSONAL RELEVANCE OF PRODUCT DOMAIN and AFFECTIVE EVALUATION OF PRODUCT BRAND as well as the control variable CORPORATE BRAND FAMILIARITY, the alpha scores resulted greater than 0.70. The average variance extracted is greater than 0.60 and composite reliability is greater than 0.80 for all constructs. Multi-collinearity between the constructs is not an issue: all correlations among latent variables are less than or equal to 0.50.

### *3.4 Validity and reliability of the study approach*

When it comes to selecting this study approach, it was assumed – as consumer research usually does – that credible and valid data about both an individual’s attitudes and his behaviors can be gathered by asking the individual himself to give self-reports about them (Ajzen, 2008; Anderson, 1986; Weaver and Schwartz, 2008). This approach generally enables the study of psychological, latent variables, and is not limited to a narrow set of overt behaviors or behavior proxies. Moreover, it was considered that data about real stock investment decisions that investors had recently made would be more valid than data about purely hypothetical “what if” investment scenarios. Of course, our approach also involved some hypothetical aspects, as the scenario asked the respondent to ponder his investment decision as if it had been a

Construct	Measurement	Scale
Personal relevance of product domain	"How relevant a thing was [domain A] to you personally?" 0 = "made no difference" ... 6 = "very relevant" "How well did [domain A] reflect you as a person?" 0 = "not at all" ... 6 = "very well"	Reflective, two items
Affective evaluation of product brand <sup>a</sup>	"What were the products of [company X's brand name] like in your opinion?" -3 = "very unpleasant" ... +3 = "very pleasant" -3 = "very unattractive" ... +3 = "very attractive" -3 = "very bad" ... +3 = "very good" "Did you like the products of [company X's brand name]?" -3 = "didn't like at all" ... +3 = "liked very much" "What kind of attitude did you have towards [company X's product brand name]?" -3 = "very negative" ... +3 = "very positive" "The products of [company X's product brand name] were clearly better than those of competitors" "strongly disagree" ... "strongly agree" <sup>c</sup>	Reflective, six items
Corporate brand familiarity <sup>b</sup>	"How well do you think you knew the products of [company X's product brand name]?" -3 = "not at all" ... +3 = "very well" "How well do you think you knew [company X] as a company?" -3 = "not at all" ... +3 = "very well"	Reflective, two items

**Notes:** <sup>a</sup>Note that the actual explanatory variable (affective evaluation of product brand) used in the analyses of the dependent variables determination to invest when equal financial returns and preparedness to invest with lower financial returns was the difference between a respondent's scores on the above seven-item measure for the invested company vs the comparison company. <sup>b</sup>The actual explanatory variable for corporate brand familiarity was analogous to the use of affective evaluation of product brand explained previously<sup>a</sup>. <sup>c</sup>This item was based on the theoretical position that the affective evaluation of a company's products will be exhibited largely relative to competition

**Table III.**  
Items for determinant constructs

choice between the investee company and the comparison company. However, anchoring the survey scenario and questions to real companies and real investment decisions that the respondents had made gives our data a fair amount of realistic sense.

On the other hand, the pursuit of data pertaining to respondents' real investment decisions also meant, in practice, that the data were retrospective – since no efficient access to investors' investment decisions could (or can) be gained at the time of the decision making. This inevitably brings a potential retrospection bias to the data, as people may tend to "construct" their retrospective memories in the present, as well as post-rationalize their past decisions. Nevertheless, we consider our data to still be adequately valid for our theoretical purposes, for the following reasons. First, even if

people's memories of their past affective states are partly "constructed" in the present, there is also much research suggesting that such memories are fairly accurate – particularly insofar as there has not been change in one's personal goals or self/personality appraisals since the memorized period (see, e.g. Levine *et al.*, 2001; Levine *et al.*, 2006; Barrett, 1997). In our case, the respondents' unchanged investments in the focal companies' shares since the initial investment (less than 1.5 years ago) until the moment of inquiry hints about their unchanged goals in regards to these attitudinal objects. The relatively little time that had elapsed since the initial investment hints, in turn, that the respondents' perceptions of their own personalities had likely remained fairly unchanged.

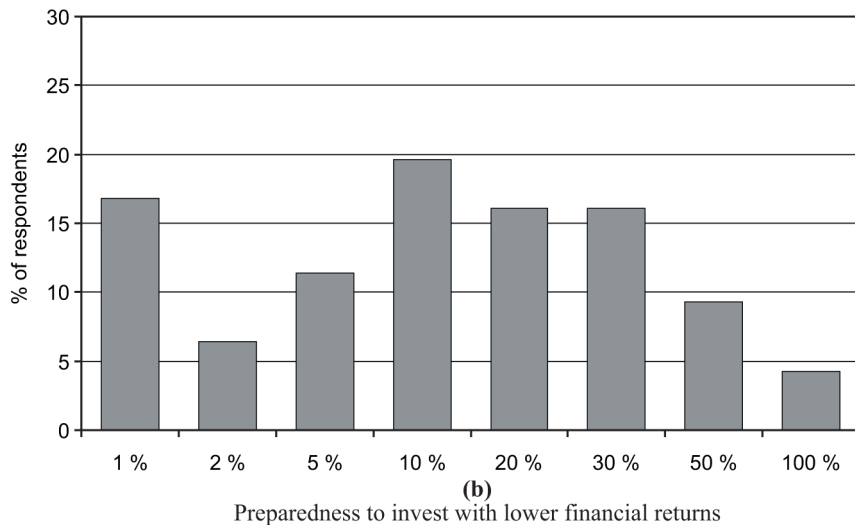
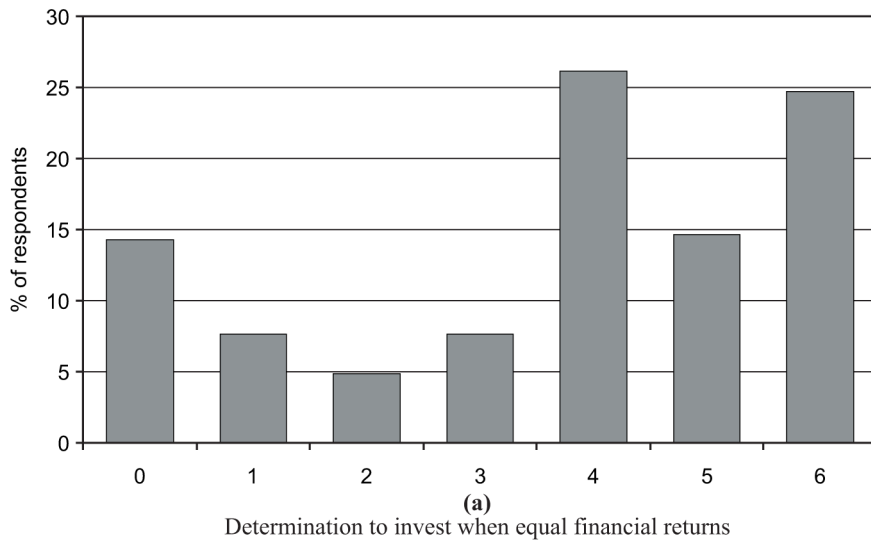
Second, it has been shown that people's memories of past affective episodes often accord with their affective states at the end of the episode (Fredrickson, 1991, 2000; Varey and Kahneman, 1992). In our case, as we asked about the respondents' affects towards the companies during the time of investment consideration, the memorized affects are likely to pertain to the relevant "end" of this period, i.e. the actual moment of the investment decision.

