Trust as a Strategy to Cope with Uncertainty in Delegated Portfolio Management

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Abstract

This paper investigates a savings choice scenario from a private investor perspective. In a web-based experiment, participants chose to either construct a stock portfolio individually, delegate to a financial adviser or to choose the equivalent of an index fund, all based on real-time stock information. Participants \((N = 199)\) completed an inventory containing measures of trust in financial advisers, financial literacy, and subjective uncertainty. The data was analyzed with analysis of variance (ANOVA) and multinomial logistic regression. As hypothesized, trust increases the probability of choosing the financial adviser whereas financial literacy increases the probability of choosing to invest individually or the index fund. And as further hypothesized, the results showed that the choice to delegate to a financial adviser reduces subjective uncertainty. The results suggest that trust is a way of coping with uncertainty.

Keywords: delegated portfolio management; trust; financial literacy; uncertainty
Trust is thought to arise as a response to uncertainty in situations where cooperation between people is needed but the relevant information is asymmetrically distributed. Trust has been defined as “a state involving confident positive expectations about another’s motives with respect to oneself in situations entailing risk” (Boon & Holmes, 1991, p. 194). Trust can thus be understood as a subjective prediction model of another person’s future actions. It is a solution to a principal agent problem referring to situations where the decisions of one individual, the agent, have an impact on another individual, the principal. Since such situations are thought to originate from a contractual or incentivized obligation where the agent is acting on behalf of the principal, various problems can occur because of different goals or preferences between the agent and principal (see Eisenhardt, 1989 and Shapiro, 2005). Because of this asymmetry, informed people can take advantage of less informed people, something which is believed to disrupt the efficient market mechanism and lead to a disproportionate amount of advantage-taking people. The market will thus suffer from an adverse selection problem (Akerlof, 1970).

Two solutions have been proposed to address the problems associated with adverse selection. Signaling (Spence, 1973), which means that agents chooses to signal in some way that they will not act opportunistically, and screening (Stiglitz, 1975), which means that principals make use of an opportunity to retrieve more information about agents (for a comprehensive overview on screening and signaling, see Riley, 2001). Information asymmetries may in other words lead to different ways of trying to reach information equilibrium or to simply retrieve more information. In finance, the efficient market hypothesis (Malkiel, 2003) dictates that all relevant information is already known and is reflected in the current share price. An implication is that there rarely exists any additional information to retrieve for a specific investor. In line with Dia (2011) we propose that peoples’ financial decision making under uncertainty may be based on the perceived
knowledge of other agents when own information or knowledge is lacking. This means that trust in an agent would act as a substitute for information, thus reducing the perceived information asymmetry.

In this paper we investigate a savings choice scenario from a private investor perspective. In a web-based experiment participants could choose to construct a stock portfolio individually, delegate to a financial adviser, or to choose an index fund. The choices were made based on real-time stock information. The choice is assumed to be part of a psychological process where relevant information is substituted with trust in a financial adviser, and financial knowledge with a belief in one’s self-assessed financial literacy.

Trust

Since most economic actions, including agency theory, reside within a social context (Granovetter, 1985) people are often more socially oriented than self-interested and rational (Fehr & Gächter, 2000), which may stem from a cost-benefit analysis influencing affect, cognition and behavior accordingly (for an overview see Kamleitner & Hoelzl, 2009). For example, people evaluate risk cognitively but they respond to it emotionally, and it is usually the emotional reaction that results in a specific behavior (Loewenstein, Weber, Hsee & Welch, 2001). In finance several deviations from rational decision making have been observed (see for example Shefrin, 2007). One of the most reported is the disposition effect which refers to a tendency to sell commodities that increase in value too soon while holding on to commodities that have decreased in value for too long (Shefrin & Statman, 1985). This effect seems to apply mainly to commodities that are non-delegated. Investors therefore show this tendency when buying and selling shares, but not to the same extent when buying and selling mutual funds. Instead, a reversed disposition effect has been observed when trading with mutual funds that are delegated to a fund manager (Chang, Solomon & Westerfield, 2014; Kaustia, 2010). There are many potential explanations for this reversed effect but it has
been suggested that because of the shift in responsibility towards another person (the agent), investors (principals) can act more rationally since they do not have to worry about impediments to their self-esteem caused by erroneous investment decisions (Nofsinger, 2007).

