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The Insurance by My Side: Better Risk Assessment for Smarter Insurance Decisions

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*Abstract**

Insurance customers are not experts in risk management, and yet they make high-stakes decisions that can substantially affect their personal wealth and health. This raises questions about the strategies people use when they look for information or for professional advice. We interviewed 20 advisors and 99 customers of an Italian cooperative bank where insurance and financial products are retailed. We analyzed different aspects of interactions between customers and advisors that contribute to the communication of expert knowledge, the formation of trust, and the adoption of advice-taking heuristics. Customers considered their advisor's communication style when deciding how much they should trust and delegate.

The communication style also influenced the customers' perceptions of risk and uncertainty of future events. Preliminary results reveal that the customers trusted their advisors very much because they judged the environment to be friendly; they developed this trust by adopting simple adaptive heuristics. Clients inferred the professional ability of their advisors by relying much more on so-called "honest" social signals than on content-related features. Methodologies to enhance customers' decision-making outcomes based on better risk communication with adequate numerical and statistical evidence are also illustrated.

Keywords: *Trust, Investor, Advisor, Delegation, Advice-taking heuristic.*

JEL Codes: *G11, G21.*

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1.
INTRODUCTION

Individuals make thousands of decisions in their lifetime; some of these decisions may have immediate effects, others effects delayed over time. Decisions and their effects are not always connected deterministically. Stochastic relations can also play a role. Wrong decisions can lead to negative consequences but even correct decisions can lead to large losses from sheer bad luck. Because always being right is impossible, individuals must develop strategies for evaluating future and uncertain events. This is especially true when making financial plans for the future. In this case, uncertainty can be managed by the right mix of insurance and financial products. To make the best choices, consumers must make the effort to understand the products as well as to assess the risks.

1.1
How insurance works and how it is perceived

From an observational point of view few consumers are good at defining and classifying risks and even fewer know how insurance coverage works. Nonetheless, neoclassical economists assume that consumers view insurance markets as a special case of markets for contingent claims based on the state-preference approach developed by Arrow and Debreu (1954). A contingent claim is a formal contract between two parties whereby one of the parties (the insured) purchases a "ticket" from another party (the insurer), which can be redeemed for money if certain states of nature occur. The ticket is more commonly referred to as an insurance policy, its cost is the insurance premium, and the states of nature are the events that are covered by it, such as a fire causing damage to one's property.

1.2
The insurance puzzle and the role of the insurer

Considerable empirical evidence suggests that many individuals for whom insurance would be a worthwhile purchase do not have coverage. For example, in the United States, flood insurance—even when heavily subsidized—is not purchased by many homeowners until after they suffer damage from a disaster (Anderson, 1974). Many residents in Louisiana and Mississippi only discovered that they were not covered for flood damage after Hurricane Katrina, with some allegedly under the misimpression that they were protected by their homeowner's policy. Only 40% of the residents (owners and renters) in Orleans parish had flood insurance before the hurricane hit (Insurance Information Institute, 2005). Yet what the average person knows and believes about insurance is a central issue for policy makers and insurance companies: Beliefs induce actions, and when beliefs are "wrong," decisions can trigger negative outcomes.

It is difficult to verify people's beliefs before an adverse event (an accident or natural disaster) because afterward it will be in their interest to claim that they thought they were covered. Limited data exist on beliefs about coverage prior to an event. It is also difficult to know what insurance agents tell prospective buyers, above and beyond specifics about the insurance contract. Insurance knowledge and statistical literacy also play an important role in insurance purchase decisions; in particular, the language used to convey information can be a source of ambiguity and can foster decision mistakes, as we will see in Section 4.2.1. The insurance advisor, as a content mediator, plays a fundamental role in sharing relevant information and eliciting proper risk understanding. In a field survey of homeowners residing in disaster-prone areas in the United States, Kunreuther and Slovic (1978) found that 60% of the uninsured homeowners interviewed had no idea that they could cover their house against flood or earthquake damage; others who appeared not to need financial protection against certain events actually purchased coverage. In different situations, many consumers buy extended warranties on new electronics or appliances that cover only small repairs and annual servicing at a premium that is extremely high relative to the cost of buying a replacement. None of these examples are totally conclusive but the circumstantial evidence suggests that more than a few people do things that would not be expected if they were both rational (in a neoclassical economics sense) and well informed.