Third, even if the respondents' recalled affective states concerning the companies somewhat reflected their current affective states, due to the respondents' (affective, dissonance-reducing) commitment to their particular investment decisions (see Bem, 1972), the data is still adequately valid for our theoretical purposes. Namely, to the extent that this kind of reflecting occurs, our data will, in part, reflect the individuals' current motivation to hold their investments in the particular companies' shares (or, investment choice reasoning they would make currently, based on their current appraisals of the companies, see Levine *et al.*, 2006) – but still manifest the very motivational link between one's affective state/identification and one's holding a particular stock investment, which we are expressly hypothesizing about[4]. In these respects, the possibility that the respondents partly reflect their (on-going) affective commitment and reasoning to their initial investments does not undermine the validity of the data in serving the examination of our theoretical hypotheses. Note also that there is no reason to believe that the investors in general would post-rationalize their decisions by overestimating the extent to which they were prepared to sacrifice expected financial returns when investing in the particular company – or the extent to which they were determined to invest in the company in case another company would have offered the same financial returns. After all, exaggerating such preparedness or determination – which, in effect, imply some disregard of money – would be all but rational. This point gives us confidence that the results about preparedness to sacrifice financial returns (see Figure 2) are actually underestimated rather than overestimated.

## 4. Results

### 4.1 Descriptive statistics concerning stock investment willingness beyond financial returns

In contrast to "benchmark" notion of traditional finance, i.e. that only financial returns and risks matter, our hypotheses assume that individuals may have extra willingness to invest in a company's stock, beyond its expected financial returns/risk. Examining the distribution of values on the two dependent variables derived, our presumption receives support. Figure 2 presents the frequency distributions of respondents' answers on the dependent variables.



**Notes:** (a) 0 = indifferent to which investment to choose ('invested company' vs 'comparison company') if equal financial returns; 6 = determinate to invest in 'invested company' even if equal financial returns. (b) How much higher (risk-free) financial returns from another (/comparison) company's stock would have been enough to the respondent for him/her to switch investments

**Figure 2.** Respondents' willingness to in the company's stock beyond its expected financial returns/risk

With regard to DETERMINATION TO INVEST WHEN EQUAL FINANCIAL RETURNS, only 14.3 per cent of the respondents exhibit the leftmost benchmark value, indicating that if offered an alternative investment with equal financial returns and risk, they would have been indifferent as to which investment to choose. The rest, 85.7 per cent,

exhibited more or less strong determination to invest in the focal company's stock, beyond its expected financial returns. In a similar vein, only 16.8 per cent of the respondents exhibit the leftmost benchmark value on PREPAREDNESS TO INVEST WITH LOWER FINANCIAL RETURNS, indicating that even a minimal increase in risk-free financial returns offered from another company's stock would have made them switch investments. The rest, 83.2 per cent, exhibited preparedness to invest in the focal company's stock with more or less lower financial returns offered than from another, comparison company, at a given risk level.

4.2 Manipulation checks

Table IV presents the findings for the tests of whether the quasi-manipulated domain for each company in the study was such a domain that the respondents who had invested in the company perceived the company's products to support or represent, and whether the quasi-manipulated comparison companies' products would not be perceived to support the domain in question. From the mean values it can be seen that for all manipulated domains and for all manipulated comparison companies, the respondents overall agreed (mean > 3.0) with statements suggesting support by the investee company's products to the manipulated domain, while disagreeing (mean < 3.0) with statements suggesting support by the manipulated comparison

Item	Quasi-manipulated domain	Means for investee vs comparison companies		
		Investee company: Mean	Quasi-manipulated comparison company 1: Mean	Quasi-manipulated comparison company 2: Mean
"The products of [company X] supported/represented car-driving very well"	Car-driving	N: 3.931 **	F: 1.936 **	M: 1.648 **
		N: 4.569 **	F: 1.900 **	M: 1.815 **
"[Company X] was committed to developing products that support/represent car-driving"	Gardening	F: 4.533 **	N: 1.911 **	M: 2.678 *
		F: 4.600 **	N: 2.044 **	M: 2.583 *
"The products of [company X] supported/represented gardening very well"	A sport	A: 4.551 **	F: 1.381 **	M: 0.9260 **
		A: 4.629 **	F: 1.372 **	M: 0.8889 **
"[Company X] was committed to developing products that support/represent sport"				

**Notes:** \*Planned comparison of mean to value 3 (disagree-agree scale neutral) significant at  $p < 0.05$  level. \*\*planned comparison of mean to value 3 (disagree-agree scale neutral) significant at  $p < 0.001$  level

**Table IV.**  
Manipulation checks

---

company's products to the same domain. All the means differed significantly from 3.0 at  $p < 0.05$  level.

