



SHOULD I, WOULD I, COULD I: TRUST AND RISK INFLUENCES ON INTENTION TO INVEST

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Abstract

This paper examines how risk-taking and trust influence students' intention to invest. The study employs a survey distributed to 84 students from business and economics programmes. Results show that trust does not have a direct positive impact on individuals' intention to invest. However, financial risk has a direct positive effect on intention to invest. Implications for theory are discussed and recommendations for further research are provided.

Keywords: *Intention to invest, trust, risk, investment, risk-aversion*

1. INTRODUCTION

Because financial development contributes to economic growth (Huang, 2010), the question of what stimulates an individual's intention to enter the financial market remains highly relevant. There has been increasing interest in understanding how personal factors shape investors' behaviour. Specifically, recent studies show that investors are not always as rational as they are assumed to be and that personal factors (e.g., emotions and cognitive abilities) play an important role while making decisions about whether and how individuals enter the investment markets (Shiv et al., 2005; Purohit, Saxena, & Satija, 2014).

This paper therefore examines how trust and risk influence individuals' intention to invest. Trust, defined as a belief that someone or something is reliable and will not cause harm, was found to be an important personal factor that influences investors' behaviour. In addition, research also suggests that risk, defined as the probability that something unpleasant will happen, influences individuals' intention to invest. Thus the goals of this study are to explore how those two factors (i.e., risk and trust) influence individuals' intention to invest and to test the proposed relationship in a student environment. To the best of our knowledge, the topic is not widely covered. Therefore the study provides better insight

into the relationship between personal factors and students' intention to invest.

The paper is structured in the following way. The first section provides a brief description of factors influencing intention to invest and develops hypotheses. The next section provides a description of the methodology, the analysis, and the results. The last section discusses the results, presents the implications of the study, and provides some recommendations for future research.

2. THEORY AND HYPOTHESES

2.1. Intention to invest

Intention is an attitudinal construct that is based on intrinsic values and plays an important role in predicting individuals' future behaviour (Angelle, 2006). According to Ajzen (1991), individuals' future behaviour can be predicted by their intentions because intentions are a preliminary step to the subsequent pattern of behaviour. Consequently, intentions indicate the direction of possible behaviour of individuals in the future. In addition, Bird (1988) argued that a company's successive growth and success are the result of the owner's intentions transformed into reality.

Studies show that some entrepreneurs put more weight on non-monetary rather than monetary rewards (Hanafiah et al., 2016). Hanafiah et al. (2016) found that there is a positive relationship of economic gains and intrinsic rewards with intention to invest. The latter can be specified in terms of a sense of personal achievement and self-satisfaction, and results showed that intrinsic rewards are the most important factor in predicting entrepreneurs' intention to invest in the future (Hanafiah et al., 2016).

In addition, Aspara & Tikkanen (2008) found that when an individual establishes a positive attitude towards a company's product, this positive attitude is likely to be transferred to the company. In turn, this will have an effect on the individual's decision to invest in that specific company. Furthermore, an individual's motivation to invest in a specific company can also go beyond a pure incentive for maximizing his/her financial returns (Aspara & Tikkanen, 2011). It also has been shown that positive attitude towards a company were used for selecting specific stocks over others when difficulties estimating the financial return-risk of alternative stocks were present (Aspara & Tikkanen, 2011).

When individuals form specific attitudes towards a specific company and its products, it can be expected that this will result in a greater intention to invest in that specific company. As Washington et al. (2015) argued, consumers' preferences, the value of the company, and the brand are positively related. Consumer-based brand equity (CBBE) is defined as value added to the product which usually goes beyond its functional purpose and can be attributed to the brand name; there is evidence that this would not occur if those products did not belong to the specific brand (Washington et al., 2015). Thus companies with strong CBBE will have stronger market positioning, consumers will be willing to pay a price premium for their products, and the perceived risk connected with the brands' product will be reduced. Those factors will all contribute to higher incomes and higher stock valuations, which will result in higher intention to invest in those companies (Keller & Lehmann, 2006). Ali (2011) also argued that brand familiarity contributes to lower perceived risk, which is combined with a higher inclination to trust the company. Specifically, emo-

tional effects play an important role alongside cognitive factors in evaluating companies. Thus it is important for managers to engage in marketing strategies which may attract possible investors more than will good financial results alone (Ali, 2011).

2.2. Trust and intention to invest

There are several definitions of trust. One of the possible definitions defines trust as attributing subjective probabilities to the possibility of being cheated (Guiso et al., 2009). Guiso et al. (2009) found that individuals who are more trusting are more likely to invest in stocks and risky assets. Consequently, they also are prepared to invest a larger share of their wealth in stocks.