Agency theory is often based on an incomplete contract consisting of both calculable and incalculable factors that depend on trust (see e.g. Möllering, 2014). Trust can hence be seen as a heuristic or shortcut that begins where rational prediction ends (Lewis & Weigert, 1985). When solutions to the information asymmetries are unavailable, or come at a too high cost, people must act without having complete and perfect information. It has consistently been found that people respond to higher levels of uncertainty with a raised demand for information (Dzielinski, 2012), and increased levels of information stemming from higher levels of control have been reported to increase trust (Emsley & Kidon, 2007). In this vein, trust has been proposed to function as a supplement to control (Das & Teng, 1998) and one way to exercise control is through the use of contracts. Under the restrictions of a binding contract trust is found to be high, such that when the contract is removed, trust drops significantly but considerably less under a non-binding contract (Malhotra & Murnighan, 2002).

Another application of the trust-control relation is that stock market development is determined by trust in terms of both stock market depth and liquidity, especially in countries with weak regulations and a lower formal institutional quality (Ng, Ibrahim & Mirakhor, 2014). One explanation for the positive trust effect on the stock market is that trust seems to reduce investors’ risk perceptions, something which may allow fund managers to charge a trust premium (Gennaioli, Shleifer & Vishny, 2015).

All common definitions of trust are concerned with risk or uncertainty since trusting is a risky choice - without risk or uncertainty trust would not be needed. Willingness to trust is
hence the acceptance of risk (Mayer, Davis & Schoorman, 1995) and it has been suggested that trust and risk are mirror images of the same appraisal where trust is the optimistic and risk is the pessimistic evaluation (Das & Teng, 2004). The relationship between trust and risk seems furthermore to be stronger when levels of self-reported knowledge are low (Siegrist & Cvetkovitch, 2000; Viklund, 2003).

The tendency to trust expertise is evident in many different domains. In medicine, for example, people trust doctors to a higher degree if they are dressed in a white coat instead of casual clothing since the former presumably signals expertise (Brase & Richmond, 2004). In investment games, people show behavior consistent with the hot hand bias choosing “experts” in games of pure chance (Huber, Kirchler & Stöckl, 2010), which is explained by the mere label expert. Another example of trust in expertise is that the Morningstar fund rating positively affects fund investments irrespectively of underlying fundamentals (Del Guercio & Tkac, 2008).

It should however be acknowledged that the general public does not always trust experts or agree with their opinions. If experts are trusted or not seem to depend on, for example, the level of uncertainty, whether experts agree, and to which extent theoretical simulations or lab experiments seem generalizable (Sjöberg, 1999). Similarly, when knowledge is lacking a tendency to believe that one has control over uncontrollable situations, referred to as the illusion of control (Langer, 1975), can occur. This illusion can yet to some degree be seen as an adaptive and positive part of human reasoning (Taylor & Brown, 1988). But illusion of control can also have serious negative consequences in the financial market if individual traders start to think that they are in control when they in fact are not. Illusion of control has, for example, been reported to be inversely related to several measures of financial competence (Fenton-O’Creevy, Nicholson, Soane & Willman, 2003).
Financial literacy

Financial literacy is strongly related to a range of different financial behaviors. For example, financial literacy predicts higher stock market participation (van Rooij, Lusardi & Alessie, 2011), more advantageous investment strategies, and fewer mistakes (Hilgert, Hogarth & Beverly, 2003). One recommended investment strategy is to diversify an asset portfolio, and this is a more common strategy by investors with higher financial literacy (Calvet et al., 2009; Graham, Harvey & Huang, 2009). The pattern of under-diversification by investors with lower financial literacy seems to be robust when controlling for a number of alternative explanations such as education, age, risk-taking or wealth (von Gaudecker, 2013). It has also been shown that people with lower financial literacy delegate portfolio choice more often or avoid investing in risky assets altogether (Calcagno & Monticone, 2015). At the same time, financial advice has been suggested to be a complement rather than a substitute to financial literacy (Collins, 2012).

