FISEVIER

Contents lists available at ScienceDirect

Journal of Business Research



Retail investors and financial advisors: New evidence on trust and advice taking heuristics [☆]



Marco Monti ^{a,b,c,*}, Vittorio Pelligra ^{d,e}, Laura Martignon ^{f,c}, Nathan Berg ^g

- a IBM. Italy
- ^b University Vita-Salute San Raffaele, Italy
- c Center of Adaptive Behavior and Cognition, Max Planck Institute for Human Development, Lentzeallee 94D, 14195 Berlin, Germany
- ^d University of Cagliari, Department of Economics and Business, V.le S.Ignazio 17, 09100 Cagliari, Italy
- e CRENoS. Italy
- f Institute of Mathematics, Ludwigsburg University of Education, Reuteallee 46D, 71634 Ludwigsburg, Germany
- ^g University of Otago, PO Box 56, Dunedin, New Zealand

ARTICLE INFO

Article history: Received 1 February 2013 Received in revised form 1 June 2013 Accepted 1 January 2014 Available online 24 April 2014

Keywords: Trust Delegation Advice-taking Heuristic Non-expert Financial literacy

ABSTRACT

This paper investigates factors that influence trust and advice taking among retail investors when consulting with financial advisors and making real-world portfolio decisions. The data reveal that non-expert retail investors trust their advisors a lot. Trust formation appears to be well described by a simple heuristic that relies substantially on the advisor's communication style when deciding how much to trust and delegate investment decisions. Portfolio decisions appear to depend more on investors' perceptions about the investor-advisor relationship than on the risk and return characteristics of investments comprising the portfolio choice set. This evidence supports Pentland's (2008) "honest signals" as a more powerful mechanism underlying investor trust than standard metrics based on past performance. Trust and advice-taking heuristics can be interpreted as well adapted to the environment of the non-profit bank cooperatives in which they are observed, implying that trusting based on simple honest signals, although vulnerable to exploitation, can be interpreted as ecologically rational. Features of the investor's environment typical of non-profit cooperative banks imply that the heuristics investors use can perform rather well without requiring investment experience or financial sophistication, which most investors in our sample are well aware they lack.

© 2014 Elsevier Inc. All rights reserved.

Introduction

One interpretation of the financial crisis and frustratingly poor economic performance since 2008 centers on trust as a fundamental explanation. Guiso (2010) describes the events following 2008 as a trust-driven crisis and backs this interpretation with survey data documenting unprecedented collapses of US and Europeans' trust in banks and financial intermediaries. This trust-driven view of recent

 $\label{limited} \textit{E-mail addresses:} monti@mpib-berlin.mpg.de (M. Monti), pelligra@unica.it (V. Pelligra), martignon@ph-ludwigsburg.de (L. Martignon), nathan.berg@otago.ac.nz (N. Berg).$

crises contends that, whereas trust had remained stable during previous postwar economic downturns and financial market crises until 2008, after that turning point (the failure of Lehman Brothers, the emergence of fraud that remains unprosecuted, and newly visible expressions of skepticism about the integrity of US unemployment, inflation and other economic data) occurred a sea change in trust. Changing correlations among financial and economic variables which had been relatively stable for decades coincides with shifting behavioral responses on the part of consumers and investors.

Although financial advising is a large industry and the role of advisors in guiding real-world retail investors' financial decisions is clearly important, few researchers have access to data allowing them to directly observe investors and financial advisors, the content of their communication, and the decisions they make. Consequently, the element of trust between retail (i.e., non-expert) investors and financial advisors is rarely analyzed, either empirically or theoretically, in standard economic models. This paper draws motivation for investigating investor trust in their advisors and the signals advisors generate while communicating from the hypothesis of Guiso (2010) that a historic (since at least WWII) drop in trust in banks and financial intermediaries has occurred.

The authors are very grateful to Alessandro Antonietti, Chiara Guglielmetti and Riccardo Boero for their useful comments and advices. They also thank Davide Donati, general director of the Cassa Rurale Giudicarie Valsabbia Paganella and Giorgio Pasolli, director of Formazione e Lavoro for the full support in conducting on-site research at cooperative banks. They likewise thank Marcel Jentsch for valuable help programming and designing interactive interfaces, Silvia Riva for precious support in making interviews and gratefully acknowledge research support from Carefin — University Bocconi Centre for Applied Research in Finance.

^{*} Corresponding author at: Center of Adaptive Behavior and Cognition, Max Planck Institute for Human Development, Lentzeallee 94D, 14195 Berlin, Germany.

Recent time trends in "generalized trust" as measured in the General Social Survey (GSS) and Financial Trust Index (FTI) show dramatic declines following the collapse of Lehman Brothers in 2008 (Guiso et al., 2008). Aside from the emblematic case of Bernard Madoff, there appears to be very little likelihood of aggressive prosecutions of fraud, which stands in stark contrast to the hundreds of criminal convictions of senior bankers during the Savings and Loan crisis in the 1980s. Recent allegations of outright theft of investor funds by large financial institutions such as MF Global (formerly one of the US Federal Reserve's 22 primary dealers) contribute further to the impression that, since 2008, world financial markets are experiencing a historically distinct breakdown in the trustworthiness of private financial institutions and regulators. The hypothesis of trust breakdown also appears consistent with the flow of retail investors' money into US equity mutual funds, which has been overwhelmingly negative over the same period (even when stock indexes are rising, which historically would have triggered new inflows generating and attempting to profit from momentum).