1.3
Effective communication and "nudging" incentives can shape better behaviors

Evidence suggests that cost-effective preventive measures are sometimes rewarded by insurers in ways that could change their clients' behavior. For example, some insurers offer lower insurance premiums (a "nudge") for buying a car with airbags or automatic seat belts. Yet such incentives are more the exception than the rule. Insurers do not discount health insurance premiums for joggers or reduce premiums for windstorm coverage for homeowners who take steps to protect their homes from wind damage, and marketing activities do not always succeed in producing results that are in the best interest of individuals at risk. Nonetheless there is great potential for what is called "the architecture of choice" (Thaler & Sunstein, 2008)—that is, decisions are influenced by how the choices are presented. One possible way to improve consumers' decision outcomes is to design information environments that support transparent communication of decision trade-offs. For example, providing a clear list of the pros and cons of a decision can guide consumers in formulating their own such list. Empowering consumers' decision strategies will enhance their decision satisfaction and will probably have a positive impact on market efficiency.

1.4
Neoclassical rational model assumptions versus real individuals' abilities

Economists assume that most people are risk averse, but they usually place no a priori limits on risk aversion (risk aversion is mainly used as a free parameter to fit a wide and heterogeneous range of aggregate data without providing evidence for its determinants). This implies that people could pay premiums very much in excess of their expected claim payments and still be called rational. The assumptions of "risk aversion" and "rationality" also imply that (1) if an insurance premium is below the actuarially fair value, rational people should definitely buy the insurance. On the other hand, (2) a rational person should not pay a premium greater than the maximum claim that could be received for the insured event. The behavioral economics framework developed by Tversky and Kahneman incorporates other factors, such as information imperfections, biases and simplified choice models used by individuals, effort and attention costs, and multiattribute preferences, that provide deeper and more realistic insights into the decision-making processes.

We considered some of the psychological determinants of the "anomalies" related to insurance behavior that emerge from the collected evidence; we define an anomaly on the demand side as the case when individuals at risk who should want to buy coverage do not, and when those who do purchase coverage should have decided to forego this protection. Determining whether behavior is anomalous requires assuming/knowing the strength of risk aversion and the administrative cost of supplying insurance, which are often difficult to measure.

1.5
Risk perception and decision making

The typical attitude of normative theories of human decision making is reflected in the following citation: "Numerous studies show that intelligent people have great difficulty judging probabilities, making predictions, and otherwise attempting to cope with uncertainty" (Slovic, Fischhoff, & Lichtenstein, 1985). Along the same lines, as noted by Slovic (1984, p. 4), "it is extremely hard (for people) to think about uncertainty, probability, and risk." It is the opinion permeating the whole heuristics and biases program, that indeed, repeated demonstrations have shown most people lack an adequate understanding of probability and risk concepts (e.g., Kahneman & Tversky, 1984).

An adaptive theory of human cognition and behavior, in contrast, does not consider human deviations from normative standards as "biases" but rather as forms of adaptation to the environment (Gigerenzer, 2002). Some of these may even become maladaptive, when conditions change (artificial vs. naturalistic conditions). As an example consider human fear of catastrophes, which is probably an ancient emotional trait of our species that in modern times includes fear of severe losses not just to individuals but to large groups of people. Fear of airplane crashes falls into this category: Humans are in general more afraid of flying than of driving, whereas, as Gigerenzer pointed out (Gigerenzer, 2002), once you have safely driven your car to the airport, you have survived the worst part. A drive of 30 km is as risky as a transatlantic flight from

Frankfurt to New York. People are scared of flying because a plane crash is experienced as a major catastrophe and cognitively enhances the risks of flying. Yet fear of catastrophes can in fact create more hazards than a serene attitude, as Gigerenzer's analysis of people's behavior after September 11 shows: During the 3 months following September 11, many people stopped flying and drove instead, and the number of car accidents in this period increased, as well. This behavior is dictated by the panic reaction to catastrophes that is still hardwired in human brains.

Health insurance companies may take advantage of people who exhibit this type of behavior when choosing their insurance policies. Problems with our teeth or with our digestion are far more common than so-called serious diseases or accidents. Humans fear accidents to the point of neglecting the risk of more commonplace adversities. Often this tendency is to the benefit of the insurers and to the detriment of the insurance buyer who invests in insurance for rare events.

2.
INSURANCE DECISIONS: EXPERT VERSUS NONEXPERT APPROACH IN DECISION MAKING UNDER UNCERTAINTY

Research in cognitive science over the last 30 years has revealed several differences between the decision approaches that experts and nonexperts follow. In particular, studies in cognitive psychology have shown experts' superiority over novices in nearly every aspect of cognitive functioning, from memory and learning to problem solving and reasoning (Anderson, Deane, Hammond, McClelland, & Shanteau, 1981). Chess masters, for instance, have been found to perceive patterns of play more effectively (de Groot, 1965) and to have better memory for chess positions (Chase & Simon, 1973). Experts in physics, mathematics, and computer programming reveal similar superior skills (Mayer, 1983). Several themes have emerged from this body of research.