The most common method of assessing financial literacy is through the number of correct answers on financial knowledge tests, using a set of three or five financial literacy questions, referred to as the “Big Three” or the “Big Five”. It is also common to use individuals’ confidence in their financial knowledge through self-reports (for an overview, see Hastings, Madrian & Skimmyhorn, 2013). Although less common, it is possible to measure financial literacy through an outcome-based approach assessing peoples’ level of financial sophistication by identifying their behavior in the stock market such as for instance under-diversification or the disposition effect (Calvet, Campbell & Sodini, 2009). Self-reported financial literacy is usually positively correlated with actual knowledge but to an even stronger degree with actual behavior (Parker, Bruine de Bruin, Yoong & Willis, 2012). This indicates that financial literacy is consistent across methods of measurement and that behavior is affected by the level of knowledge that people think that they have, which likely
reflects a biased view of actual financial knowledge.

**Aims, hypotheses, and expectations**

The tenet of the present study is that uncertainty will occur in situations where there is an asymmetry in information between at least two people. A specific case is when people make savings investments in the stock market, either directly or through bundled investment products. The approach to solving this asymmetry is to obtain more information. Since information is costly or can be illegal to act upon, which is the case with insider information in the stock market, people are likely to rely on other ways to retrieve information and thus reduce uncertainty. One way to handle uncertainty is to delegate the decision making to another person and thereby substitute lack of information or knowledge with the belief in someone else’s financial knowledge (Dia, 2011). We thus hypothesize (first hypothesis) that a higher level of uncertainty increases the probability of delegating the responsibility to a financial adviser compared to investing individually or choosing an index fund. Trust will likely result in a belief that the risky choice is less risky (Gennaioli et al., 2015) and subjective uncertainty is therefore hypothesized (second hypothesis) to be lower for those who choose to delegate to the financial adviser. Moreover, and in connection to both these hypotheses, trust in financial advisers (or “experts”, Huber et al., 2010) will positively affect the choice to delegate (Carlander et al., 2013), which is the basis for our third hypothesis. Lastly, another way to handle uncertainty is through the belief that one possesses more information or control than justified. Our fourth hypothesis is therefore that financial literacy will be positively related to both choices of investing individually and index fund since higher financial literacy has been reported to be related to a higher degree of stock market participation and with making more advantageous financial decisions (Hilgert et al., 2003; van Rooij et al., 2011).

The first hypothesis will be analyzed with a chi square test for differences of how
many of the participants choose to delegate or not. The second hypothesis will be analyzed with an analysis of variance (ANOVA) investigating to what degree the subjective uncertainty measure differs depending on whether the participant chose to delegate to the financial adviser, invest individually or the index fund. Finally, hypothesis three and four will be analyzed with multinomial logistic regression that will allow us to show the individual effects of trust and financial literacy on the three-way choice as a dependent variable.

Hypotheses

I. The financial adviser alternative will be chosen more frequently in a high risk scenario, because

II. The perception of uncertainty will be lower if an adviser takes responsibility for the construction of the stock portfolio, and for this reason it is highly likely that

III. Trust will be positively related to the choice of financial adviser, while

IV. Financial literacy will be positively related to both choices of investing individually and index fund

In addition to the above formalized hypotheses several patterns are expected. Mirroring Hypothesis III, we expect that trust will be negatively related to the choices of investing individually and the index fund. Financial literacy is furthermore expected to be negatively related to the choice of financial adviser. Self-reported financial literacy is likely to have a stronger relation to the choice of investing individually compared to actual financial literacy. A person who believes that he or she is proficient in stock trading would thus rather act on such a belief than on actual knowledge. It is also more likely that actual financial literacy will show a stronger effect on the choice of index fund compared to self-reported financial literacy. A reason for this is that nearly all empirical research shows that investors are not likely to beat the market in the long run, i.e. the index.