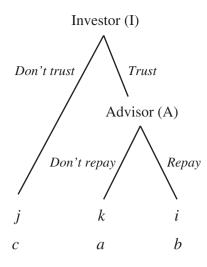
Financial information for making good investment decisions is often imperfect, incomplete, complex, and costly to acquire. Under such circumstances, many non-experts thinking about the possibility of making investments are likely to want advice from those with greater expertise. In standard theories of portfolio choice in which investors care primarily about mean and variance of portfolio returns, the tools through which advisors might contribute to investors' portfolio performance would be limited to boosting returns or reducing risk. Furthermore, at the system levels, delegation of financial decisions makes room for economies of scale in both portfolio management and information acquisition (Hackethal et al., 2009). On the other hand, delegation is costly and risky. In the real world, it entails commissions and fees. And because of the possibility of conflicts of interest between sellers and buyers, it is easy to appreciate the potential for advisors to strategically mis-inform, under-inform or simply guide investors toward high-commission portfolio decisions whose costs drag down the investor's returns or worsen the risk characteristics (Inderst & Ottaviani, 2009). The advisor is, in essence, selling a service whose quality (which can be interpreted as the ultimate effects of the advisor's services on the investor's utility) is difficult or impossible for the investor to ascertain ex ante. This information asymmetry motivates many countries' regulatory frameworks to insist that advisors are held to more stringent legal standards of conduct as a fiduciary.

A simple trade-off faces the investor. If the investor trusts too much, then he or she increases the risk of being cheated. On the other hand, if the investor does not trust the advisor enough, then he or she may lose out on profitable opportunities. This paper attempts to assess different components of trust and relate self-reported trusting decisions to self-reported financial literacy, past investment experience, individual-specific traits related to risk taking and willingness to delegate portfolio purchasing decisions to a financial advisor.

The paper is organized as follows. Section 2 describes a simple two-player trust game frequently studied in economics, psychology and neighboring social sciences. Using the theoretical model from Section 2 as a point of departure, Section 3 introduces a taxonomy of factors that influence trust, after covering multiple definitions of trust and components of trusting behavior found in the large trust literature. Section 4 describes the data and methodology underlying the collection of data from real-world investors and financial advisors. Section 5 summarizes the main findings. Finally, Section 6 discusses interpretations of the results and Section 7 briefly summarizes conclusions that can be drawn.

Trust game

Consider the game depicted in Fig. 1. In this sequential game, Investor I first chooses whether to trust advisor A. Next, if I decides to trust A, then A faces the choice of repaying I's trust or acting opportunistically to exploit I's trust at a real cost to I. In the context of the investor as first mover and advisor as second mover, the opportunistic choice would



$$i > j > k$$
 and $a > b > c$.

Fig. 1. Generic trust game.

correspond to the advisor deviating from the responsibilities of a fiduciary. If I begins by choosing not to trust, then I and A's payoffs are immediately determined (A has no move to make when I does not trust), with payoffs given by the ordered pair (j,c) (indicated by the terminal node on the lower left of the extensive form game tree). The first element indicates I's payoff j and the second element indicates A's payoff c. Relative to this no-trust outcome, if instead I chooses to trust A and if A repays this trust with trustworthy or reciprocal behavior, then both I and A will be better off, with payoffs given by (i,b), where i>j and b>c (corresponding to the payoffs on the far lower-right terminal node of the game tree). However, if A behaves opportunistically and takes advantage of I, then I loses big, experiencing the worst possible outcome, with payoff k (i>j>k), and A ends up richer than he or she would have among all possible combinations of actions in the trust game, with payoff a (a>b>c) (corresponding to the payoffs at the middle terminal node of the game tree).

This strategic interaction has three basic elements: (i) potential gain to trustor from trusting: if the trustee repays the trustor's trust, the trustor will end up better off, with a gain of i-j, (i>j); (ii) potential loss: if the trustee is trusted but does not repay the trustor's trust, then the trustor will be worse off, with a negative change in payoff relative to the no-trust status quo of k-j, (j>k); (iii) temptation: if the trustee is trusted, he will be materially better off by letting the trustor down and not repaying trust, lured by the gain from not repaying, which is a-b, (a>b).

How would an own-payoff-maximizing Investor and Advisor behave in such a situation? Using backward induction, the subgame perfect equilibrium is for both players not to trust. Every other profile of actions is exploitable in the sense that one of the players can improve their payoff by changing their chosen action.