First, expertise is domain specific. The special skills of experts are diminished outside their area of expertise: "Chess experts do not appear to be better thinkers for all their genius in chess" (Anderson, 1990). Apparently, the thinking of experts is "domain adapted" (Slatter, 1987).

Second, expertise is acquired through stages of development, somewhat akin to the mental development of children. According to Fitts and Posner (1967), the first stage is the "cognitive stage," where specific facts pertinent to a task are memorized. Next is the "associative stage," where connections between the relevant facts are strengthened. Last, in the "autonomous stage" the skills become practiced and rapid.

Third, experts use different thinking strategies. For instance, novices have been found to reason backward from the unknowns to the givens in solving physics problems. Expert physicists, in contrast, reason forward using stored "functional units" from the givens to the goal (Larkin, 1979). Therefore, expertise produces more efficient approaches to problem solving and decision making (Anderson, 1990).

Fourth, the thinking of experts is more automated (Shiffrin & Schneider, 1977). These automated processes generally operate in parallel and function somewhat like visual perception or pattern recognition. Novices, in contrast, rely on controlled processes that are linear and sequential, more like deductive reasoning (Larkin, McDermott, Simon, & Simon, 1980).

These special characteristics of experts can be studied through verbal protocols. By asking experts to think aloud, qualitatively rich accounts of their reasoning processes become accessible (Ericsson & Simon, 1980). In summary, the cognitive science view is that experts within their domains are skilled, competent, and think in qualitatively different ways from novices (Anderson, 1981; Chi, Glaser, & Farr, 1988).

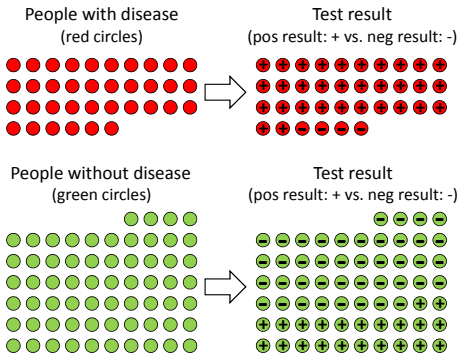
But what differences should we expect when we observe nonexperts dealing with complex decisions, such as deciding which insurance to purchase? How do they manage payoffs that are stochastic and bear long-lasting effects? How can they improve their expertise and, thereby, their decision performance over time? Differences between nonexperts and experts lead to different perspectives on how consumers—both nonexpert and expert—experience buying insurance, investing money, and protecting their wealth (Lusardi, Mitchell, & Curto, 2009).

Nonexperts are more likely to have problems in assessing risks. Some of these problems arise from the inadequacy of the information formats used by the media to convey risk information. Here, again, it is a feature of adaptive human behavior that we are more suited to understand certain formats of information better than others.

Bayesian reasoning, which is often used for assessing risks, exhibits typical deviations from the norm when people have to compute conditional probabilities based on percentages or Kolmogorov probabilities. The problem of "base rate neglect" is frequent (Tversky & Kahneman, 1974) when people use formats that do not arise from "natural sampling"(Gigerenzer & Hoffrage, 1995). These types of deviations can be practically eliminated when natural formats are used. The statistical terms associated with a medical test, for instance, are the *base rate* of the disease and the *sensitivity* and *specificity* of the test. These terms are usually unfamiliar to nonexperts. Figure 1 shows how these terms are handled in three formats, using disease as an example. One advantage of using (verbal or graphical) natural frequencies is that base rate information is encoded in the frequency information (Gigerenzer & Hoffrage, 1995).

Figure 1

The base rate of disease and the sensitivity and specificity of a test conveyed with words and numbers in terms of conditional probabilities and natural frequencies and graphically displayed through an icon array

	Conditional probabilities	Natural frequencies	Icon array
Base rate	The probability that a person has the disease is 36%; the probability that a person does not have the disease is 64%.	Out of 100 people in the population, 36 have the disease whereas 64 do not have the disease.	
Sensitivity	If a person has the disease, the probability is 90% that the test will indicate the person has the disease.	For 32 out of 36 people with the disease, the test will indicate they have the disease.	
Specificity	If a person does not have the disease, the probability is 65% that the test will indicate the person is healthy.	For 42 out of 64 people without the disease, the test will indicate they are healthy.	

