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# Antecedents and consequences of perceived investment value

**To gain a more comprehensive view to non-institutional investment behavior, this study develops and tests a set of hypotheses linking self-congruence, risk profile and investment experience with perceived investment value (PIV). In addition, the study tests direct and indirect effects of PIV on positive word-of-mouth. The hypotheses are tested on data from 440 private investors. The findings reveal that 1) self-congruence and risk profile are positively associated with five out of six of the PIV dimensions, 2) the relationship between PIV and word-of-mouth are more complex than is generally thought, and 3) user experience moderates four out of the twelve hypothesized paths. The study contributes to our understanding of the antecedents and consequences of PIV.**

*Keywords: Investments, self-congruency, risk profile, perceived value, satisfaction, repurchase intention, word-of-mouth*

*Track: Consumer Behaviour*

## 1. Introduction

We believe that the research on investment behavior is facing a major paradigm shift; the behavioral finance and traditional finance view where the role of money as the sole vehicle of exchange and economic benefit as the only output of investment value is increasingly being challenged. Accordingly consumers' investment preferences go beyond risk and return, to include, for instance, entertainment and status considerations (Dorn & Sengmueller, 2009; Puustinen, Maas, and Karjaluoto, 2013; Statman, 2004). Thus it seems reasonable to argue that in fact the marketing-theoretical concepts such as perceived value, word-of-mouth, repurchase intention, self-congruency and satisfaction offer a good foundation for understanding the investment behavior.

The purpose of this paper is three-fold. First to test the effects of self-congruency and risk profile on dimensions of perceived value in the non-institutional investment context. Second to examine how perceived investment value (PIV) is related to word-of-mouth via satisfaction and repurchase intention. Third, to examine how investment experience affects the relationships between self-congruency and PIV and risk profile and PIV. The paper begins with presenting the research model and hypotheses. Subsequently we present the study methodology, the findings, and conclude the study.

## 2. Research Model and Hypotheses

The most important assumption of modern finance and microeconomic theories is that the value of investments is considered to be embedded in the investment alternatives' transaction-based benefits and sacrifices, namely the risk-adjusted return. This paradigm treats people as economic actors (homo economicus) and assumes that investment value can be derived by means of profit maximization, rationality, and perfect information. Accordingly, there is plenty of research where individual investors risk profile is explained by using e.g. age, wealth, income, and investment experience as predictors. There is however some evidence that consumers may, in fact, compose their overall evaluations of investment alternatives not only on the basis of utilitarian criteria, but also from experience and emotion-based criteria (Beal, Goyen, and Phillips, 2005). Therefore, some recent studies challenge the assumption that consumers would make investment decisions purely on the basis of expected financial returns and risks.

Against this background our study expands the traditional utilitarian risk perception perspective and adopts a more holistic approach to investing by examining the relationship between five concepts derived from marketing literature to gain more comprehensive view to investment behavior. Accordingly in the current paper the first stream of literature focuses on the concept of self-congruence (Sirgy et al., 1997). The second concept is derived from the perceived value literature portraying the key dimensions of PIV (Puustinen et al., 2013). These two concepts are complemented by satisfaction, repurchase intention and word-of-mouth that are also well established in marketing but not in the financial literature.

Self-congruity theory by Sirgy et al. (1997) proposes that consumer behavior is determined, in part, by the congruence resulting from a psychological comparison involving the product-user image and the consumer's self-concept. Thus, self-congruity affects consumer behavior through self-concept motives such as the needs for self-consistency and self-esteem. Previous research has shown that self-congruence plays a role in many evaluations such as satisfaction and value (e.g., Sirgy et al., 1997; O'Cass & Grace, 2008). Further, the concept of self-congruence has been

used to explain the attitudes as well as the purchase intentions of consumers in many contexts (Chon, 1992; Sirgy & Su, 2000). The research framework is shown in Figure 1.