The included subjective uncertainty measure is expected to be positively correlated
with the number of additional sources used to gather information before the choice, since 
more information can be an expression of a desire to reduce uncertainty (Dzielinski, 2012). 
The risk manipulation is thus expected to affect the subjective uncertainty measure, and since 
higher uncertainty is associated with need for more information, the number of sources 
should be higher in the high risk group. Finally, since trust has been suggested to be an 
expression of effort aversion (Kramer, 2006), we included a question measuring effort.

Method

Participants and Research Design

One hundred and ninety-nine participants from a national U.S survey panel 
(Qualtrics) provided usable data from a total of 4,191 invited. Fifty-nine point eight percent 
(59.8 %) were female and the mean age for men and women respectively were 47.6 and 44.3 
years old. The highest degree or level of school completed was 32.7 % high school graduates, 
27.7 % trade/technical/vocational/associate degree, whereas the remaining 39.6 % of the 
participants had a bachelor’s degree or higher.

The experiment was constructed with a nominal 3(choice: invest vs. delegate vs. 
index) outcome variable with two categorical predictor variables; risk (high vs. low) and 
order (ab vs. ba). The difference between the task orders was whether each participant 
completed the trust ratings (a) or the investment task (b) first. Trust and financial literacy was 
regarded as covariates in the analysis of nominal choice.

Procedure

The participants were recruited to a study about financial decision making. Two 
mandatory screening questions were introduced and the requirement to partake in the study 
was that at least one of the questions “I frequently make, or will within the next six months, 
make investment decisions about stocks” and “I have made and intend to make investment 
decisions in the foreseeable future about mutual funds, bonds or other interest bearing
"securities issued by a corporation or financial institution" was answered affirmatively.

After having answered questions of gender, age, and education level, each participant was randomly assigned to one of four conditions of which two contained a manipulation of high risk and the other two a low risk. Within each risk manipulation the investment task was placed in one of two different orders, either before or after the trust measure. After completion of the trust measure and investment task followed measures of financial literacy, subjective uncertainty associated with the investment task, need for information (i.e., additional sources such as web pages), and effort (how taxing the task was perceived to be).

In the high-risk condition participants received a predefined list of ten companies selected from the S&P 600 small cap segment, whereas in the low-risk condition participants were presented with a similar list but with companies from the S&P 100 large cap segment. In each condition participants were informed of the general properties pertaining to each segment, for example that the variation in share prices in the large cap segment is generally lower compared to the small cap list. This means that the difference in volatility and hence risk between the two lists was the risk manipulation such that the risk was higher in the small cap list compared to the large cap list. The participants were presented with portfolio weight, volatility, beta and max drawdown the current year for each single share and for the portfolio of the ten shares. Each participant was presented with three options for an imagined investment of $10,000 USD: (1) they could construct a stock portfolio individually or; (2) delegate the portfolio construction to a financial adviser or; (3) choose a value-weighted index fund consisting of the ten shares in the list. Costs pertaining to each option were presented with the aim of being close to a real-world scenario. Each share buy order would cost USD 10 whereas the financial adviser would charge an annual management fee of 1.5% and the index fund would cost 0.2% of the total assets under management annually. After having choosing financial adviser or index fund the participant moved to the next series of
questions but investing individually led to a new page containing ten real-time stock widgets provided by TradingView\(^1\). Each participant could then evaluate the real-time movements in each share price together with other relevant financial data. In addition, the participants were encouraged to search for more information from other web pages to complete the task.

**Measures**

The questionnaire part consisted of six trust statements where three items measured competence and the other three measured benevolence. The items were taken from Carlander et al., (2013) with the minor modification of changing the object of one’s trust to “financial advisers” instead of “banks and fund managers”.