#### 4.3 Tests of hypotheses

We list the path coefficients and  $t$ -values in Table V). Figure 1 presents the final model in a simplified form, with significant paths noted. The model explains 28.7 per cent of DETERMINATION TO INVEST WHEN EQUAL FINANCIAL RETURNS and 31.7 per cent of PREPAREDNESS TO INVEST WITH LOWER FINANCIAL RETURNS, respectively. In the calculated model, PERSONAL RELEVANCE OF PRODUCT DOMAIN, AFFECTIVE EVALUATION OF PRODUCT BRAND, or both have significant ( $p < 0.05$ ), direct and/or indirect effects on the dependent variables, in support of our hypotheses. In addition, all significant parameters are in the proposed directions, providing general support for our hypotheses.

With regard to the dependent variable DETERMINATION TO INVEST WHEN EQUAL FINANCIAL RETURNS, we find, on one hand, a marginally significant ( $p < 0.10$ ) direct path from PERSONAL RELEVANCE OF PRODUCT DOMAIN leading to it. This hints, in support of *H1a*, that an increase in the personal relevance of a domain supported or represented by a company's products increases individuals' determination to invest in the company's stock rather than other stocks that have approximately similar expected financial returns/risks. Also the direct path from AFFECTIVE EVALUATION OF PRODUCT BRAND towards DETERMINATION TO INVEST WHEN EQUAL FINANCIAL RETURNS is marginally significant ( $p < 0.10$ ). This hints, as we propose in *H2a*, that an increase in the affective evaluation of a company's product brand increases individuals' determination to invest in the company's stock.

On the other hand, there are significant indirect paths with positive effects ( $p < 0.05$ ) from both PERSONAL RELEVANCE OF PRODUCT DOMAIN and AFFECTIVE EVALUATION OF PRODUCT BRAND towards DETERMINATION TO INVEST WHEN EQUAL FINANCIAL RETURNS, through the mediating variable WILLINGNESS TO SUPPORT THE COMPANY BY INVESTING. That is, both the personal relevance of a domain represented by a company's products and the affective evaluation of a company's product brand increase individuals' willingness to support the company by investing in its stock, which in turn raises their determination to invest in the company's stock rather than in other stocks that have approximately similar expected financial returns/risks. In other words, willingness to support the company by investing in it partially mediates the positive effects that the personal relevance of a company's product domain and the affective evaluation of a company's product brand have on determination to invest in the company's stock rather than other stocks with approximately similar expected financial returns. Thus, both *H1a* and *H2a* receive support, especially when it comes to the indirect effects (through willingness to support the company by investing in it).

With regard to the dependent variable PREPAREDNESS TO INVEST WITH LOWER FINANCIAL RETURNS, we find a significant ( $p < 0.05$ ) direct path from AFFECTIVE EVALUATION OF PRODUCT BRAND leading to it. This suggests, as we propose in *H2b*, that an increase in the affective evaluation of a company's product brand increases individuals' preparedness to invest in the company's stock with lower financial returns expected from that stock than from another stock.

Whereas the direct path from PERSONAL RELEVANCE OF PRODUCT DOMAIN towards PREPAREDNESS TO INVEST WITH LOWER FINANCIAL RETURNS remains non-significant,

Effect of	On	Path coeff	t-value
<i>Main determinants</i>			
Personal relevance of product domain	Willingness to support the company by investing	0.2166	1.7969 *
Affective evaluation of product brand	Willingness to support the company by investing	0.3559	1.8847 *
Personal relevance of product domain	Determination to invest when equal financial expectations	0.1477	1.5406 <sup>a</sup>
Affective evaluation of product brand	Determination to invest when equal financial expectations	0.2558	1.4729 <sup>a</sup>
Personal relevance of product domain	Preparedness to invest with lower financial returns	-0.0166	0.2371
Affective evaluation of product brand	Preparedness to invest with lower financial returns	0.2300	1.9566 *
<i>Mediator</i>			
Willingness to support the company by investing	Determination to invest when equal financial expectations	0.2526	2.1357 *
Willingness to support the company by investing	Preparedness to invest with lower financial returns	0.3154	2.6069 **
<i>Controls</i>			
Corporate brand familiarity	Willingness to support the company by investing	0.0186	0.3906
Corporate brand familiarity	Determination to invest when equal financial expectations	0.1436	2.2183 *
Corporate brand familiarity	Preparedness to invest with lower financial returns	-0.0136	0.2650
<i>Company dummy controls</i>			
Dummy: invested company F	Willingness to support the company by investing	-0.0015	0.0106
Dummy: invested company A	Willingness to support the company by investing	-0.2198	1.4764 <sup>a</sup>
Dummy: comparison company N	Willingness to support the company by investing	-0.2116	1.3529 <sup>a</sup>
Dummy: comparison company M	Willingness to support the company by investing	-0.0818	0.7903
Dummy: invested company F	Determination to invest when equal financial expectations	-0.3194	1.4053 <sup>a</sup>
Dummy: invested company A	Determination to invest when equal financial expectations	0.1322	0.9827
Dummy: comparison company M	Determination to invest when equal financial expectations	-0.0404	0.3360
Dummy: comparison company N	Determination to invest when equal financial expectations	-0.0548	0.4528
Dummy: invested company F	Preparedness to invest with lower financial returns	-0.5077	2.2567 *
Dummy: invested company A	Preparedness to invest with lower financial returns	0.1827	1.2170

**Table V.**  
Impacts of determinants  
on willingness to invest  
in a company's stock

(continued)