Even hard problems become easier with practice: “Practice makes perfect” (or at least better), but practice and learning may not always be possible. Unfortunately, some of life’s most important decisions do not allow for previous practice. Most insurance consumers choose their products only once or at least a limited number of times depending on their needs and economic circumstances. For example, employees get one chance to save for retirement (though they can make adjustments along the way). Generally the higher the stakes, the less often practice is an option.

Yet practice does not make perfect if people lack good opportunities for learning. Learning is most likely if people get immediate, clear feedback after each trial. Many of life’s choices are made in unstructured situations that do not provide clear feedback. For example, insurance consumers usually get feedback only on the option they select, not on the ones they reject. Unless people go out of their way to experiment, they may never learn about alternatives other than the familiar ones. Long-term processes rarely provide good feedback. All these situational aspects have serious consequences for decision outcomes and these consequences are even much stronger when the decisions are made by laypeople.

3.
COLLECTIVE STATISTICAL ILLITERACY AND RISK REPRESENTATIONS

Risk is amenable to a precise mathematical definition involving expectations, probabilities, and utility functions. The simplest definition that people should internalize as children is that a situation is risky when at least one possible event is connected to a loss of some resource. The involved risk is the expected loss. Perceiving and evaluating risk is based on two abilities:

- assessing the likelihood of the hazard;
- estimating the loss caused by the hazard.

The likelihood of the hazard can be expressed in absolute or in relative frequencies.

For instance, many advertisements and brochures in favor of cancer screening state that routine mammograms after the age of 40 reduce the risk of dying from breast cancer by 25%. This is a relative risk reduction. Consider the same information expressed as an absolute risk reduction: The base rate of breast cancer among women over age 20 is 4%. If 100 women participate in regular screening, on average, 1 out of 4 will be saved (absolute risk reduction). Most people are not aware of these differences in risk communication. It is our conviction that absolute and relative risk should be taught in schools, and in fact as early as the fourth grade (Kurz-Milcke, Gigerenzer, & Martignon, 2008; Martignon & Kraus, 2009).

There is extensive evidence that statistical illiteracy (a) is found in all types of people, even those who are highly educated, such as doctors; (b) is created or exacerbated by nontransparent framing of information that is sometimes the unintentional result of lack of understanding but can also be a result of an intentional effort to manipulate or persuade people; and (c) can have serious consequences for health and wealth management. The causes of statistical illiteracy may also be linked to the emotional nature of the expert–nonexpert relationship and potential conflicts of interest. The classic consumer–advisor relationship is based on a sort of paternalism (the advisor's) and the consumer's trust in the perceived authoritative advisor. The advisor's paternalism and the consumer's trust make statistical literacy seem irrelevant.

Commercial brochures, websites, leaflets distributed to financial and insurance advisors by the insurance companies, and even newspapers often report evidence in nontransparent forms that suggest big benefits of featured interventions and small harms. Without understanding the numbers involved, the public is susceptible to commercial manipulation of their anxieties and hopes, which undermines the goals of informed and shared decision making. Low levels of expertise and practice influence the decision outcomes and recursively the potential development of better decision strategies.

4.
TO BE OR NOT TO BE INSURED? THIS IS THE QUESTION

When faced with a choice between two options, most individuals have a good sense of whether they prefer Option A or Option B, in particular if they have already experienced both options and have had the time to sample the alternatives and learn about their own preferences. But suppose that they have to choose from unfamiliar options. It is particularly difficult for people to make good decisions when they have trouble translating the choices they face into the experiences they will have.

Often when laypeople are presented with financial and insurance products, it is as if they have to choose a dish from a menu in a language they do not understand. But even when they do know the meaning of the words being used, they may not be able to translate the alternatives into terms that make the slightest sense to them; they face obstacles in envisioning future alternative scenarios and deciding among them.

How do consumers of such products represent the concept of risk to themselves? Does this representation depend on the customer–advisor relationship and communication style of the advisor? How do customers develop trust in their financial advisor? What factors influence their willingness or desire to delegate important financial decisions? To investigate these questions we surveyed customers and advisors of an Italian cooperative bank.

4.1
Method

4.1.1
Participants and procedures

This study was conducted in two phases. First, we interviewed all 20 professional bank advisors working at an Italian cooperative bank that was a partner in our research. A cooperative bank is a nonprofit institution whose aim is to support the economic development of people living in a specific area. Cooperative banks in Italy usually retail insurance and financial products through their network of agencies in that region. We chose this type of bank because its advisors are neither under the pressure of budget goals nor heavily conditioned by other economic incentives that could influence their customer interactions. Another important aspect is that customers know and appreciate this particular feature of their bank, and this leads most of them to become partners of the cooperative.