Self-reported financial literacy was measured through the question “*On a scale from 1 to 7, where 1 means very low and 7 means very high, how would you assess your overall financial knowledge?*” Five additional questions pertaining to financial literacy were included, three of which were taken from the 2004 Health and Retirement Study (HRS)\(^2\) and the other two from the 2009 National Financial Capability Study\(^3\). Together, the five questions make up the “big five” financial literacy inventory. There was also a measure of the subjective uncertainty for the task of investing individually that was phrased as “*How uncertain did you feel about choosing to invest in the shares yourself?*” ranging from “completely certain” to “completely uncertain” on a 7-point rating scale.

In addition, two different 7-point rating-scale measures for the manipulation check items were included. One statement pertaining to the need for information was formulated as “*How many different sources/sites other than the stock widgets did you use in order to make up your mind about what shares to choose?*” We also included a statement to assess how much effort each respondent felt that the task involved. This item was formulated as “*It was demanding to choose between investing yourself, the financial adviser, and the index fund.*”

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1. https://www.tradingview.com/widget/
**Pre-analysis**

An independent samples t-test showed no significant difference in the subjective uncertainty measure between the high ($M = 3.52, SD = 1.79$) and the low ($M = 3.47, SD = 1.71$) risk group. Neither did the number of additional sources differ significantly between the high ($M = 1.45, SD = 2.10$) and the low ($M = 1.72, SD = 3.4$) risk group. A significant positive correlation was however detected between subjective uncertainty and the number of additional sources used for the task $r(196) = .17, p < .05$.

The two theoretical components of trust (competence and benevolence) were correlated $r(197) = .74, p < .001$ and an initial principal component analysis suggested that the statements from both components comprised of one single factor accounting for 69.2% of the variance. Competence and benevolence were for this reason merged into a single trust component in the main analysis. There was no evidence of effort aversion or any effects of order, i.e. whether participants were presented with the trust inventory or the task choice first.

**Results**

**Hypothesis I**

A total of 54.8% chose the financial adviser compared to investing individually (21.1%) or the index fund (24.1%). The choice was not significantly affected by the risk manipulation $\chi^2(2) = .047, p = .982$ since there was an almost equal number of participants choosing the financial adviser in the high risk ($n = 54$) compared to the low risk ($n = 55$) condition. Descriptive data of all variables across the three groups by choice are presented in Table 1.
Table 1. Means and standard deviations of competence, benevolence, subjective uncertainty, financial literacy (self-report and actual based on the “big five”), effort (cognitive effort of the investment task) and the number of additional sources each participant used in order to make the decision.

<table>
<thead>
<tr>
<th></th>
<th>Invest individually</th>
<th>Financial adviser</th>
<th>Index fund</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>Competence</td>
<td>4.56</td>
<td>1.32</td>
<td>42</td>
</tr>
<tr>
<td>Benevolence</td>
<td>4.09</td>
<td>1.58</td>
<td>42</td>
</tr>
<tr>
<td>Subjective uncertainty</td>
<td>4.36</td>
<td>1.82</td>
<td>42</td>
</tr>
<tr>
<td>Financial literacy (self-report)</td>
<td>4.69</td>
<td>1.33</td>
<td>42</td>
</tr>
<tr>
<td>Financial literacy (actual)</td>
<td>3.50</td>
<td>1.49</td>
<td>42</td>
</tr>
<tr>
<td>Effort</td>
<td>4.17</td>
<td>1.95</td>
<td>42</td>
</tr>
<tr>
<td>Sources</td>
<td>1.24</td>
<td>1.62</td>
<td>42</td>
</tr>
</tbody>
</table>

**Hypothesis II**

In a one-way ANOVA with the investment choice (invest vs. delegate vs. index) as a between-groups factor, there was a significant difference on the subjective uncertainty ratings, $F(2, 196) = 7.656, p = .001$. A Bonferroni post-hoc test at $p < .001$ revealed that choosing the financial adviser resulted in a significantly lower estimate of subjective uncertainty ($M = 3.16, SD = 1.75$) compared to investing individually ($M = 4.36, SD = 1.82$).