The theoretical prediction of the no-trust outcome, which is based on backward induction, is often contradicted by experimental findings showing that people are more trusting and trustworthy than theory would suggest (Camerer, 2003; Ostrom & Walker, 2002). In light of the theoretical prediction of non-trusting behavior, this paper investigates real investors' behavior in a specially designed institutional environment in which the bank is organized as a non-profit cooperative.

Definitions and measures of trust

Trust is an elementary intuition. We trust someone even before he or she has given signs of trustworthiness (Fehr, 2009; Gigerenzer, 2008).

Although the concept seems straightforward, multiple definitions appear in various social science literatures. Trust can be defined as a "personality trait" (Baker, 1987; Jones, 1996), a "probabilistic phenomenon" (Baier, 1986, 1994; Gambetta, 1998), or as a matter of "encapsulated interest" (Hardin, 1993, 2001). The characterization that best matches the aspect of investor-advisor relationships under focus in this paper is the idea of trust as a "responsive behavior" (Horsburgh, 1960; Jussim, 1986; Pelligra, 2010, 2013; Pettit, 1995). This notion of trust zeros in on relational factors that define interpersonal relationships. It seems extremely unlikely that consequentialist utility theory (i.e., where the only thing that individuals care about is outcomes, regardless of process or how those outcomes are embedded in surrounding social relations) offers a complete account of individual motives to trust and behave in a trustworthy manner. Behavioral economists do indeed try to expand utility theory to account for a variety of motives. A more satisfactory theory of trust should explicitly account for social inter-dependency of which the effect of the advisor's actions on the investor's payoffs is one important example.

The responsiveness hypothesis regarding trust postulates that a trusting action induces trustworthiness through an endogenous modification of the trustee's preferences. In other words, a single act of genuine trust provides additional reasons for, or positively shifts the likelihood of, trustworthy behavior.

Measuring trust itself requires measuring beliefs of the trustor about the trustee's behavior and therefore can be narrowly conceptualized as an intrinsic individual trait or component of an individual's stable preferences underlying the standard utility function representation of preferences. But Dufwenberg and Gneezy (2000) show that the trustee's beliefs about the trustor's expectations also matter, revealing yet more complicated layers of inter-personal dependency guiding each party's actions. Undoubtedly there are other beliefs that affect the individual investor's behavior (in the role of trustee in the trust game nomenclature of Dufwenberg and Gneezy) contributing to his or her perceptions about the financial advisor's integrity or honesty.

In the investor–advisor relationship, trust takes different forms. Expectant or presumptive trust refers to the predisposition an investor brings to a first encounter. In contrast, experiential trust develops with knowledge of previous actions taken by the other person. Yet another distinct notion of trust based on identification relies primarily on the extent to which trustor perceives that trustor and trustee share overlapping core values or interests. The theory guiding the empirical analysis reported subsequently posits that expectant or presumptive trust, which is the main dependent variable our observations enable us to measure, is influenced by several distinct components consisting of the different forms of trust described above: (1) person-specific general trusting tendency; (2) previous accumulations of experiential trust with other advisors working in a similar role; and (3) trust based on second-hand knowledge or other indirect information sources.

Thus, the statement, "I trust my advisor to take care of my money," does not express a belief about the characteristics of the different investment products comprising the investor's choice set (as presented by the advisor). Rather, that statement is about the advisor. Therefore, trust in this analysis is future-directed toward a person (the financial advisor) within a particular investment and organizational environment.

Complexity, transparency and trust

Although trust has an inherent as well as instrumental value for non-expert investors (e.g., retail bank common customers), trust can be misplaced. If an advisor reveals truthfully to a customer that the expected outcomes are stochastic because of the market uncertainty, trust in the advisor may diminish as a result of this trustworthy behavior. Similarly, if an advisor lies to an investor by saying that fees are stochastic and impossible to predict ex ante, some investors may appreciate the apparent candor of the advisor's admission that he or she is unable to predict and consequently trust the advisor more. Disclosure of

previous investing errors may have similarly ambiguous effects, either decreasing or increasing investors' probability of trusting. In contrast, even though an advisor who is less open about the uncertainty he or she faces (especially if this is done knowingly) is acting in a less trustworthy manner, the investor might paradoxically increase his or her trust in the advisor.

Simple honest signals

The "honest signals" framework of Pentland (2008) views communication as occurring through two primary channels: signals delivered in spoken words and a distinct communication network of unconscious signals functioning as an evolved capacity for reading and interpreting so-called "unspoken messages." The spoken channel of communication requires that all participants in an act of communication know the language (e.g., agree on definitions of words). In the domain of communicating about financial securities, this may be not necessarily be the case even among two native speakers with the same mother tongue. Words like "risk" can have very different meanings when used by those trained in finance and economics (e.g., thinking of risk simply as a volatility score for purposes of measuring Sharp ratios or CAPM risk-return tradeoffs) than for non-experts. Non-experts instead commonly understand "risk" as referring to specific bad outcomes, the chances of those bad outcomes, or difficult-to-describe outcomes that are elusive or uncomfortable to think about. In contrast, the unspoken channel of communication in the honest signals framework revolves around social relations. Depending on the complexity, domain specificity, and knowledge requirements of the communication task, people may (consciously or unconsciously) rely to a greater extent on unspoken signals that Pentland (2008) sometimes refers to as "social sense." Alex Sandy Pentland (2008) supports this framework as applied to the domain of investment decision-making by suggesting that "investments made without a sufficiently strong personal connection are far more likely to fail". One of the clearest indications from the data reported in this paper is that investors pay more attention to characteristics of their face-to-face interactions with the financial advisor - and condition actual investment decisions to a far greater extent on these characteristics than they do for characteristics of the investment products themselves (e.g., expected return, standard deviation, and correlation of returns that would be the primary inputs if people were using standard models of portfolio choice, which they clearly are not). This social channel profoundly influences major decisions in their lives even though they are largely unaware of it. It is a powerful and pervasive form of communication though.