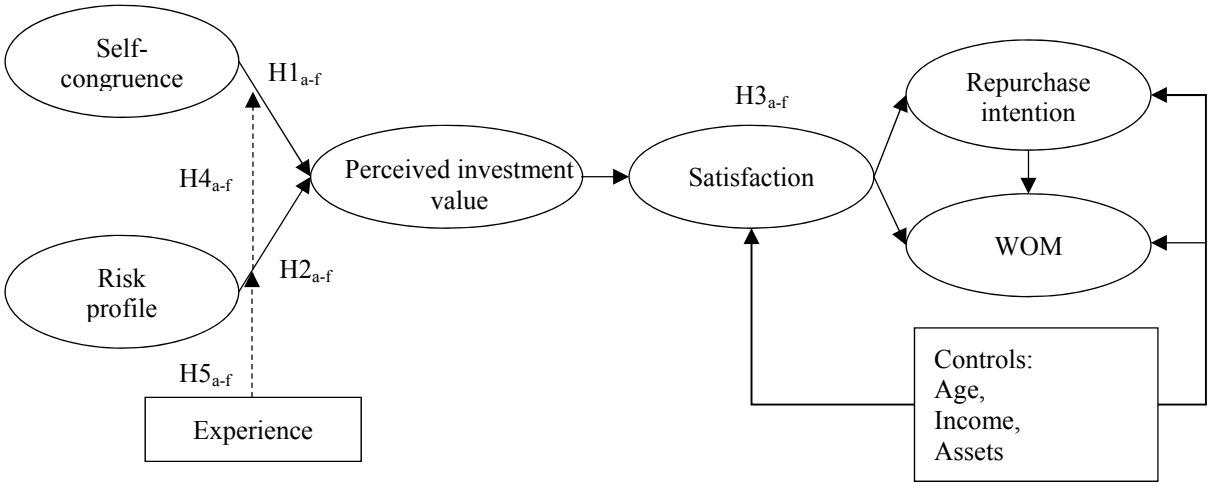


Figure 1: Conceptual framework and hypotheses (moderating effects dashed)

In addition to self-congruency the concept of perceived value offers a good foundation for understanding the investment behavior. Following Puustinen et al. (2013) the PIV and its six dimensions (Economic-Monetary Savings, Economic-Efficiency, Functional-Convenience, Emotional-Emotions & Experiences, Symbolic-Altruism, and Symbolic-Esteem) explains non-institutional investors' choice better than does trade-off between risk and profit alone. Research has shown that self-congruence plays a role in value creation (e.g., Sirgy et al., 1997; O'Cass & Grace, 2008). As self-congruity affects consumer behavior through the needs for self-consistency and self-esteem (Sirgy et al., 1997), we propose it should have a positive effect on PIV (H1): Self-congruence has a positive effect on a) Economic-Monetary Savings (EconMS), b) Economic-Efficiency (EconEF), c) Functional-Convenience (FuncCON), d) Emotional-Emotions & Experiences (EmotEE), e) Symbolic-Altruism (SymbALT), and f) Symbolic-Esteem (SymbET).

Sweeney, Soutar and Johnson (1999) suggest that risk perception plays an important role in perceived value. In the context of investment advice to individual investors, financial institutions all over the world have started to use so-called risk profiles of their clients. These risk profiles are standard questionnaires that are completed by potential clients (Veld & Veld-Merkoulova, 2008). Our approach follows the procedure by EU:s Markets in Financial Instruments Directive (MiFID, 2004) that legally bounds investment advisors to directly ask clients certain questions what clients think about investment risk. As risk perception is an inherent feature of all investment options (see e.g. Sachse, Jungermann, and Belting, 2012), we propose H2: Risk profile has a positive effect on a) EconMS, b) EconEF, c) FuncCON, d) EmotEE, e) SymbALT, and f) SymbET.

Satisfaction is a reliable predictor of repurchase intentions and word-of-mouth. However, Petrick (2004) suggests that while perceived value and satisfaction both are important antecedents of behavioral intentions such as word-of-mouth and repurchase intention, they affect behavioral intentions separately. Repurchase intention can be characterized as a consumer's judgment about investing again a designated investment alternative, taking into account his or her current situation and likely circumstances. In this study, word-of-mouth (WOM) is defined as

positive word-of-mouth. On this basis we propose H3: The effects of a) EconMS, b) EconEF, c) FuncCON, d) EmotEE, e) SymbALT, and f) SymbET on WOM are mediated by satisfaction and repurchase intention.