Effect of	On	Path coeff	t-value
Dummy: comparison company N	Preparedness to invest with lower financial returns	-0.0280	0.2604
Dummy: comparison company M	Preparedness to invest with lower financial returns	-0.3111	1.7184*
<i>Company dummy moderators</i>			
Dummy: invested company F × Personal relevance of product domain	Willingness to support the company by investing	0.1496	0.9068
Dummy: invested company A × Personal relevance of product domain	Willingness to support the company by investing	0.0748	0.6783
Dummy: comparison company N × Personal relevance of product domain	Willingness to support the company by investing	0.0407	0.3738
Dummy: comparison company M × Personal relevance of product domain	Willingness to support the company by investing	-0.0269	0.2623
Dummy: invested company F × Personal relevance of product domain	Determination to invest when equal financial expectations	-0.0831	0.5925
Dummy: invested company A × Personal relevance of product domain	Determination to invest when equal financial expectations	-0.1299	0.9616
Dummy: comparison company N × Personal relevance of product domain	Determination to invest when equal financial expectations	0.1046	0.8513
Dummy: comparison company M × Personal relevance of product domain	Determination to invest when equal financial expectations	-0.1677	1.3312***
Dummy: invested company F × Personal relevance of product domain	Preparedness to invest with lower financial returns	-0.0115	0.0851
Dummy: invested company A × Personal relevance of product domain	Preparedness to invest with lower financial returns	-0.0834	0.7303
Dummy: comparison company N × Personal relevance of product domain	Preparedness to invest with lower financial returns	-0.0660	0.7071
Dummy: comparison company M × Personal relevance of product domain	Preparedness to invest with lower financial returns	-0.0027	0.0252
Dummy: invested company F × Affective evaluation of product brand	Willingness to support the company by investing	-0.3741	1.9919*
Dummy: invested company A × Affective evaluation of product brand	Willingness to support the company by investing	-0.0534	0.8176
Dummy: comparison company N × Affective evaluation of product brand	Willingness to support the company by investing	0.1301	1.2456
Dummy: comparison company M × Affective evaluation of product brand	Willingness to support the company by investing	-0.2058	2.3593**
Dummy: invested company F × Affective evaluation of product brand	Determination to invest when equal financial expectations	-0.0885	0.7721
Dummy: invested company A × Affective evaluation of product brand	Determination to invest when equal financial expectations	0.0564	0.8495
Dummy: comparison company N × Affective evaluation of product brand	Determination to invest when equal financial expectations	0.1439	1.7093*
Dummy: comparison company M × Affective evaluation of product brand	Determination to invest when equal financial expectations	0.0136	0.2438
Dummy: invested company F × Affective evaluation of product brand	Preparedness to invest with lower financial returns	-0.1286	1.3857***

(continued)

Table V.

Effect of	On	Path coeff	<i>t</i> -value
Dummy: invested company A × Affective evaluation of product brand	Preparedness to invest with lower financial returns	-0.1669	2.1631 *
Dummy: comparison company N × Affective evaluation of product brand	Preparedness to invest with lower financial returns	-0.0763	0.9687
Dummy: comparison company M × Affective evaluation of product brand	Preparedness to invest with lower financial returns	0.0771	1.1232
Dummy: invested company F × Willingness to support the company by investing	Determination to invest when equal financial expectations	0.2929	1.8027 *
Dummy: invested company A × Willingness to support the company by investing	Determination to invest when equal financial expectations	-0.0995	1.2297
Dummy: comparison company N × Willingness to support the company by investing	Determination to invest when equal financial expectations	-0.1702	1.3659 ***
Dummy: comparison company M × Willingness to support the company by investing	Determination to invest when equal financial expectations	0.1279	1.4830 ***
Dummy: invested company F × Willingness to support the company by investing	Preparedness to invest with lower financial returns	0.2981	1.8582 *
Dummy: invested company A × Willingness to support the company by investing	Preparedness to invest with lower financial returns	-0.2177	2.0032 *
Dummy: comparison company N × Willingness to support the company by investing	Preparedness to invest with lower financial returns	0.1458	1.4695 ***
Dummy: comparison company M × Willingness to support the company by investing	Preparedness to invest with lower financial returns	0.1824	1.6764 *

**Notes:** \**p* < 0.05 (one-sided); \*\**p* < 0.01 (one-sided); \*\*\**p* < 0.10 (one-sided). The *t*-values were calculated through a bootstrapping routine with 269 cases and 500 samples

Table V.

we find, again, significant indirect paths with positive effects ( $p < 0.05$ ) from both AFFECTIVE EVALUATION OF PRODUCT BRAND and PERSONAL RELEVANCE OF PRODUCT DOMAIN towards PREPAREDNESS TO INVEST WITH LOWER FINANCIAL RETURNS – through the mediating variable WILLINGNESS TO SUPPORT THE COMPANY BY INVESTING. That is, both the affective evaluation of a company’s product brand and the personal relevance of a domain represented by a company’s products increase individuals’ willingness to support the company by investing in its stock, which in turn raises their preparedness to invest in the company’s stock with lower financial returns expected from that stock than from another stock. Noting the significance vs non-significance of the direct paths, willingness to support the company by investing in its stock partially mediates the positive effect of affective evaluation of the company’s product brand, while fully mediating the effect of personal relevance of a company’s product domain,

---

on preparedness to invest in the company's stock with lowered financial returns. So both *H1b* and *H2b* receive support, when it comes to the indirect effects (through willingness to support the company by investing in it).

Examining the main control variable, we also find a significant direct path from CORPORATE BRAND FAMILIARITY to DETERMINATION TO INVEST WHEN EQUAL FINANCIAL RETURNS, but as expected, even with the inclusion of this control variable in the model, the effects of the main predictor variables are as reported previously. This being the case, it seems established that the found positive effects that product brand evaluations have on individuals' investment interest are not due to individuals' mere familiarities with the companies' brands (see Frieder and Subrahmanyam, 2005).

Examining the dummy company variables, we find that many of these variables have direct and/or moderating effects on the dependent variables and the relationships between PERSONAL RELEVANCE OF PRODUCT DOMAIN and AFFECTIVE EVALUATION OF PRODUCT BRAND and the dependent variables. This suggests that there are likely to be certain company- and/or industry-specific factors unidentified in our model that additionally explain some of individuals' extra willingness to invest in companies' stocks beyond financial returns, and/or strengthen or weaken the impact of the predictor constructs thereon. For example, the investee company being "A" is found to have significant, negative moderating effect on the relationship between AFFECTIVE EVALUATION OF PRODUCT BRAND and PREPAREDNESS TO INVEST WITH LOWER FINANCIAL RETURNS. This finding may result from the fact that affective evaluation of that company's products had less substantial effect on a respondent's preparedness to invest in that company's stock with lowered financial returns than was the case with other companies. The finding might also result from a situation that the respondents' overall affective evaluation of that company's products was on average at higher level.

## 5. Discussion

### 5.1 Contributions to research

Both marketing and finance researchers have recently become interested in the fact that perceptions and evaluations of companies' products may spill over to people's investment decisions in the stock market. However, there has been a lack of research that would directly examine the individual-level links between people's subjective evaluations of certain companies' products and brands, on one hand, and their subjective willingness and decisions to invest in those companies' stocks, on the other.