The bank that provided access to interview investors and advisors

The research project as a whole was developed in two phases. First, we interviewed 20 professional financial advisors working at an Italian cooperative bank, which graciously worked with us as partners in testing and collecting data using a tool we developed referred to as the "Cognitive Banking Lab." Next, we interviewed 99 active bank customers. The interviews focused on the specifics of the investor–advisor interaction. We elicited perspectives on both sides: investors' beliefs about their own advisors and advisors' beliefs about their representative investors.

Honest signals in the investor-advisor environment

What are types of honest signals that investors use when interacting with financial advisors? According to Pentland, many types of honest signals are so commonly seen as to make them difficult to recognize as signals worthy of paying attention to (e.g., smiles that others send, the clothes they wear, the cars they arrive to meetings in). As senders of these signals, Pentland argues that most of us are more conscious of strategically deploying unspoken signals into communication,

especially when the stakes are high. And therein lies the problem of potential incentive incompatibility, or simply conflict of interest, between advisors and investors. Because unspoken signals are so easy for advisors to plan and strategically manipulate, investors cannot rely on them as *bona fide* honest signals. Instead, investors would need to look for signals about advisors that are difficult or impossible for advisors to strategically control.

Data

Data were collected through scripted face-to-face interviews, survey items and a computer-aided survey tool. The structured questionnaire was specifically designed to shed light on the decision processes underlying the investor-advisor interaction, advice taking, and trust formation. Two independent pilot studies of the data collection tools aimed to rigorously check and double check for comprehension among both investors and advisors. Unipark¹² served as the primary data collection platform and survey tool, which enabled near real-time tracking.

Interviews were collected by two psychologists and one economist trained to conduct scripted surveys and elicit standard information using standard decision-making tasks. Interviewers assisted participants by reading and explaining each single question that appeared on respondents' computer screens. After training to answer questions requiring 7-point Likert Scale responses, all participants entered responses to all closed-end decision tasks themselves by using a touch-screen interface. Responses to open ended survey items were collected and entered electronically by the interviewers. Bank customers with an investment account already established were offered a gift for participating (e.g., an automatic umbrella or a silver plated pen). When invited, customers responded to the invitation with great enthusiasm, suggesting a high degree of involvement and resulting in a high participation rate, namely 99 out of 115.

Questionnaires

Fig. 2 provides a visual outline of the component areas comprising the design of the questionnaires. Participants provided responses to 112 survey items, all but 16 of which were elicitations on a Likert scale. The 16 non-Likert items were qualitative and open-ended. The questionnaire that financial advisors responded to was designed to elicit typical, or modal, mental representations (i.e., stereotypical images) that financial advisors have regarding the representative investor to whom they provide advice. The questionnaire that investors responded to was nearly identical in many elicitations about advisor–investor communication but was designed to elicit the customers' perceptions of and receipt of signals from financial advisors.

On average, each interview took 75 min plus 15 min for a brief discussion afterwards, the purpose of which was to hear what participants

thought about the survey and give them a chance to ask questions. The data reported in this paper focus on links between trust formation and decisions within six categories, all potentially affecting the investor–advisor relationship: general satisfaction with advisor, expertise of the advisor, the investor's decision style, perceptions about relational and communication style, trust, and delegation.

Participants

A cooperative bank is a nonprofit institution whose aim is to support the economic development of people living in a specific area. This type of bank is unusual in that its financial advisors are under very little, if any, pressure to sell particular financial products. Customers at the cooperative bank understand and appreciate this feature of their bank (i.e., that employees are not incentivized in ways not visible to the customers), which motivates them to buy shares in the bank and become partners, or joint owners, of the cooperative. We first interviewed all financial advisors working at the bank. Then we drew a random sample of active customers from the bank's customer database subject to only one condition: the only requirement customers had to fulfill in order to be selected for an invitation to be a participant was to have deposits or investments of at least 40,000 Euros. The 40,000 Euro requirement puts bank customers in the status of being investors who face a meaningful portfolio choice decision.

Results

This section reports the study's main results; in particular, we present evidence for aspects affecting trust formation and maintenance. We also analyze the effects of trust and emotions on delegation. We consider effort and time devoted to the investment decision as indexes for the investors' participation into the process.