Then, we interviewed a random sample of 99 active bank customers extracted from the bank's database. There were two requirements that needed to be met to be eligible for participation: Customers had to have deposits/investments of at least 40,000 euros and had to hold at least one insurance product. The interviews focused on the customer–advisor interaction

and its effects on purchase decisions. Data collected from these interviews were analyzed at the aggregate level for each of the two populations.

Data were collected through individual interviews. Before officially starting the survey, we tested the questionnaires in two independent pilot phases to ascertain their comprehensibility to advisors and customers. To facilitate the data collection and the subsequent analysis, the questionnaires were designed to be administered by computer; we used Unipark,[1] a standard platform for empirical surveys. This allowed us to track results and check for possible interactions and misunderstandings.

Interviews were conducted at several bank agencies in the surroundings of Trento by two psychologists and one economist trained in conducting empirical surveys on decision making. They sat with the participants and read each question aloud; they also introduced the research project and gave instructions on how to answer (i.e., how to use the equipment). Participants were given a short training to familiarize them with answering questions on a Likert-type scale. After the training they answered the questions by simply touching their preferred option on a touch-screen display. The answers to open-ended questions were personally collected by the interviewers.

Bank customers were offered a small gift (e.g., an automatic umbrella or a silver-plated pen) for their participation; customers responded to the invitation with great enthusiasm, suggesting a high degree of interest in the research project.

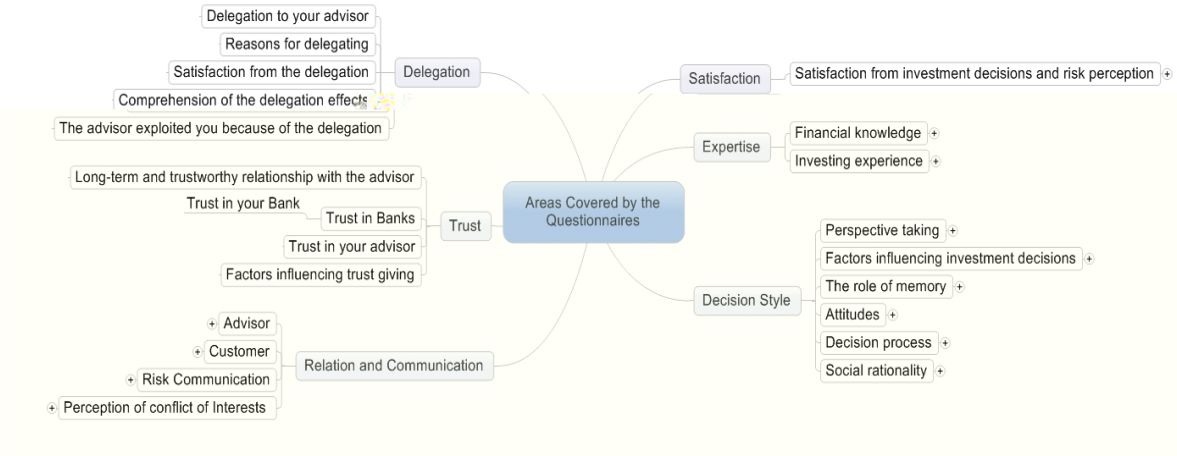
4.1.2 The questionnaires

The questionnaires (Figure 2) were composed of 112 questions: 16 qualitative and open-ended, 96 quantitative and based on a 5- or 11-point Likert scale. The advisor questionnaire was designed to elicit the mental representations (stereotypical images) that advisors had of their most frequently served customers. The customer questionnaire was identical in content but designed to elicit the customers' self-reported experiences with their advisors.

[1] *Unipark is online survey software.*

Figure 2

Map of the content of the questionnaires



On average, each interview took 75 minutes plus 15 minutes for a brief discussion with the participants about the aims of the survey. We investigated five areas of the customer–advisor relationship that could influence the quality of that relationship, or the quality of customers' decisions: satisfaction, expertise, decision style, relationship and communication, and delegation. We also analyzed how risk perception and communication can affect financial investments and insurance decisions within the customer–advisor relationship. In this paper we present data collected from a subset of questions mainly dealing with risk perception and advice-taking strategies.