Trust also can be defined as the subjective belief that the opposite party will act honestly (Bottazzi et al., 2011). Bottazzi et al. (2011) argued that there are two types of trust: personalized and generalized. The generalized type of trust is shaped by the perceptions that people from one identifiable group have about another identifiable group of people, whereas personalized trust is connected with the relationship between two specific (individual) agents. Furthermore, Arrow (1972) argued that trust is an important element of every commercial transaction. When taking into account transaction costs (e. g. spending less time investigating one's broker), lack of trust between parties results in enforcement of more contracts. However, the relationship between trust and contracts is not so straightforward. On the one hand, sophisticated contracts can be used to overcome information asymmetries (trust and contracts are substitutes for one another), whereas on the other hand, trust can be a requisite for such contracts (trust and contracts are complements) (Bottazzi et al., 2011). Thus the level of trust towards other parties may influence an individual's intention to invest.

According to Bloom et al. (2009) trust also has an important effect in implementing managerial practices. Firms located in areas where the level of trust is high tend to be more decentralized. Thus sophisticated contracts are less likely to be needed and individuals spend less money protecting themselves from being exploited by other parties in

transactions. Guiso et al. (2005) also found that trust plays an important role in selecting stocks in a portfolio. Individuals are more likely to invest money in local stocks in regions where perceived mistrust represents a lower obstacle. At the same time, a higher-trust society also contributes to easier collection and dissemination of information. Conversely, a low level of trust in society will cause people to invest more in holdings that are the least trust-intensive (Guiso et al., 2004). Similar behaviour can be expected in the moneylending segment, where low trust means more credit applications will be denied.

Trust also can be an important factor in explaining the lack of intention to invest among some social groups. For example, in Sweden, 2% of the wealthiest (top 5%) people do not trust in major corporations on the stock market and consequently 4% of the wealthiest (top 5%) do not invest in the stock market. A similar pattern holds also for the United States. On the other hand, a totally different situation is evident in Italy, where 29% of the wealthiest (top 5%) people do not trust major corporations and 35% of them (top 5%) do not invest in the stock market. In Italy, a low-trust country, the proportion of the population investing in the stock market is 8.2%, whereas in the U.S., a high-trust country, that proportion is almost 50% (Guiso et al. 2005).

Another factor influencing an individual's decision to invest in stock market also is determined by institutions. Societies with a low level of trust cannot sufficiently transform savings to sustain positive output growth. This "poverty trap" is more likely to happen in countries where institutions for punishing cheaters are weak or insufficient (Knack & Zak, 2001). La Porta (1997) also argued that the strength of the legal environment (which includes both laws and their enforcement) has a crucial impact on the size of capital markets. Laws that protect potential investors against expropriation raises people's trust and hence increases their willingness to exchange their funds for securities, which further expands capital markets. Thus an appropriate environment, characterized by a high level of trust towards others, positively affects people's intention to invest.

H1: Trust is positively related to intention to invest.

2.3. Risk and intention to invest

Risk-taking is behaviour in which an individual commits himself/herself to an act with an undetermined result. Benefits or unwanted consequences can be expected, but the outcome is not known until the end. To engage in the risky behaviour, anticipated benefits should be greater than the losses associated with the act. According to risk homeostasis theory, people have a certain target level of risk, and to reach this level they engage in activities that have the highest net balance of benefits over losses (Burns & Wilde; 1995). Olsen (2008) defined risk as a function of the probability of a loss. Moreover, he argued that risk is also a function of familiarity and control of the situation, trust, and fairness (Olsen, 2008). Kahneman & Tversky (1979) argued that people are not risk-averse but loss-averse. People tend to inflate their losses compared with profits of the same size and would prefer not losing 1 dollar rather than getting it. In addition, people also tend to overestimate low probabilities, which consequently is advantageous to the insurance industry (Kahneman & Tversky, 1979). Kiev (2002) depicted risk as one of the most important factors regarding investment behaviour. The capability to adapt to risk and to maintain a certain level of risk even when under the stress of making huge losses is what makes an investor successful.