How much do common investors trust?

The following four questions were intended to assess investors' level of trust:

Q22: Do you have a long lasting and trustful relationship with your financial advisor?

Q41: How much do you trust the nation's banking system?

Q42: How much do you trust your cooperative bank? O43: How much do you trust your financial advisor?

Fig. 3A through D shows empirical distributions corresponding to the 11-point Likert responses generated by the questions listed above. Fig. 3B shows that respondents are fairly distrustful of the banking sys-

tem in general, with well over half the distribution falling below the

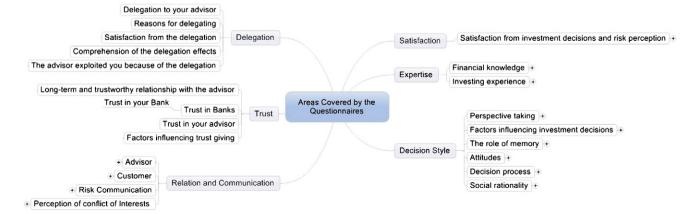


Fig. 2. Design of the questionnaire.

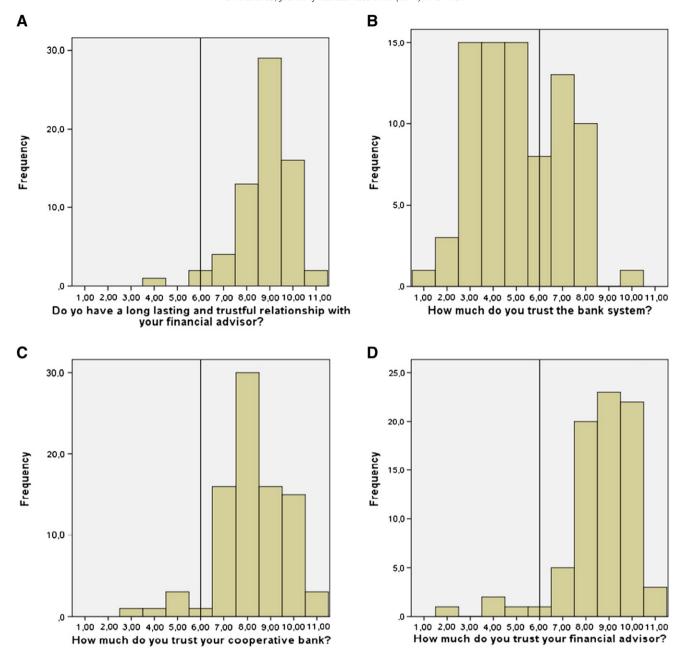


Fig. 3. Dimensions of trust.

midpoint of the Likert scale. This matches survey results in Guiso's studies in general and the Financial Trust Index in particular. Respondents report significantly higher levels of trust in their cooperative bank and financial advisors. The fourth item obviously overlaps with the first item and provides an internal consistency check on the responses generated by these items.

Influences on investor trust in advisors

We asked subjects in an open-ended format to state at least five factors they consider as important for building and maintaining trust in their financial advisor. We collected responses first in a free order. Then we asked respondents to rank the five items they had mentioned. We transcribed the responses and used software for semantics classification to measure the fraction of statements falling into each of the four categories: technical competence of the advisor; the advisor's

relational and communication traits; the advisor's accessibility; and the overall bank environment.

Table 1 reports empirical distributions of all statements made by investors into four semantic content areas. These empirical distributions

Table 1Percentage of statements in four semantic content areas, by trust factor (ranked I–V).

Semantic content areas	Trust factors					Average ^a
	I	II	III	IV	V	
Competence	32.0	24.0	29.1	28.5	33.3	28.9
Relation and communication	64.0	76.0	66.6	71.4	66.6	69.3
Accessibility	0.0	0.0	8.3	0.0	0.0	1.9
Bank environment	4.0	0.0	0.0	0.0	0.0	0.9

^a Averages are calculated on the whole pull of collected subjects' answers, while columns present the percentages of answers related to each single semantic content area at each phase of the questionnaire.

are broken out according to each of five trust factors that investors came up with. One interpretation of the trust factors investors came up is as cues triggering trust. The point of this semantic content area analysis is to connect the explicit factors enumerated by investors to hidden signals in the Pentland framework. We interpret the semantic content areas to correspond to potential hidden signal channels. First, we take the five trust factors that investors list at face value as factors that do genuinely influence their own trusting behavior. Second, we perform semantic analysis to link the explicit factors to honest signaling channels of which those being influenced may not even be aware.

Investors are aware of the fact that they are not well equipped to judge the technical financial information they receive. Therefore, they decide to rely on something that they know much better and which they consider reliable: the "honest signals" in Pentland (2008). An important premise that bank customers are explicitly aware of is their consideration of the cooperative bank environment as one of the friendliest banks whose employees' incentives are favorably aligned with their own. This deliberate consideration guides the bank customers to choose a strategy of accepting their inexperience and relying on an intuitive set of impressions that can be quantified according to honest signals channels as in Table 1.