4.2
Results

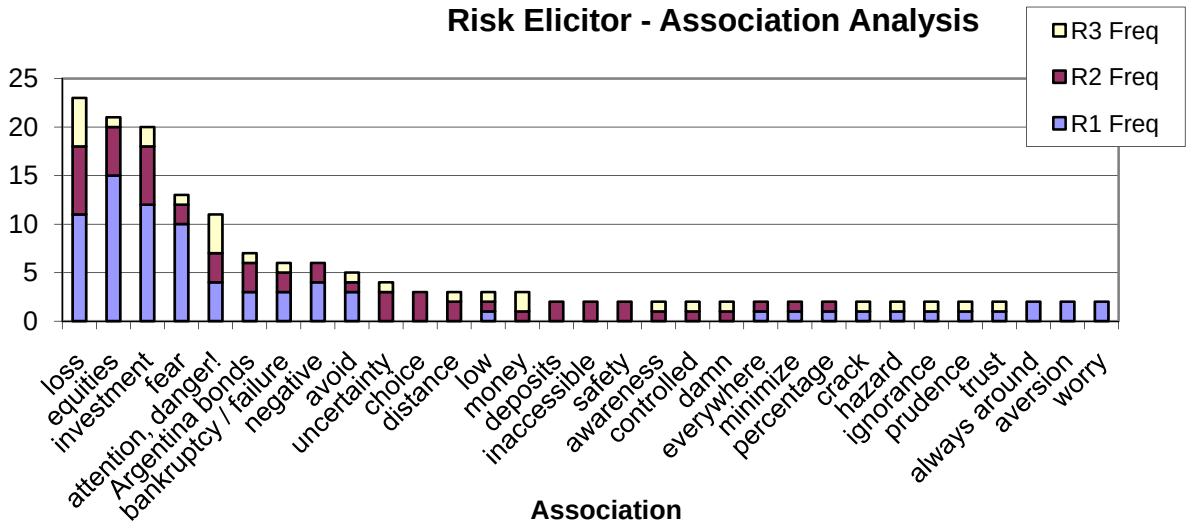
In this section we report our main results; in particular, we present evidence for aspects of the consumer–advisor relationship that affect the consumer's risk perception and the advisor's communication style in sharing information and knowledge with their customers. We then analyze trust formation and its effect on delegation; effort and time devoted to the decisions are considered reliable indexes for the customers' participation in the decision-making process.

4.2.1
How the participants understood risk

At the beginning of the interview, we invited participants to list three ideas/associations that usually came to mind when they thought about risk. Customers were asked to report their own feelings and advisors were asked to predict an average customer's responses. Figure 3 displays the most frequent customer answers. All these terms reveal negative connotations that individuals associate with the term risk.

Figure 3

The 31 most common customer associations with the idea of risk (R1 Freq, R2 Freq, and R3 Freq=frequency of first, second, and third reply, respectively)



In particular, risk was seen as a synonym for loss. Risk was also perceived as synonymous with stocks and investments. Some customers associated negative feelings such as danger and fear of financial bankruptcy and failure (e.g., the Argentina bonds). None of the most frequently mentioned terms corresponded to an economics or statistics definition of risk.

These findings are consistent with the representations that the advisors had in mind when they thought about their average customer's understanding of risk: They knew that most of their clients did not have a clear and correct representation of risk. Risk strongly brought to mind fear and danger. The advisors revealed in the interviews that they very rarely mentioned the term "risk" in their consulting meetings except when they wanted to deliberately induce fear of future negative outcomes in their customers, thereby fostering the need for stronger insurance protection.

4.2.2
How insurance advisors responded to their customers' emotion-driven decision making

Given the customers' mostly negative associations with the term risk, how did advisors assess their customers' risk preferences and how did they provide them with the right insurance coverage? Most of the interviewed advisors reported that it was very difficult to help customers achieve an appropriate representation of risk. Most of the difficulties seemed to stem from their customers making emotional rather than evidence-based decisions.

In particular, advisors reported that nonexpert customers were very rarely good at imagining their financial future and were indeed even worse at assigning plausible probabilities to calculate their decisions' expected payoffs. The "rational" process for calculating stochastic outcomes seems to have been out of reach for most customers because of its complexity and because of their lack of statistical and financial literacy. The advisors were aware of such deficiencies and knew that when nonexpert customers asked for an insurance product they were usually much more driven by the fear of potential losses than by a so-called rational process of calculating pros and cons. The customers' decision triggers were mainly emotional, and the advisors' communication style reflected this bias.

This emotion-based perspective also affected the a posteriori satisfaction that customers had with insurance products. Because their purchase decisions were mainly emotional, once the possibility of a negative outcome had passed or had become less likely, customers considered the insurance coverage unnecessary. That is, when they no longer feared a potential event they wanted to cancel the insurance contract or at least receive an economic incentive to continue.