(Financial) risk is usually assumed to be a function of variance of distribution of possible returns. The greater the variance, the greater the risk" (Olsen, 2008, p. 3). Tolerance to risk is one of the characteristics most needed by an investor if he/she is to succeed. Cordell (2001) divided investment risk tolerance into four elements: attitude towards risk, financial capacity to incur a risk, knowledge, and propensity to act riskily. Risk tolerance is not static, but changes over time. In good times, when asset prices are rising, people tend to have a higher risk tolerance. On the other hand, in bad times the risk tolerance decreases to low levels (Grable et al.; 2006). Most of the macroeconomic models describe risk as an internal component of an asset. In contrast, prospect theory defines risk differently, connected not just to the asset but interconnected with the investor, and more precisely with his/her amount of wealth. An affluent individual has a different level of risk tolerance than does an individual with little to no wealth. Consequently, risk tolerance increases with increasing wealth (Chauk et al.,

2003). Additionally, risk tolerance is not related only to individual's amount of wealth. Individuals have a different level of risk tolerance due to different life experiences and differences in social and cultural background (Olsen & Cox, 2001).

However, Zuckerman (1994) developed the idea that risk is not connected to an individual's wealth but to his or her personality traits and seeking of excitement. In addition, Carducci and Wong (1998) expanded Friedman and Rosenman's theory of Type A and Type B personalities. The theory describes Type A people as competitive, impatient, eager to succeed, even hostile and aggressive. Type B people possess the opposite characteristics. Carducci & Wong (1998) found that Type A people are willing to take more financial risk than are Type B individuals.

H2: Risk influences an individual's intention to invest.

3. METHODS

3.1. Procedures and participants

Empirical data were collected in a student environment, examining students from Slovenia. Eighty-four students filled out a web-based questionnaire. The age of the students ranged from 19 to 26 years, with a mean age of 21.67; 46% of the students were male, 56% of the students studied an economics programme and 44% studied a business programme, and the majority of the students were enrolled in the second (48.8%) or third (40.5%) year of an undergraduate programme.

3.2. Measures

All the variables were self-reported and measured on a five-point Likert scale. The following de-

scribes the measurement scales used for focal and control variables.

Intention to invest. We measured intention to invest by using a six-item scale adopted from Ali (2011). We used a five-point Likert scale with the anchors "very low" and "very high". The items were general enough to fit a student population ($\alpha = 0.91$).

Trust. A five-item scale was used to assess an individual's general level of trust towards other people (Yamagishi, 1986). The scale was specially designed to measure two of the primary factors that form general factors: (1) belief that other people are basically honest and (2) belief that trusting others is risky. Responses were documented on a five-point Likert scale with 1 being "strongly disagree" and 5 being "strongly agree" ($\alpha = 0.75$).

Risk-taking. Risk behaviour was measured by using a 30-item scale developed by Weber, Blais, and Betz (2002) ($\alpha = 0.85$). The scale measured three content domains: financial decisions (10 items, $\alpha = 0.73$), ethical decisions (10 items, $\alpha = 0.79$), and social decisions (10 items, $\alpha = 0.66$). Students were asked to indicate the likelihood of engaging in each activity by providing a rating from 1 ("extremely unlikely") to 5 ("extremely likely").

Control variables. We included the students' gender, age, study programme, and year enrolment as control variables.

3.3. Results

Table 1 provides the descriptive statistics (means, standard deviations, and correlations) for the main variables analysed in the study.

Table 1: Means, Standard Deviations, and Correlations ^a

Variable	Mean	SD	1	2	3
1 Intention to invest	3.48	0.72	—		
2 Trust	3.55	0.66	0.136	—	
3 Risk-taking	2.07	0.57	0.159	-0.066	—

^a n = 84

A series of regression analyses was applied to test the hypotheses. To test Hypothesis 1, which predicted a positive relationship between trust and intention to invest, trust was added to the regression model as an independent variable predicting intention to invest. Trust was not positively related to intention to invest ($\beta = 0.15$, $SE = 0.12$, $p = 0.21$), not supporting Hypothesis 1. To test Hypothesis 2, risk-taking was added to the regression model as an independent variable predicting intention to invest. First, we tested the relationship between financial risk and intention to invest. The results revealed that financial risk was marginally significantly related to intention to invest ($\beta = 0.23$, $SE = 0.14$, $p = 0.10$). Second, we tested the relationship between social risk and intention to invest. The results revealed that social risk was not significantly related to intention to invest ($\beta = -0.09$, $SE = 0.15$, $p = 0.55$). Finally, we also tested the relationship between ethical risk and intention to invest. The results revealed that ethical risk also was not significantly related to intention to invest ($\beta = 0.02$, $SE = 0.13$, $p = 0.89$). Based on the results, Hypothesis 2 is only partially supported.