As stated, perceived risk plays an important role in perceived value. According to Laroche et al. (2010) risk profile (attested here) is less important for those with high levels of prior knowledge and investment experience. Against this background we propose H4: Experience will moderate the relationship between self-congruency and the PIV dimensions a) EconMS, b) EconEF, c) FuncCON, d) EmotEE, e) SymbALT, and f) SymbET, such that Self-congruence is more strongly linked to PIV dimensions when customers have much experience of investing, and H5: Experience will moderate the relationship between risk profile and the PIV dimensions EconMS, b) EconEF, c) FuncCON, d) EmotEE, e) SymbALT, and f) SymbET, such that risk profile has less impact on PIV dimensions when customers have much experience of investing.

## 3. Methodology

To test the hypotheses, a questionnaire was designed that included measures for the model constructs, three control variables, and demographic questions. Sample involved distributing 3,113 online survey invitations by e-mail to members of the Federation of Stock Investors (Finland). In total, 440 completed surveys were returned between May 24 and August 8, 2011, resulting in a response rate of 14%. Test of non-response bias was conducted by comparing the first 25% of the respondents to the late 25% of the respondents. No differences in the answers were found at $p < 0.05$ level.

The model constructs were measured with established scales. The self-congruence scale (SC) was adopted from that of Sirgy et al. (1997). As mentioned above, our approach concerning the risk profile (RISK) followed the procedure by EU:s Markets in Financial Instruments Directive (MiFID, 2004). Accordingly RISK was measured with five measures ranging from '1 = I seek a small increase in the value of my investments and I am not ready to take much risk' to '5 = I seek the highest possible returns in long term, and I am ready to take much risk'.

PIV was measured with the six-factor scale developed by Puustinen et al. (2013). Satisfaction measure was an adoption of Mägi's (2003) scale. The scales measuring repurchase intention and positive word-of-mouth were adopted from Jones and Reynolds (2006). All the model constructs are measured with reflective scales. Regarding the moderator variable, investment experience was measured with a three-item scale ranging from '1 = one to five years' experience', '2 = six to 20 years' and '3 = 11 years or more'. Around one fifth (24%) had less than five year experience, 45% six to 20 years and 31% more than 20 years' experience. The three control variables were age, income and assets (in euros). Around half (52%) of the respondents were between 45 and 64. Majority (70%) had a personal monthly gross income below 4500 EUR. Slightly over half (52%) had properties worth more than 150,000 EUR. The majority of the respondents were male (81%).

## 4. Results

The data were analyzed using Partial Least Squares (PLS) and SmartPLS (Ringle, Wende, and Will, 2005). The measurement model shows acceptable reliability and convergent validity as the factor loadings ($\geq 0.688$), composite reliabilities of the scales ($\geq 0.866$) and AVEs ($\geq 0.697$)

were higher than the recommended cut-off criteria. Discriminant validity was achieved as the square root of the AVE was higher than the correlation between any two latent constructs (Fornell & Larcker, 1981). Common method bias was not found to be a major threat to the study as the largest factor just accounted 11.8 percent of the variance of the factors and the PLS common method factor shows that average variance substantively explained variance of the indicators (0.804), while the average method based variance is 0.240.

The direct effects are shown in Table 1. With respect to $H1_{a\text{-}f}$, we confirm all the other positive effects expect that between SC and EconMS ($H1_a$). SC has the strongest effect on SymbET. Tests of $H2_{a\text{-}f}$ confirmed five out of six of the hypotheses. Risk has the strongest effect on EconEF.

