The impact of emotions towards investments and towards life on attitude to financial risk

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Short Abstract

Do emotions towards investments and towards life impact the risk tolerance of retail investors, and if so, why? In this paper we examine the relationships between emotions towards financial investments and towards life on attitudes to financial risk using questionnaire data from 970 UK-based retail investors. We show that risk tolerance monotonically increases with positive emotions towards investments and life, and decreases with negative emotions. We incorporate a broader range of relevant emotions than in any existing studies and we show that aggregate positive emotions have a greater impact on risk tolerance than negative emotions. We investigate the explanatory power of gender, age, income, assessed financial knowledge and investment experience as control variables, finding that these play a significant role. We do, however, find that emotions towards investments have a considerably greater explanatory power for the cross-section of risk aversion than emotions towards life, cognitive factors and demographic factors. We observe that investors who are more positive (or less negative) towards investments than towards life are more risk tolerant than investors who are equally positive (or negative) towards investments and life. The difference between positive emotions towards investments and life is greater for investors who are male, with lower income and greater assessed financial knowledge. Our research sheds lights on the different impact that integral and incidental emotions (investments versus life) have on the financial decision making of retail investors.

Keywords: retail investors, risk tolerance, risk aversion, attitude to risk, emotions, financial advisor.

J.E.L. Classifications: G11, G20, J14, C25

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Extended Abstract

Introduction and Contributions

Emotions influence the risk tolerance of investors. This observation that decision-making process is affected by emotions is pervasive in the literature across different domains, both financial and non-financial. Decisions can often be explained by incidental, knee-jerk emotions rather than more rational cognitive processes (Loewenstein et al., 2001; Loewenstein and Lerner, 2003). A broad academic literature documents how the impact of emotions may vary depending on the specific individual emotions (Learner, 2001; and Lewis, 2013), the gender of the decision-maker (McCann et al, 1991; Ricciardi, 2008; Fujita et al., 1991; Grossman and Wood, 1993; Craske (2003; and Stevenson and Wolfers, 2007), her age and cognitive abilities (Park & Reuter-Lorenz, 2009; Salthouse, 1990; Rypma, Prabhakaran, Desmond, and Gabrieli (2001)).

While there is a clear consensus that emotions influence financial decision making, little is known about whether the impact on risk tolerance of integral, goal-oriented emotions – such as emotions towards investments – and incidental emotions – such as emotions towards life – differ. Moreover, there is not a clear indication from the literature as to whether emotions are more important than other factors - such as cognitive processes and demographics – in the financial decision-making context.

Using questionnaire data comprising attitude to risk, emotions towards investments and life, financial knowledge and experience, and demographic information for a thousand UK retail investors, we are able to make several novel contributions to the literature. We investigate the impact of emotions towards investments and towards life on risk tolerance and find that emotions towards investments are the most important in explaining the variation in financial risk tolerance of retail investors. In terms of explanatory power, emotions towards investments are followed by cognitive factors, demographics and emotions towards life. Moreover, we allow for a higher number of emotions than previously employed in the literature, and we show that positive emotions have a greater impact on attitude to financial risk than negative emotions.

We are the first to investigate whether and why the impacts on risk tolerance of incidental and of integral emotions differ. For example, does an investor who is happy towards investments but less happy towards life take more financial risk than an investor who is equally happy in both domains? We find that when a retail investor is more positive (or less negative) towards investments than towards life, her risk tolerance increases. Investors who are male and more knowledgeable are more positive towards investments than those who are more positive in their lives. We interpret these
results as evidence of a cross-over effect of incidental emotions towards life on financial decision-making.

Data and Methodology

This paper utilises a unique dataset from an online survey of 970 UK retail investors. The survey was conducted in June 2017 and hosted on the Qualtrics online platform. The recruitment of respondents was managed by Qualtrics according to pre-specified sampling criteria in order to ensure the representativeness of key demographic characteristics – age, gender and income – and investment experience. Participants were remunerated in line with standard practices to obtain an adequate level of engagement with the questionnaire, resulting in an average time of completion of the survey equal to 10 minutes. The study was implemented according to the University’s Ethics procedure.

Financial risk tolerance is measured by attitude to financial risk (ATR). To assess ATR, we employ a questionnaire used by Distribution Technology (DT), one of the main UK providers of financial planning solutions. The 20 questions of the questionnaire are individually scored on a five-point Likert scale. An aggregate integer result from 1 (lowest level of risk tolerance) to 10 (highest possible risk tolerance), which we term the ATR, is then formed by summing the scores from the individual questions. Measures of positive and negative emotions towards investments and towards life are adapted from a standard PANAS scale (Watson et al., 1988) and measured on a five-point Likert scale. Four aggregate measures of emotions are computed as simple averages of the individual emotions resulting in the following indices: positive emotions towards investments, negative emotions towards investments, positive emotions towards life, and negative emotions towards life. Moreover, we control for general demographics such as gender, age and income, and for cognitive factors such as assessed financial knowledge and self-reported investment experience.

In our analysis, we investigate the extent to which emotions towards investment and life can explain the cross-sectional variation in ATR score. Since the dependant variable of the regressions employed is the ATR score of the investor, which can only take integer values from 1 to 10, we use ordered probit estimation techniques.

Results and Conclusions

We show that risk tolerance monotonically increases with positive emotions towards investments and towards life, and decreases with negative emotions. We control for a higher numbers of emotions
than is the case in any of the existing literature, and we show that aggregate positive emotions have a greater impact on risk tolerance than negative emotions. We investigate the explanatory power of gender, age, income, assessed financial knowledge and investment experience, finding that these variables play a significant role. We do, however, find that emotions towards investments have a considerably greater explanatory power for the cross-section of risk tolerance than emotions towards life, cognitive or demographic factors. We observe that investors who are more positive (or less negative) towards investments than towards life are more risk tolerant than investors who are equally positive (or negative) towards investments and life. The difference between positive emotions towards investments and life is greater for investors who are male, have lower incomes and greater financial knowledge. Our research sheds lights on the role that integral and incidental emotions (investments versus life) have on the financial decision making process of retail investors.