Trust and delegation versus participation in the portfolio choice decision

Fig. 4 shows the scatterplot of trust and delegation. The correlation is not that obvious, suggesting that there are other factors going into the delegation decision. What seems clear is that high levels of trust are required but not sufficient to guide an investor to delegate. The data in Fig. 4 are almost entirely consistent with this interpretation that trust is necessary but not sufficient for delegation. Fully 77% of respondents are in the upper quadrant with trust and delegation levels above the midpoint of each respective scale — bold diamonds represent answers provided by more than one participant.

Table 2 shows simple pairwise correlations between delegation and three other items self-assessing financial expertise in positive and negative frames. While previous researches (Hackethal et al., 2009) find support for the hypothesis that wealthier and older investors are the most frequent delegators, the sample we collected indicates that nearly all participants reflect on the fact that their experience and expertise are limited and consequently seek advice.

Fig. 5A, B and C presents empirical distributions for self-assessments of the time required to decide on an investment (in units of hours per

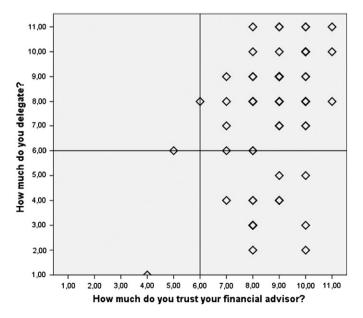


Fig. 4. Scatterplot of trust and delegation.

month), the effort required to decide on an investment, and how much the respondent delegates these decisions to the advisor. Fig. 5A shows that more than 40% of investors spend less than 1 h per month making investment decisions, which may be part of a wise buy-and-hold investment strategy or at least one that avoids running up large expenditures on transaction fees from shifting the composition of the portfolio. Fig. 5B shows that very few would claim to spend extreme amounts of effort on investment decision making. Together, these data indicate that investors do not play a very active role in managing their money, which is consistent with the high levels of delegation reported in Fig. 5C.

Investors who delegate a lot also seem not to check or update their portfolios frequently. Delegators spend on average half the time thinking about investments that non-delegators do. Delegators also spend just a fourth to a third the time that non-delegators do searching for information needed to make financial decisions.

Effort and time devoted to the investment decisions have correlation of 0.581. This suggests that those in the upper distribution of both scales were the most active participants in making portfolio choice decisions. Finally, delegation and trust have simple correlation of 0.404.

In our interviews with advisors, they said with some concern that they were too frequently asked to make portfolio decisions on behalf of investors. In a for-profit advising consultancy, advisors could easily exploit this trust by churning to generate high transaction fees for themselves at their clients' expense. In this relationship, however, the advisors expressed concern that investors were delegating too much, because advisors said they wanted to make sure investors were involved in the decisions to as great an extent as possible. Advisors told us that another common request from investors was, "Please choose how to invest this money as if it were yours," or: "Please invest this money as if it were your mother's." These requests make good sense.

Why do investors delegate?

In order to investigate investors' motives for delegating, we asked subjects the following question: Q45: Why do you delegate investment decisions to your financial advisor?

The majority of participants recognized that they delegate because they lack expertise in finance. The other most frequent response was that they delegate because they trust their advisor. Most investors consider delegation as the default option to manage their economic resources once trust has been established. They do not see the need and apparently do not have incentives to try deepening their own expertise and become more active in making portfolio decisions.

Communication and trust

The following survey items sought to uncover how communication affects investors' trust in advisors: Q24: How well do you understand your advisor? Q33: Does your advisor clarify information that was previously unclear? Q34: Are you satisfied with your advisor's explanations?

The three histograms in Fig. 6A, B and C show the empirical distributions for the three items above. There is a high degree of overlap in these three distributions with pairwise correlations between 0.60 (for understanding and clarity) and 0.80 (for clarity and satisfaction). Thus, understanding, receiving clarification, and satisfaction appear to be reflecting a strong common component.

Discussion

Data analysis shows that the observed investors have a high level of trust in their bank and the financial advisors with whom they consult, despite rather low levels of trust in the financial system in general. These are customers of a cooperative non-profit bank. They view the

 Table 2

 Pairwise correlations among delegation, competency in one's own investments, and self-regarded expertise in financial decision making.

	How much do you delegate?	How well do you understand your investments?	How much do you consider yourself Naïve in your financial understanding?	How much financial expertise do you possess?
How much do you delegate?	1.00	-0.40	0.43	-0.21
How well do you understand your investments?		1.00	-0.51	0.30
How much do you consider yourself Naïve			1.00	-0.60
in your financial understanding?				1.00
How much expert do you consider yourself?				1.00

non-profit (to which they share a small ownership stake) as a trustworthy alternative outside the generally *un*trustworthy financial system of Italy and the global economy. Because investors trust their advisors to such a high degree, they delegate "so much" that their advisors frequently resist requests for them to take over and make the portfolio decisions, hoping to get the investors to participate more actively in choosing their portfolios.