This decision inconsistency is a by-product of their naïve risk understanding; ex ante, customers wanted coverage for all the potential threats that had strong and vivid emotional representations. Once they no longer felt at risk and their negative emotions were dissipated, on average, customers judged their previously purchased insurance coverage as something useless, just a waste of money.

The advisors noticed that a good communication style—one that dynamically changed according to their expertise and to their customer's ability to follow concepts—could have positive effects on the customers' risk understanding and could also lead to a more stable and rational analysis of pros and cons even in a stochastic framework. The customer–advisor interaction dynamics played an important role in shaping the decision-making process. We next looked at the role of trust and delegation in the insurance decision-making process.

4.2.3
Extent of nonexpert customers' trust

Four questions were explicitly devoted to assessing the customers' level of trust:

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

Q41: How much do you trust the banking/insurance industry?

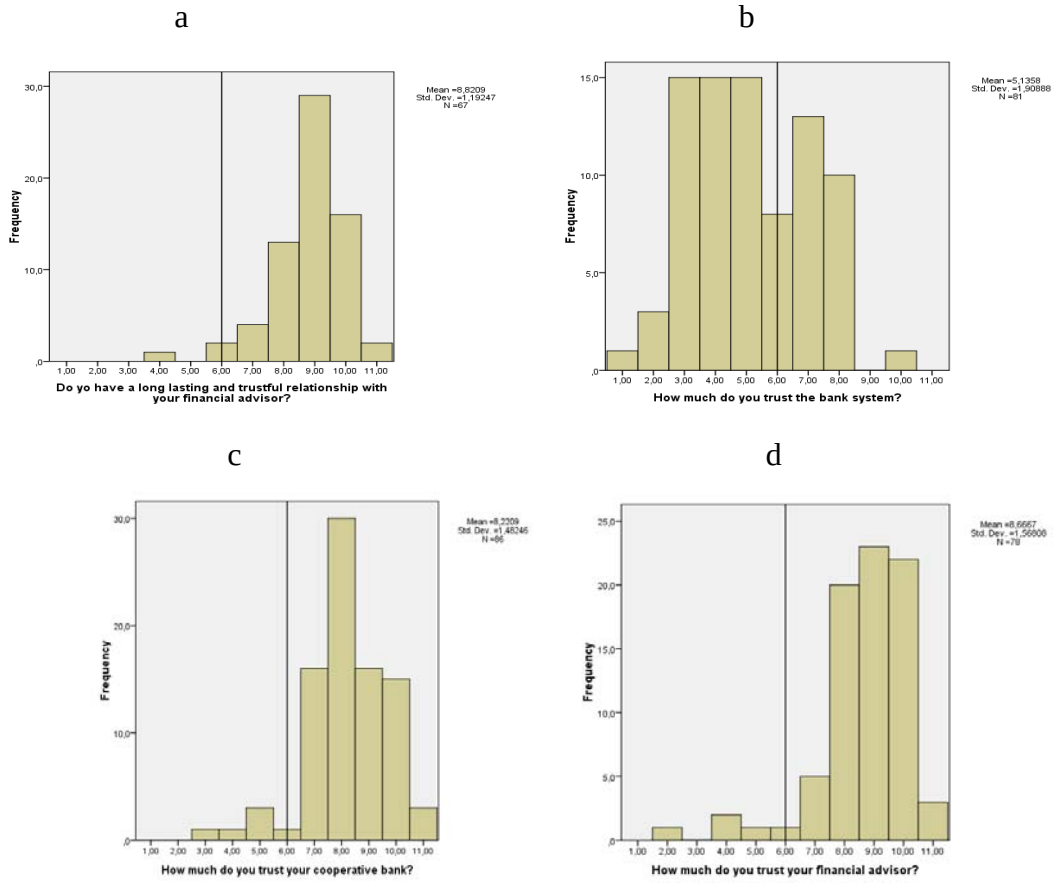
Q42: How much do you trust your cooperative bank?

Q43: How much do you trust your advisor?

As Figure 4 reveals, respondents, although fairly distrustful of the banking/insurance industry in general (this attitude is consistent with data from the Financial Trust Index (http://www.financialtrustindex.org/), nevertheless tended to have a high level of trust in "their" cooperative bank and in "their" personal advisor. They also had more trust in the people and institutions that were socially close to them compared to those that were distant or with which they did not directly interact. They also thought that the greater the distance between themselves and the institutions, the greater the likelihood that the institutions would engage in opportunistic behaviors.