| | $\beta$ | $f^2$ | $q^2$ | Hypotheses testing | | $R^2$ | $Q^2$ |
|---|---|---|---|---|---|---|---|
| $H1_a$ SC → EconMS | 0.053 † | 0.003 | 0.002 | Rejected | EconMS | 0.035 | 0.028 |
| $H2_a$ RISK → EconMS | 0.182** | 0.034 | 0.027 | Confirmed | | | |
| $H1_b$ SC → EmotEE | 0.208** | 0.046 | 0.038 | Confirmed | EmotEE | 0.061 | 0.050 |
| $H2_b$ RISK → EmotEE | 0.141** | 0.021 | 0.017 | Confirmed | | | |
| $H1_c$ SC → SymbET | 0.236** | 0.059 | 0.049 | Confirmed | SymbET | 0.067 | 0.054 |
| $H2_c$ RISK → SymbET | 0.119** | 0.015 | 0.010 | Confirmed | | | |
| $H1_d$ SC → FuncCON | 0.152** | 0.024 | 0.015 | Confirmed | FuncCON | 0.024 | 0.016 |
| $H2_d$ RISK → FuncCON | 0.043 † | 0.002 | 0.001 | Rejected | | | |
| $H1_e$ SC → EconEF | 0.135** | 0.021 | 0.015 | Confirmed | EconEF | 0.144 | 0.121 |
| $H2_e$ RISK → EconEF | 0.360** | 0.152 | 0.126 | Confirmed | | | |
| $H1_f$ SC → SymbALT | 0.142** | 0.021 | 0.015 | Confirmed | SymbALT | 0.038 | 0.029 |
| $H2_f$ RISK → SymbALT | 0.141** | 0.020 | 0.015 | Confirmed | | | |
| EconMS → ACSI | 0.109** | 0.016 | 0.009 | | Satisfaction | 0.435 | 0.324 |
| EmotEE → ACSI | 0.106** | 0.016 | 0.010 | | | | |
| SymbET → ACSI | 0.040 † | 0.002 | 0.016 | | | | |
| FuncCON → ACSI | 0.107** | 0.016 | 0.010 | | | | |
| EconEF → ACSI | 0.452** | 0.209 | 0.131 | | | | |
| SymbALT → ACSI | 0.039 † | 0.002 | 0.016 | | | | |
| Age → ACSI | -0.001 † | 0.000 | 0.002 | | | | |
| Income → ACSI | -0.007 † | 0.000 | 0.003 | | | | |
| Income → SAT | 0.118** | 0.018 | 0.013 | | | | |
| ACSI → REPUR | 0.433** | 0.245 | 0.144 | | Repurchase intention | 0.268 | 0.181 |
| Age → REPUR | -0.221** | 0.049 | 0.034 | | | | |
| Income → REPUR | 0.117** | 0.016 | 0.010 | | | | |
| Assets → REPUR | -0.007 † | 0.000 | 0.000 | | | | |
| REPUR → WOM | 0.157** | 0.024 | 0.019 | | WOM | 0.256 | 0.212 |
| ACSI → WOM | 0.364** | 0.141 | 0.110 | | | | |
| Age → WOM | -0.163** | 0.026 | 0.019 | | | | |
| Income → WOM | 0.005 † | 0.000 | -0.001 | | | | |
| Assets → WOM | -0.023 † | 0.000 | -0.001 | | | | |

** $p \leq 0.01$; † - not significant

Table 1: The direct effects model

Of the control variables, age was found to have an impact on repurchase intention and WOM, and the negative effect indicates that younger respondents have higher repurchase intention and are more likely to promote positive WOM. Respondents' income had a positive effect only on repurchase intention, indicating that the larger the income the more they have repurchase intention. Assets have a positive influence on satisfaction.

Test of H3 was conducted by calculating the significance of the indirect and specific indirect effects with bootstrapping based on 5,000 bootstrap samples (Preacher & Hayes, 2008). Variance Accounted For (VAF) for each mediation was also assessed. The findings show the total indirect effect is significant ($p < 0.01$) for only EconEF. Thus, satisfaction and repurchase intention only mediate the effects of EconEF on WOM. The effects of EconEF on WOM are fully mediated (VAF = 0.816) by satisfaction and repurchase intention.

Finally, the moderating effects were tested with the product indicator approach. The results confirm two out of the six hypothesized moderating effects (H4a-f). The results indicate that when user experience is high, the relationships SC → SymbET (interaction effect = 0.127, $p < 0.01$) and SC → SymbALT (0.099, $p < 0.01$) are stronger, compared to when experience is low. With respect to H5a-f, experience moderates two of the hypothesized relationships. We find that when experience is high, the relationships between risk and EconMS (interaction effect = -0.123, $p < 0.01$) and risk and SymbALT (-0.125, $p < 0.01$) are stronger.

## 5. Conclusion

The findings of the study contribute to the literature in several ways. First, we showed that self-congruence and risk profile have significant effects on perceived investment value with some exceptions. Second, we showed that three PIV dimensions are related to WOM, the total effect of SymbET is the largest, and that only the effects of EconEF on WOM mediated (full mediation) by satisfaction and repurchase intention. The results of the mediation tests reveal that the relationships between the PIV dimensions, the mediators, and WOM are more complex than is generally thought. Finally, in line with our assumptions, experience moderates some of the effects of self-congruence and risk profile on PIV.

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