**Hypotheses III & IV**

In order to analyze which factors influence the choice between investing individually, financial adviser and index fund, a multinomial logistic regression was conducted. The results are presented in Table 2 where the choice of financial adviser is the comparison group. Trust reduces the probability of choosing to invest individually while financial literacy (both self-reported and actual but self-reported to a higher degree) increases the probability of investing individually compared to the financial adviser choice. A similar pattern emerges for the choice of index fund where trust reduces the probability of choosing an index fund and financial literacy (both self-reported and actual but actual to a higher degree) increases the probability of choosing the index fund compared to the financial adviser.
Table 2. Results from the multinomial logistic regression presenting coefficients (B), standard errors (SE), relative risk ratios (RRR) together with a 95% confidence interval.

<table>
<thead>
<tr>
<th></th>
<th>B (SE)</th>
<th>Lower</th>
<th>RRR</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invest individually</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-.82 (.125)</td>
<td>.04</td>
<td>.44</td>
<td>5.09</td>
</tr>
<tr>
<td>Trust</td>
<td>-1.01 (.22)</td>
<td>.24</td>
<td>.37</td>
<td>.56</td>
</tr>
<tr>
<td>Subjective uncertainty</td>
<td>.32 (.17)</td>
<td>1.00</td>
<td>1.38</td>
<td>1.92</td>
</tr>
<tr>
<td>Financial literacy (self)</td>
<td>.52 (.23)</td>
<td>1.07</td>
<td>1.68</td>
<td>2.63</td>
</tr>
<tr>
<td>Financial literacy (actual)</td>
<td>.40 (.16)</td>
<td>1.10</td>
<td>1.49</td>
<td>2.04</td>
</tr>
<tr>
<td>Effort</td>
<td>.08 (.13)</td>
<td>.83</td>
<td>1.08</td>
<td>1.41</td>
</tr>
<tr>
<td>Sources</td>
<td>-.20 (12)</td>
<td>.64</td>
<td>.82</td>
<td>1.06</td>
</tr>
<tr>
<td>Financial adviser</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-.07 (1.22)</td>
<td>.09</td>
<td>1.06</td>
<td>11.51</td>
</tr>
<tr>
<td>Trust</td>
<td>-.54 (.19)</td>
<td>.38</td>
<td>.58</td>
<td>.84</td>
</tr>
<tr>
<td>Subjective uncertainty</td>
<td>-.02 (.15)</td>
<td>.74</td>
<td>.98</td>
<td>1.31</td>
</tr>
<tr>
<td>Financial literacy (self)</td>
<td>.41 (.19)</td>
<td>1.03</td>
<td>1.50</td>
<td>2.20</td>
</tr>
<tr>
<td>Financial literacy (actual)</td>
<td>.42 (.15)</td>
<td>1.14</td>
<td>1.53</td>
<td>2.04</td>
</tr>
<tr>
<td>Effort</td>
<td>-.20 (.11)</td>
<td>.66</td>
<td>.82</td>
<td>1.02</td>
</tr>
<tr>
<td>Sources</td>
<td>-.23 (.13)</td>
<td>.62</td>
<td>.80</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Note: $R^2 = .30$ (Cox & Snell), .35 (Nagelkerke). Model $\chi^2(12) = 71.47$, $p < .001$. * $p < .05$, ** $p < .001$

**Discussion**

This study investigates reasons for choosing between different financial products from a private investor perspective. Hypothesis I was not confirmed since choosing from a list of shares with a relative higher risk did not result in a higher propensity to delegate the responsibility of constructing a stock portfolio to a financial adviser. However, the results showed that those who chose to delegate to a financial adviser rated their subjective uncertainty lower which confirms Hypothesis II. Hypothesis III was supported in that the probability of choosing to delegate increases with trust in financial advisers. Hypothesis IV was also confirmed in that financial literacy increased both the probability of choosing to invest individually and the probability of choosing the index fund alternative.

We further report the additional finding that trust was negatively related to invest individually and index fund, whereas financial literacy was negatively related to delegation to the financial adviser. In addition, self-reported financial literacy showed a stronger influence...
on investing individually than actual financial literacy did, whereas this pattern was reversed for the index fund alternative.