A second primary result is that trust leads most investors, namely 77% of respondents, to choose the action labeled "full delegation," which gives full responsibility over buying and selling securities in the investor's portfolio to the advisor. What is particularly noteworthy in these data is that the "full delegation" action is not statistically linked to investors' assessments of their advisors' technical competence or past performance. Rather, honesty signals once confirmed by the

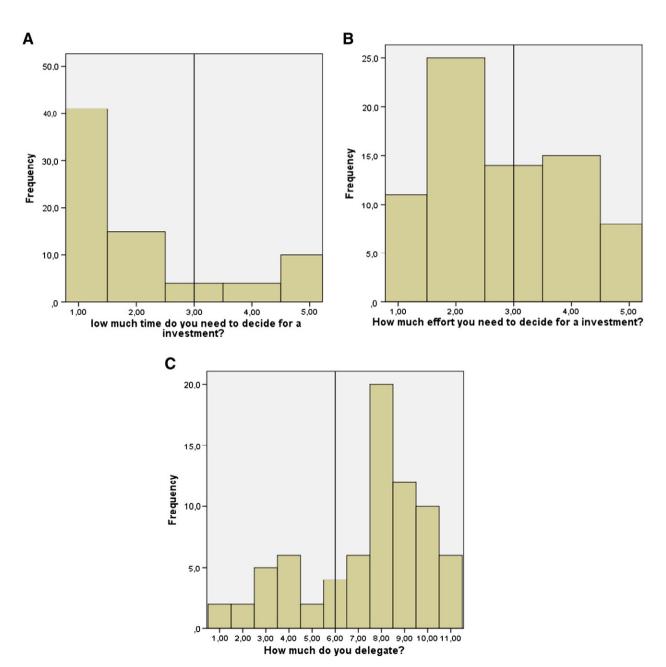


Fig. 5. Dimensions of the decision process.

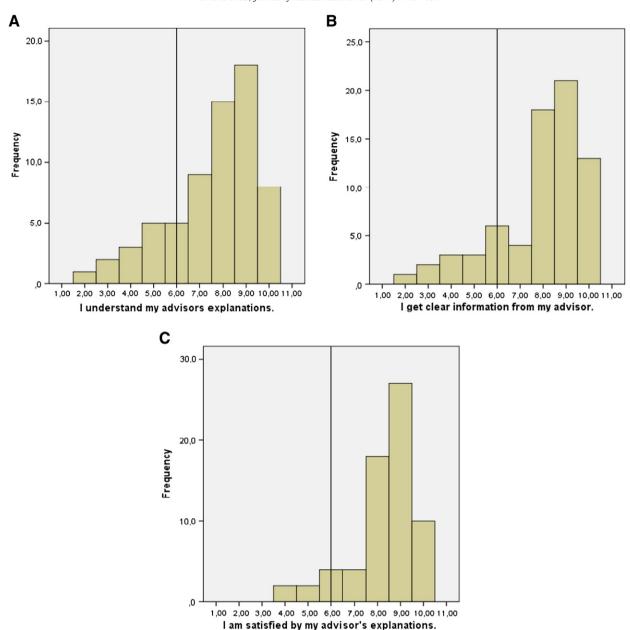


Fig. 6. Information and understanding.

investor lead to the conclusion that the advisor's communication and relational attitudes are perhaps the very most important cues for triggering trust. Word count analysis confirms that the quality of customer–advisor communication is mentioned by investors far more frequently than the quality of advisors' performance or levels of competency.

This mode of trust formation (apparently independent of fundamentals and performance metrics that standard economic models would predict investors condition heavily on) is obviously vulnerable to opportunistic exploitation in less friendly environments. It would be interesting to see if other contextual cues would lead this same investor population to wisely choose a different mode of trust formation in an environment with less well aligned incentives to avoid the pitfalls of trusting senders misleading signals with harmful intent.

A third element we investigated is the relationship between trust and advice taking strategy. The data show that there is a strong correlation not only between trust and delegation but also between delegation and disengagement, in terms of both time and effort devoted to financial decision making. The data are consistent with the hypothesis that

one motive for investors to trust advisors is simply to economize on time and the psychic disutility of effortful thinking about portfolio choice, planning, and personal finances in general. Indeed, the majority of subjects stated that one reason they delegate is because they are not expert enough at analyzing financial securities and managing their money by themselves. This points to a standard economizing of time and effort as a motive. Beyond these utilitarian reasons to trust and delegate, however, the investors in our sample stated, often emphatically, that a distinct reason for delegation is to affirm their sincere trust in their advisors.

Conclusion

Trust functions as a tremendously valuable public good. Its value becomes most noticeable, perhaps, only after it disappears or becomes scarce. This would seem particularly true for the case of trust in private and public institutions employing professionals to communicate key characteristics of financial products to potential investors. Studying trust and trustworthiness as influences on retail investors' utilization

of advisor services and portfolio decision making is relevant on several counts. Retail investors typically have very little experience or technical training using standard metrics to compare financial securities that comprise the portfolio choice set, and are therefore vulnerable (Lusardi & Mitchell, 2007). Retail investors also tend to adopt an "advice taking" heuristic as the default option. Asymmetries in information and power are typical in the investor–advisor relationships. To invest, retail investors must trust their financial advisors concerning private information and their own money. Otherwise, many would lack access (without confidence and competency to make investments online, for example) were it not for the trust based relationships that have formed and evidently producing real economic value.