Addressing this research gap, the specific contribution of our research is to examine the effects of individuals' subjective evaluations of companies' products on their willingness to invest in the companies' stocks – over and beyond expected financial returns and risks. We found that stock investment willingness beyond financial returns/risks was manifested in up to 85 per cent of individuals' stock investment cases within our data. As partial explanation, we identify and find evidence of two variables affecting individuals' willingness to invest in a company's stock beyond its expected financial returns/risk:

- (1) individual's affective evaluation of the company's product brand(s); and
- (2) perceived personal relevance attached to domains represented by the company's product categories.

The affective evaluation (1) reflects an overall evaluation of the company's product brand (i.e. how much its product brand is liked), while the domains (2) can be heterogeneous activities or areas of interests (e.g. car-driving, gardening, or sport), or more abstract ideas (e.g. road-safety, health, cure to a severe illness, fight against climate change).

These two variables are found to influence the individual's willingness to invest in the company's stock beyond its expected financial returns and risks – in two specific forms.

First, they have positive effect on the individual's determination to invest in the company's stock rather than other stocks that have approximately similar expected financial returns/risks. Second, they even elicit certain preparedness to invest in the company's stock with lower financial returns expected from the stock than from others, at a given risk level.

Moreover, both the effects are channeled partly through the individual's willingness to support the company (and its business) by investing in its stock.

The effects found add to the general criticism of the traditional finance utility functions for only incorporating financial risk and return to explain investor behavior (Fisher and Statman, 1997; Hoffmann *et al.*, 2006). Specifically, the present study adds to the earlier research that implies that people may obtain emotional or experiential utility (see Beal *et al.*, 2005; Fama and French, 2007) and self-expressive benefits (see Statman, 2004) from investing in the stocks of certain kinds of companies. Nevertheless, while this earlier research has focused on self-expressive/emotional benefits that individuals may obtain from investments in socially responsible companies (ethicality) and companies based in one's home country (patriotism), we show that individual investors may also obtain self-expressive/emotional utility from investing in companies whose product domains are personally relevant to them and whose product brands they have affect or liking for.

### *5.2 Implications to managers*

Essentially, our research emphasizes the potential role of subjective product and brand evaluations in creating individual investor attraction beyond expected financial returns. The implications can serve segmentation and targeting when it comes to marketing the company in the financial market so as to attract individual investors, e.g. with the aim of raising capital for investments, realizing an IPO, or widening the company's shareholder base and enhancing its market valuation. Possible managerial strategies for marketing the corporation in the financial market are summarized in Table VI and discussed in the following. In effect, these strategies can be used by (investment) banks that help companies market their stocks to consumers (through retail bank networks), in IPO or stock reissue situations, for example.

*Marketing the corporation in the financial market.* First, any company can take advantage of the potential of the personal relevance of various domains to elicit extra willingness, in people, to invest in companies that support or represent those domains with their product categories. In other words, given a company with certain product categories, it may be highly useful for the company – when attempting to promote itself as an investment target in the financial market – to target specifically such individuals who find certain domains supported or represented by the company's product categories as personally relevant. Such domains may be identified by asking

Scope	Potential strategies
<p>Marketing the corporation in the financial market (so as to attract investors):</p> <ul style="list-style-type: none"> <li>→ Raising capital for investments</li> <li>→ Realizing an IPO</li> <li>→ Enhancing company's market valuation                             <ul style="list-style-type: none"> <li>• widening company's shareholder base (liquidity)</li> <li>• enhancing demand for the company's stock</li> </ul> </li> </ul>	<p>Targeting, as potential investors who to promote the company as an investment target:</p> <ul style="list-style-type: none"> <li>• Individuals who readily find activities, areas of interest, ideas, or ideals supported/represented by the company's products as personally relevant, and/or</li> <li>• Individuals who have positive affective evaluation of the company's product brand (including individuals who are actual users/customers of the company's products)                             <ul style="list-style-type: none"> <li>Emphasizing/positioning (by communication) amidst potential investors how</li> </ul> </li> <li>• The company's product support/represent activities, areas of interest, ideas, or ideals that they find personally relevant, and/or</li> <li>• The company's product brand is one of which they have positive affective evaluation</li> </ul>
<p>Hybrid marketing across product and financial markets</p> <ul style="list-style-type: none"> <li>→ Towards a "product use-stock investment community"</li> </ul>	<p>Towards the company's stockowners:</p> <ul style="list-style-type: none"> <li>• Promoting the company's products for stockowners to try and buy</li> <li>• Engaging stockowners in product development (e.g. as feedback-givers)</li> <li>• Providing incentives to stockowners to generate positive word-of-mouth about the company and recruit new customers</li> </ul> <p>Towards the company's customers:</p> <ul style="list-style-type: none"> <li>• Promoting the company's stock for customers to invest in</li> </ul> <p>Jointly towards the customers/investors:</p> <ul style="list-style-type: none"> <li>• Rendering current customers more loyal customers by offering them stocks of the company (e.g. buy-back shares, discounts)</li> <li>• Rendering current stockowners more long-term owners by offering them products of the company (e.g. samples, discounts)</li> <li>• Developing regular customer-stock option programs</li> </ul>

**Table VI.**  
Potential managerial strategies utilizing the findings of the study

the question: "What activities, areas of interest, ideas, or ideals do our company's products support or represent?". For instance, if the company's product category is tires, answers to this questions might include, at least, car-driving, road traveling, and even road safety. Accordingly, people finding these domains personally relevant can be pursued, through appropriate media channels, so as to offer the company as an investment target to them. Note that for being able to take advantage of the personal relevance of a company's product domains to potential investors, the targeted individuals need not be familiar with the company in advance. Thus, even a company that lacks an established brand can utilize this strategy.

Second, among people who already are familiar with the company (brand) in a given market, a company can target not only those who find the domains supported or represented by the company's product categories personally relevant – but additionally or alternatively also those who have particularly positive affective

evaluation of the company's products or brands. Evidently, these groups will often be overlapping in part, but it is useful to consider them separately, as well. Namely, there might not be so many people finding, for instance, certain mundane product categories (e.g. dairy products or newspapers) as highly relevant personally (in an identification sense) – but many people may still have strong brand affect for certain companies' product brands within those categories (e.g. Danone, *New York Times*). An especially useful channel for promoting the company's stock particularly to existing users of a brand might be constituted by the company's product communication materials. For instance, the company may incorporate to its product packaging, reminders or persuasive messages concerning the opportunity to invest in the company.