In line with previous studies we report that trust has an impact on people’s financial decision making (Carlander et al., 2013; Del Guercio & Tkac, 2008; Huber et al., 2010; Ng et al., 2014). A reason for this may be that trust reduces subjective uncertainty (Gennaioli et al., 2015). Consistent with this we report that choosing to delegate to a financial adviser reduces subjective uncertainty. This is in line with previous studies reporting that higher levels of uncertainty is related to higher levels of trust (Das & Teng, 2004) and it has been suggested that trust is a coping response in order to handle potential threats pertaining to high uncertainty (Wilson & Darke, 2012). This may imply that trust and risk are inversely related over time such that trust is a response to risk.

Subjective risk assessments are based on knowledge, but in the absence of own knowledge trust in knowledgeable people can act as a substitute when assessing risks (Siegrist & Cvetkovich, 2000; Viklund, 2003). This pattern seems to be present when making savings choices, since knowledge and trust has been reported to be complementary (Carlander et al., 2013). Since information usually is asymmetric and scarce in financial decision making, decisions are, especially under delegation, often based on a subjective belief in other peoples’ knowledge as a substitute for own knowledge (Dia, 2011). In the present study it is shown that financial literacy increases the probability of choosing to invest individually or in the index fund, similar to studies showing a higher involvement in the financial market by for example investing in shares (van Rooij et al., 2011). A lower level of financial literacy is related to delegation to advisers (Calcagno & Monticone, 2015) and making more common financial mistakes (von Gaudecker, 2013), something which may or may not occur because of a higher level of illusion of control (Fenton-O’Creevy et al., 2003). We report, in support of these findings, that a lower level of financial literacy increases the
probability of choosing the financial adviser.

The decision making process described in the present study hence seems to follow a certain pattern since participants seem motivated to eliminate a lack of information and reduce a sense of uncertainty. Choosing to delegate the responsibility to the financial adviser is evidently affected both by an actual and a subjective lack of knowledge as measured by financial literacy in the present study. This choice puts the adviser’s perceived knowledge at the focal point, transforming the knowledge or risk assessment to a trust assessment (Das & Teng, 2004). Trust may in our view under some circumstances act as an illusion of control by proxy (Wohl & Enzle, 2009), and in this particular case the proxy is the financial adviser. Lastly, choosing to invest in the index fund may be the “correct” choice according to both theory and practice. It is therefore not surprising that actual financial literacy is showing a stronger effect than self-reported financial literacy in this choice group.

An obvious limitation in the present study is that the participants did not handle real, their own, or a large amount of money. It has been reported that the effects of performance-based compensation in experiments vary, but higher incentives seem to have stronger impact on judgment tasks and provide data that is more externally valid in terms of less risk-seeking or social desirability (Camerer & Hogarth, 1999).

Another limitation is that the goal of the present study was to create a real-world scenario with real-time stock information, realistic costs and a reasonably realistic choice from a savings perspective. This scenario obviously came at the expense of a weak risk manipulation for the experimental setting to work as intended. It may also mean that people do not discriminate between shares from different stock segments. In addition, measuring uncertainty directly after the choice would perhaps have given a different result. Still, the different risk levels did not show any effect on the choice either, so it is reasonable to believe that the risk levels were too similar.
With these limitations in mind, it is important to replicate the present study with a more elaborate uncertainty measure. In the present study the perceived uncertainty measure is limited to one single item and will need to be expanded in terms of theoretical underpinnings and components. It is likely that individual risk preferences or traits can explain a range of behaviors. It is therefore important to consider concepts such as tolerance of ambiguity since people generally differ in terms of tolerance of, and in response to, uncertainty (for a review on tolerance of ambiguity and related concepts, see Furnham and Marks, 2013).

We conclude that the delegation of a stock portfolio construction to a financial adviser lowers the subjective uncertainty level of the investment. This is likely due to the mental substitution of own knowledge and information with trust in the financial adviser’s knowledge and information.
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