This paper analyzes predictors and correlates of trust in investoradvisor relationships and interprets these observations through the lens of Gigerenzer and Selten's (2001) ecological rationality framework. The empirical investigation reveals evidence consistent with the hypothesis that "honest signals" are pervasive and particularly important for novice investors. Honest signals are behaviors that are so expressive or so directly connected to our underlying biology that they become generally reliable indicators used by people to guide their own internal psychological production of trust. Honest signals are either so costly to send, or so difficult to suppress, that they function reliably (i.e., with a useful degree of accuracy) as conduits for revealing intentions. Simple information-frugal heuristics consistent with the observed choices that investors in this sample exploit the diagnostic value of subtle modes of behavior (i.e., honest signals) and therefore enjoy the benefit (both cost savings and possible improvements in accuracy of inferences) of ignoring further information (which may be purely in terms of improved accuracy without requiring cost savings as in the theoretical model of Berg & Hoffrage, 2008).

These simple heuristics would appear to work well within the cooperative social environment where we have observed people appearing to use them. In this environment, advice taking can be considered an adaptive behavior. Investors recognize their own lack of competence for applying the standard tools of portfolio choice. In addition to this motive, however, investors also seek and rely on advice because they consider their financial advisor to be a reliable and supportive person. A key influence supporting the trusting behaviors we documented is the fact that investors are banking with a non-profit cooperative bank. This institutional

structure creates an environment that appears to effectively align financial advisors' interests with those of the investors whom they advise. This ultimately benefits investors who can, in turn, use simple decision strategies that appear well-calibrated for the non-profit cooperative bank environment in which they are used.

References

Baier, A. (1986). Trust and antitrust. Ethics, 96, 231-260.

Baier, A. (1994). Moral prejudices. Cambridge: Harvard University Press.

Baker, J. (1987). Trust and rationality. Pacific Philosophical Quarterly, 68, 1-13.

Berg, N., & Hoffrage, U. (2008). Rational ignoring with unbounded cognitive capacity. *Journal of Economic Psychology*, 29, 792–809.

Camerer, C. (2003). Behavioral game theory. Princeton University Press: Princeton.

Dufwenberg, M., & Gneezy, U. (2000). Measuring beliefs in an experimental lost wallet game. Games and Economic Behavior, 30, 63–182.

Fehr, E. (2009). On the economics and biology of trust. *Journal of the European Economic Association*, 7(2–3), 235–266 (MIT Press).

Gambetta, D. (1998). Can we trust trust? In D. Gambetta (Ed.), Trust: Making and breaking cooperative relations. Cambridge, MA: Basil Blackwell.

Gigerenzer, G. (2008). Why heuristics work. *Perspect Psychol Science*, 3. (pp. 20–29).

Gigerenzer, G., & Selten, R. (Eds.). (2001). Bounded rationality: The adaptive toolbox. Cambridge, MA: MIT Press.

Guiso, L. (2010). A trust-driven financial crisis. Implications for the future of financial markets. EEAG report on the European economy 2010 (pp. 53–70). Munich: CESifo Group.

Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *The Journal of Finance*, 63(6), 2557–2600.

Hackethal, A., Haliassos, M., & Japelli, T. (2009). Financial advisors: A case of babysitters? CFS working paper no. 2009/04.

Hardin, R. (1993). The street-level epistemology of trust. Politics and Society, 21(4), 505–529.

Hardin, R. (2001). Trust and trustworthiness. New York: Russell Sage.

Horsburgh, H. (1960). The ethics of trust. Philosophical Quarterly, 10, 343-354.

Inderst, R., & Ottaviani, M. (2009). Misselling through agents. American Economic Review, 99(3), 883–908.

Jones, K. (1996). Trust as an affective attitude. Ethics, 107, 4-25.

Jussim, L. (1986). Self-fulfilling prophecies: A theoretical and integrative review. Psychological Review. 93, 429–445.

Lusardi, A., & Mitchell, O. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education. *Journal of Business Economics*, 42(1), 35–44.

Ostrom, E., & Walker, J. (2002). Trust and reciprocity: Interdisciplinary lessons from experimental research. New York: Russell Sage Publishing.

Pelligra, V. (2010). Trust responsiveness. On the dynamics of fiduciary interactions. *Journal of Socio-Economics*, 39(6), 653–660.

Pelligra, V. (2013). Trust. In L. Bruni, & S. Zamagni (Eds.), Handbook on the economics of philanthropy, reciprocity and social enterprise. Cheltenham: Edward Elgar.

Pentland, A. (2008). *Honest signals. How they shape the world.* Cambridge MA: Mit Press. Pettit, P. (1995). The cunning of trust. *Philosophy and Public Affairs*, 24, 202–225.