*Hybrid marketing across product and financial markets.* Managers can also choose to pursue integrated, "hybrid marketing" across product markets and financial markets by simultaneously marketing both its products for certain segments of people to buy and use and its stock for the same people to invest in. This way the company might pursue the development of a community of product user-stockowners who have enhanced commitment or loyalty towards the products of the company's products and brand as well as commitment to long-term stock ownership of the company (see Schoenbachler *et al.*, 2004). Accordingly, rather radical hybrid strategies (see Table IV) may be pursued in promoting and selling the company's products to and through its shareholders (e.g. word-of-mouth), on one hand, and promoting and selling the company's stock to and through its current customers, on the other. In such hybrid strategies, the company can even take advantage of the fact that consumers who own its stocks tend to be loyal customers of its products and services, as has been recently demonstrated in banking context (Aspara *et al.*, 2008).

### 5.3 Limitations and further research

There are certain limitations in the present study. The potential retrospection bias is one – although, as discussed in the Method section, it is unlikely that there is such bias that would fundamentally undermine the validity of the results concerning individuals' propensities to hold particular stock investments rather than others. In any case, further research might benefit from gathering data at the time of individuals' investment decisions, when subjects buy stocks through, e.g. internet stock trading service, as well as from tracking the investments over time. Another limitation of the present study is the potential non-response bias: the found effects might be less significant among the non-respondents. Note, however, that we found no significant differences between those who responded quickly and those who responded late, which alleviates concerns about non-response bias.

Fundamentally, our research is among the first responses to the call for using consumer theories and marketing research techniques in studying individuals' investment preferences (e.g. Garmaise, 2009; Statman, 2004). Nevertheless, much further research is needed in the area. Replicating our study with different companies from different industries, supporting/representing different domains with their products, as well as being listed and having shareholders in different countries, will be necessary steps in further research. For instance, business-to-business companies should be included in a further study, as the companies addressed in the present empirical study were consumer product companies.

Moreover, interaction effects should be considered further. It is worth noting that in additional analyses – left out of the present article due to reasons of limited space – we did not find significant interaction effects by, e.g. number of stocks owned, investment volume, investment tracking activity, or demographics. Yet, further research should examine these and other interaction variables in more detail. Finally, the effectiveness of various corporate marketing strategies in the financial market as well as hybrid strategies across product and financial markets should be explored from the managerial perspective, based on the insights developed in the present article.

### Notes

1. Throughout this article, we will only use the personal pronoun “he” (or “his, him”) when referring to individuals. We do this purely for sake of simplicity, to avoid repeating expressions like “he/she” and “his/her”. The use of “he” does not in any way suggest that the arguments would merely apply to males, or that the arguments would be contingent on the gender of the individual.
2. Of course, a brand may be collected or possessed also by the way of collecting tangible products sold under its name (see Fournier, 1998).
3. Note that respondents who indicated ownership of not only the investee company but also the comparison company presented to them (less than 10 per cent of respondents) were screened out from the data, in order to ensure similar comparison scenario among all the respondents included in the analyses.
4. Such a link should not exist at all according to the traditional rationality assumptions of mainstream finance – which our hypotheses essentially question – i.e. neither before, during, nor after the stock investment decision making, and not in self-reports any more than any other kind of data. In other words, any finding of such a positive link in the data is consistent with and in support of our hypotheses.

### References

- Ajzen, I. (2001), “Nature and operation of attitudes”, *Annual Review of Psychology*, Vol. 52, pp. 27-58.
- Ajzen, I. (2008), “Consumer attitudes and behavior”, in Haugtvedt, C.P., Herr, P. and Kardes, F.R. (Eds), *Handbook of Consumer Psychology*, Lawrence Erlbaum, Hillsdale, NJ, pp. 525-48.
- Ajzen, I. and Fishbein, M. (1980), *Understanding and Predicting Social Behavior*, Prentice Hall, Englewood Cliffs, NJ.
- Anderson, P.F. (1986), “On method in consumer research: a critical relativist perspective”, *Journal of Consumer Research*, Vol. 13 No. 2, pp. 155-73.
- Antil, J.H. (1984), “Conceptualization and operationalization of involvement”, in Kinnear, T.C. (Ed.), *Advances in Consumer Research*, Vol. 11, Association for Consumer Research, Ann Arbor, MI, pp. 203-9.
- Aspara, J., Nyman, H. and Tikkanen, H. (2008), “Influence of share ownership on repeat patronage”, *Journal of Customer Behaviour*, Vol. 7, pp. 149-63.
- Aspara, J., Olkkonen, R., Tikkanen, H., Moisander, J. and Parvinen, P. (2008), “A theory of affective self-affinity: definitions and application to a company and its business”, *Academy of Marketing Science Review*, Vol. 12 No. 3, available at [www.amsreview.org/articles/aspara03-2008.pdf](http://www.amsreview.org/articles/aspara03-2008.pdf).
- Assael, H. (1992), *Consumer Behavior and Marketing Action*, 4th ed., PWS-Kent, Boston, MA.