4. DISCUSSION

This article analyses the relationship between trust, risk, and intention to invest. We assumed that there is a positive relationship between trust and intention to invest. However, our results did not support our assumption; therefore, we had to reject our first hypothesis. In addition, we assumed that there is a relationship between risk and in individual's intention to invest. The results showed that the proposed relationship is marginally significant. Thus our second hypothesis is supported.

4.1. Implications

This study contributes to the literature of investor behaviour by providing evidence of how personal factors influence investment intention. First, the study contributes to the literature of investor behaviour by examining how trust, defined as a general trust towards others, influences an individual's intention to invest. The results revealed weak correlations between trust and intention to invest. One

of the reasons for the rejection of our first hypothesis may be that the last financial crisis contributed to a lower intention to invest even among people who are per se more trusting. In addition, our study revealed that trust is not the strongest personal factor that influences investor behaviour. In situations when trust between investors and other parties is low, investors can use contracts in order to overcome the trust issues. Thus we assume that some other personal factors (e.g., self-confidence or personality traits) play a more relevant role in predicting an individual's intention to invest.

Second, we contribute to the literature of investors' behaviour by examining how risk-taking influences intention to invest. Although the results were only marginally significant, we argue that financial risk behaviour influences an individual's intention to invest. However, interestingly, the results revealed that social and ethical risk have no influence on an individual's intention to invest. Therefore we found additional support for the premise that risk taking is domain-specific rather than a reflection of stable attitudes or traits (Weber, Blais, & Betz, 2002). Thus if we want to promote an individual's intention to invest, we should increase his/her perception of financial risk.

4.2. Limitations and future research

This paper has several limitations. First, the survey sample was very small, consisting of only 84 participants. This limited the ability to conduct a more advanced analysis. Second, and related, this study examined only simple direct relationships between variables. Future research could improve this research design by including a larger sample of students and proposing and testing moderated or/and mediated relations between the construct.

Third, we collected the data only among students in the Faculty of Economics. These graduates are more likely to invest in the stock (security) market or to work in areas that are closely connected with investments. Thus future research could benefit from testing the proposed relationship on students from other faculties (i.e., natural science faculties). In addition, it also would be interesting to compare the different groups of students. Further-

more, future research would benefit from testing the proposed relationships among real-life investors. For future research, we also recommend inclusion of more personal factors that are assumed to affect intention to invest. If we understand how personal factors influence investors' behaviour, we could improve faculty programmes in a way that would promote personal characteristics that determine good investors.

Fourth, the data were cross sectional, which limits the ability to demonstrate causality. Future research would benefit from longitudinal designs, which could enable observations of variations in intention to invest and other variables of interest over time. Fifth, the data were all self-reported, which raises concerns about common method bias.

EXTENDED SUMMARY / IZVLEČEK

Danes živimo v okolju, kjer je prisotna čedalje večja participacija na trgu vrednostnih papirjev. Čeprav lahko kdorkoli vstopi na finančne trge, obstaja velika verjetnost, da bodo pomembnejše položaje na področjih povezanih z investicijsko dejavnostjo zavzeli večinoma posamezniki z dokončano ekonomsko izobrazbo. V naši raziskavi skušamo ugotoviti, kateri so tisti dejavniki, ki vplivajo na posameznikovo nagnjenost k investiranju. Med številnimi osebnimi dejavniki, ki vplivajo na vedenje investitorjev, smo se osredotočili predvsem na stopnjo zaupanja posameznika in pripravljenost za prevzemanje tveganja. Stopnjo zaupanja lahko opredelimo kot posameznikovo subjektivno oceno o (potencialni) verjetnosti, da bo prevaran. Rezultati prejšnjih študij so pokazali, da za posameznike, ki so po naravi bolj zaupljivi, obstaja večja verjetnost, da bodo investirali v trge vrednostnih papirjev. Poleg tega naj bi bili ti ljudje pripravljeni investirati večji delež svojega premoženja. Poleg zaupanja pa na nagnjenost k investiranju pomembno vpliva tudi posameznikova pripravljenost za prevzemanje tveganja. Tveganje označuje predvsem okoliščine, v katerih je končni rezultat negotov. Za prevzemanje tveganja je torej pomembno, da so bodoče koristi višje od morebitnih izgub. Postavljene hipoteze smo preverjali na vzorcu študentov Ekonomske fakultete. Rezultati so pokazali, da stopnja zaupanja ne vpliva na nagnjenost posameznikov k investiranju, medtem ko je pri pripravljenosti za prevzemanje finančnega tveganja zaslediti le manjši vpliv.

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