- Bagozzi, R.P. (1980), *Causal Models in Marketing*, Wiley, New York, NY.
- Barrett, L.F. (1997), "The relationships among momentary emotion experiences, personality descriptions, and retrospective ratings of emotion", *Personality and Social Psychology Bulletin*, Vol. 23, pp. 1100-13.
- Baumgartner, H. and Homburg, C. (1996), "Applications of structural equation modeling in marketing and consumer research: a review", *International Journal of Research in Marketing*, Vol. 13 No. 2, pp. 139-61.
- Beal, D., Goyen, M. and Phillips, P. (2005), "Why do we invest ethically?", *Journal of Investing*, Vol. 14, pp. 66-77.
- Bem, D.J. (1972), "Self-perception theory", in Berkowitz, L. (Ed.), *Advances in Experimental Social Psychology*, Academic Press, New York, NY, pp. 1-62.
- Bentler, P.M. (1980), "Multivariate analysis with latent variables: causal modeling", *Annual Review of Psychology*, Vol. 31 No. 1, pp. 419-56.
- Bentler, P.M. and Speckart, G. (1979), "Models of attitude-behavior relations", *Psychological Review*, Vol. 86 No. 5, pp. 452-64.
- Bhattacharya, C.B. and Sen, S. (2003), "Consumer-company identification: a framework for understanding consumers' relationships with companies", *Journal of Marketing*, Vol. 67, pp. 76-88.
- Bloch, P.H. (1981), "An exploration into the scaling of consumers' involvement with a product class", in Monroe, K.B. (Ed.), *Advances in Consumer Research Volume*, Association for Consumer Research, Ann Arbor, MI, pp. 61-5.
- Bloch, P.H. and Richins, M.L. (1983), "A theoretical model for the study of product importance perceptions", *Journal of Marketing*, Vol. 47 No. 3, pp. 69-81.
- Celsi, R.L. and Olson, J.C. (1988), "The role of involvement in attention and comprehension processes", *Journal of Consumer Research*, Vol. 15 No. 2, pp. 210-24.
- Chin, W.W. and Newsted, P. (1999), "Structural equation modeling analysis with small samples using partial least squares", in Hoyle, R.H. (Ed.), *Statistical Strategies for Small Sample Research*, Sage Publications, Thousand Oaks, CA, pp. 307-42.
- Clark-Murphy, M. and Soutar, G.N. (2004), "What individual investors value: some Australian evidence", *Journal of Economic Psychology*, Vol. 25, pp. 539-55.
- Clark-Murphy, M. and Soutar, G.N. (2005), "Individual investor preferences: a segmentation analysis", *Journal of Behavioral Finance*, Vol. 6, pp. 6-14.
- Coulter, R.A., Price, L.L. and Feick, L. (2003), "Rethinking the origins of involvement and brand commitment: insights from post-socialist Central Europe", *Journal of Consumer Research*, Vol. 30, pp. 151-69.
- Danet, B. and Katriel, T. (1989), "No two alike: play and aesthetics in collecting", *Interpreting Objects and Collections*, Vol. 2, pp. 253-77.
- Fama, E.F. and French, K.R. (2007), "Disagreement, tastes, and asset prices", *Journal of Financial Economics*, Vol. 83, pp. 667-89.
- Fishbein, M. and Ajzen, I. (1975), *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA.
- Fisher, K.L. and Statman, M. (1997), "The mean-variance-optimization puzzle: security portfolios and food portfolios", *Financial Analysts Journal*, Vol. 53, pp. 41-50.
- Fornell, C. and Bookstein, F.L. (1982), "Two structural equation models: LISREL and PLS applied to customer exit-voice theory", *Journal of Marketing Research*, Vol. 19, pp. 440-52.

- 
- Fornell, C. and Cha, J. (1994), "Partial least squares", in Bagozzi, R. (Ed.), *Advanced Methods of Marketing Research*, Blackwell, Cambridge, MA, pp. 52-78.
- Fournier, S. (1998), "Consumers and their brands: developing relationship theory in consumer research", *Journal of Consumer Research*, Vol. 24, pp. 343-73.
- Fredrickson, B.L. (1991), "Anticipated endings: an explanation for selective social interaction", doctoral dissertation, Stanford University, *Dissertation Abstracts International*, Vol. 3, AAD91-00818.
- Fredrickson, B.L. (2000), "Extracting meaning from past affective experiences: the importance of peaks, ends, and specific emotions", *Cognition and Emotion*, Vol. 14, pp. 577-606.
- Frieder, L. and Subrahmanyam, A. (2005), "Brand perceptions and the market for common stock", *Journal of Financial and Quantitative Analysis*, Vol. 40, pp. 57-85.
- Garmaise, M.J. (2009), "Marketing issues in corporate finance, commentaries and rejoinder to 'marketing and firm value: metrics, methods, findings, and future directions'", *Journal of Marketing Research*, Vol. 46 No. 3, pp. 324-36.
- Getzner, M. and Grabner-Kräuter, S. (2004), "Consumer preferences and marketing strategies for 'green shares': specifics of the Austrian Market", *International Journal of Bank Marketing*, Vol. 22, pp. 260-78.
- Grinblatt, M. and Keloharju, M. (2000), "The investment behavior and performance of various investor types: a study of Finland's unique data set", *Journal of Financial Economics*, Vol. 55, pp. 43-67.
- Grinblatt, M. and Keloharju, M. (2001a), "How distance, language, and culture influence stockholdings and trades", *Journal of Finance*, Vol. 56, pp. 1053-73.
- Grinblatt, M. and Keloharju, M. (2001b), "What makes investors trade?", *Journal of Finance*, Vol. 56, pp. 589-616.
- Havitz, M.E. and Dimanche, F. (1997), "Leisure involvement revisited: drive properties and paradoxes", *Journal of Leisure Research*, Vol. 29, pp. 245-78.
- Havitz, M.E. and Mannell, R.C. (2005), "Enduring involvement, situational involvement, and flow in leisure and non-leisure activities", *Journal of Leisure Research*, Vol. 37 No. 2, pp. 152-77.
- Hoffmann, A.O.I., von Eije, J.H. and Jager, W. (2006), "Investors' needs and conformity behavior: an empirical investigation", working paper, available at SSRN: <http://ssrn.com/abstract=835426>
- Huffman, C., Ratneshwar, S. and Mick, D.G. (2000), "Consumer goal structures and goal-determination processes", in Ratneshwar, S., Mick, D.G. and Huffman, C. (Eds), *The Why of Consumption: Contemporary Perspectives on Consumer Motives, Goals and Desires*, Routledge, London.
- Keller, K.L. (1993), "Conceptualizing, measuring, and managing customer-based brand equity", *Journal of Marketing*, Vol. 57 No. 1, pp. 1-22.
- Laaksonen, P. (1994), *Consumer Involvement: Concepts and Research*, Routledge, New York, NY.
- Levine, L., Safer, M.A. and Lench, H.C. (2006), "Remembering and misremembering emotions", in Sanna, L.J. and Chang, E.G. (Eds), *Judgments over Time: The Interplay of Thoughts, Feelings, and Behaviors*, Oxford University Press, New York, NY, pp. 271-90.
- Levine, L.J., Prohaska, V., Burgess, S.L., Rice, J.A. and Laulhere, T.M. (2001), "Remembering past emotions: the role of current appraisals", *Cognition & Emotion*, Vol. 15, pp. 393-417.
- Lovett, M.J. and MacDonald, J.B. (2005), "How does financial performance affect marketing? Studying the marketing-finance relationship from a dynamic perspective", *Journal of the Academy of Marketing Science*, Vol. 33, pp. 476-85.

- MacGregor, D.G., Slovic, P., Dreman, D. and Berry, M. (2000), "Imagery, affect, and financial judgment", *Journal of Psychology and Financial Markets*, Vol. 1 No. 2, pp. 104-10.
- Michaelidou, N. and Dibb, S. (2006), "Product involvement: an application in clothing", *Journal of Consumer Behaviour*, Vol. 5 No. 5, pp. 442-53.
- Mittal, B. (1995), "A comparative analysis of four scales of consumer involvement", *Psychology and Marketing*, Vol. 12, pp. 663-82.
- Pearce, S.M. (1994), *Interpreting Objects and Collections*, Routledge, London and New York, NY.
- Ringle, C., Wende, S. and Will, A. (2005), *SmartPLS Version 2.0 M2*, available at: www.smartpls.de
- Schoenbachler, D.D., Gordon, G.L. and Aurand, T.W. (2004), "Building brand loyalty through individual stock ownership", *Journal of Product & Brand Management*, Vol. 13, pp. 488-97.
- Scott, S.G. and Lane, V.R. (2000), "A stakeholder approach to organizational identity", *Academy of Management Review*, Vol. 25, pp. 43-62.
- Slovic, P., Finucane, M.L., Peters, E. and MacGregor, D.G. (2002), "The affect heuristic", in Gilovich, T., Griffin, D. and Kahneman, D. (Eds), *Heuristics and Biases: The Psychology of Intuitive Judgment*, Cambridge University Press, Cambridge, pp. 397-420.
- Slovic, P., Finucane, M.L., Peters, E. and MacGregor, D.G. (2007), "The affect heuristic", *European Journal of Operational Research*, Vol. 177 No. 3, pp. 1333-52.
- Statman, M. (2004), "What do investors want?", *Journal of Portfolio Management*, Vol. 30, pp. 153-61.
- Tietje, B.C. and Brunel, F.F. (2005), "Toward a unified implicit brand theory", in Kardes, F.R., Herr, P. and Nantel, J. (Eds), *Applying Social Cognition to Consumer-focused Strategy*, Lawrence Erlbaum, Mahwah, NJ, pp. 135-54.
- Tuan, Y.F. (1984), *Dominance and Affection: The Making of Pets*, Yale University Press, New Haven, CT.
- Varey, C. and Kahneman, D. (1992), "Experiences extended across time: evaluation of moments and episodes", *Journal of Behavioral Decision Making*, Vol. 5, pp. 169-86.
- Weaver, K. and Schwartz, N. (2008), "Self-reports in consumer behavior", in Haugtvedt, C.P., Herr, P. and Kardes, F.R. (Eds), *Handbook of Consumer Psychology*, Lawrence Erlbaum, Hillsdale, NJ, pp. 1081-102.
- Zaichkowsky, J.L. (1985), "Measuring the involvement construct in marketing", *Journal of Consumer Research*, Vol. 12, pp. 341-52.
- Zaichkowsky, J.L. (1994), "The personal involvement inventory: reduction, revision, and application to advertising", *Journal of Advertising*, Vol. 23, pp. 59-70.
- Zajonc, R.B. (1980), "Feeling and thinking: preferences need no inferences", *American Psychologist*, Vol. 35, pp. 151-75.

### Further reading

- Belk, R.W. (1987), "Identity and the relevance of market, personal, and community objects", in Umiker-Sebeok, J. (Ed.), *Marketing and Semiotics: New Directions in the Study of Signs for Sale*, Walter de Gruyter, New York, NY, pp. 151-63.
- Damasio, A.R. (1994), *Descartes' Error: Emotion, Reason, and the Human Brain*, G.P. Putnam & Sons, New York, NY.
- Damasio, A.R. (2003), *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain*, Harcourt, New York, NY.

- 
- Guiso, L., Haliassos, M. and Jappelli, T. (2003), "Household stockholding in Europe: where do we stand and where do we go?", Discussion Paper No. 3694, Centre for Economic Policy Research, London.
- Higie, R.A. and Feick, L.F. (1989), "Enduring involvement: conceptual and measurement issues", in Srull, T.K. (Ed.), *Advances in Consumer Research*, Association for Consumer Research, Provo, UT, pp. 690-6.
- Jacoby, J., Morrin, M., Johar, G., Gurhan, Z., Küss, A. and Mazursky, D. (2001), "Training novice investors to become more expert: the role of information accessing strategy", *Journal of Psychology and Financial Markets*, Vol. 2, pp. 69-79.
- McIntyre, D.A. (2008), "Steve Jobs is no Robin Hood", *24/7 Wall St*, available at: [www.247wallst.com/2008/03/apple-aapl-stev.html](http://www.247wallst.com/2008/03/apple-aapl-stev.html)
- Richins, M.L. and Bloch, P.H. (1986), "After the new wears off: the temporal context of product involvement", *Journal of Consumer Research*, Vol. 13, pp. 280-5.
- Solomon, M.R. and Assael, H. (1987), "The forest or the trees? A Gestalt approach to symbolic consumption", in Umiker-Sebeok, J. (Ed.), *Marketing and Semiotics: New Directions in the Study of Signs for Sale*, Walter de Gruyter, New York, NY, pp. 189-217.
- Wärneryd, K.-E. (2001), *Stock-Market Psychology: How People Value and Trade Stocks*, Edward Elgar, Cheltenham.

#### About the authors

Jaakko Aspara is an Assistant Professor at Helsinki School of Economics HSE, Department of Marketing and Management, Helsinki, Finland. Jaakko Aspara is the corresponding author and can be contacted at: [jaakko.aspara@hse.fi](mailto:jaakko.aspara@hse.fi)

Henrikki Tikkanen is a Professor and Head of Department at Helsinki School of Economics HSE, Department of Marketing and Management, Helsinki, Finland.