Figure 4

Customers' level of trust on an 11-point scale



4.2.4
Influences on trust

We asked customers to list at least five features they considered central to trusting their financial advisor. They were then asked to rank these features in order of importance. We classified each feature into one of four categories: competence, relationship and communication, accessibility, and bank environment.

Table 1 shows the percentage of answers dealing with competence-based aspects versus relationship- and communication-based features. We clustered the content using advanced software for semantic classification. Table 1 also reveals that features dealing with the quality of the customer–advisor interaction (relationship and communication) were mentioned much more frequently and were considered more important than those features related to the advisor's

competence and expertise. This means that nonexpert customers considered the former features as valid cues for inferring the quality of advice that, because of its technical nature, was often not fully understood. Customers were aware that they were not well equipped to judge the technical financial information they received, so they relied on something that they knew much better and that they considered dependable: "honest signals"—the unconscious social signals displayed in interactions (Pentland, 2008). This approach hinged on their impression of the cooperative bank environment as being friendly and supportive, where fair and nonopportunistic interactions occur. This approach emphasizes the importance of having a good match between decision heuristics—the strategies one uses for deciding when to trust or take advice—and the environment in which they are adopted (Simon's notion of ecological rationality; see Simon, 1980, Todd, Gigerenzer, & the ABC Research Group, in press).

Table 1

Percentage of Customers Ranking Features Affecting Trust in Their Financial Advisor (by Category) and Overall Percentage Mentioning a Category

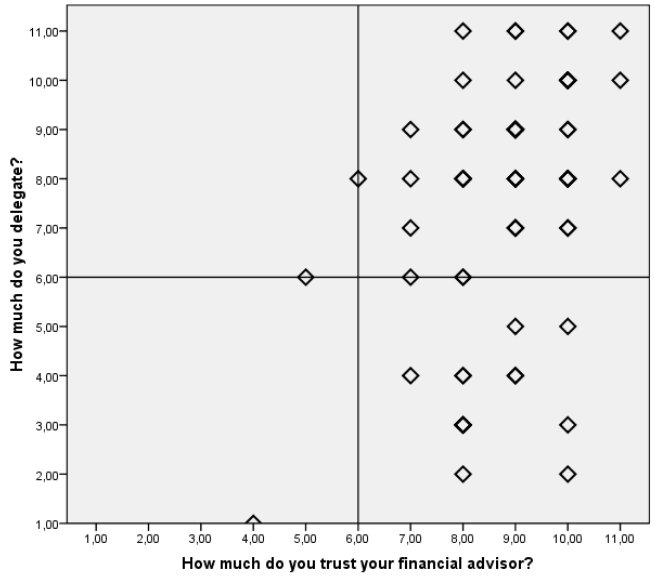
Feature category	Rank order of features					Total
	First	Second	Third	Fourth	Fifth	
Competence	32%	24%	29.1%	28.5%	33.3%	28.9%
Relationship and communication	64%	76%	66.6%	71.4%	66.6%	69.3%
Accessibility	0%	0%	8.3%	0%	0%	1.9%
Bank environment	4%	0%	0%	0%	0%	0.9%

4.2.5
How trust, delegation, and participation in the decision-making process are related

Another important aspect we investigated was the interaction between trust and delegation. As we can see from Figure 5, these two elements are strongly correlated. Most of the customers belonged, in fact, to the quadrant with high trust and high delegation (77.1%); customers who delegated more were those who trusted more.

Figure 5

Trust and delegation. Bold diamonds represent answers provided by more than one participant



How did the characteristics of the customers affect their decision to seek an advisor? Were less literate and poorer customers more likely to seek help from advisors to avoid mistakes, or were wealthier and more knowledgeable customers more likely to delegate to advisors to save time and effort? While other researchers (Hackethal, Haliassos, & Japelli, 2009) found support for the latter hypothesis, our data seem to confirm that both classes of customers tend to seek advice. On the one hand, in fact, our correlation analysis (Table 2) shows that quite often customers felt that they were forced to trust, because of their lack of financial knowledge; in fact, they felt that they did not have an alternative when they had to make important decisions.

Table 2

Correlation Analysis of Delegation and Expertise

	How much do you delegate?	How well do you understand your investments?	How naïve[a] do you consider yourself in your financial understanding?	How much of an expert do you consider yourself?
How well do you understand your investments?	-0.40	–	–	–
How naïve do you consider yourself in your financial understanding?	0.43	-0.51	–	–
How much of an expert do you consider yourself?	-0.21	0.30	-0.60	–

[a]Naïve understanding means having an unclear knowledge of common financial products

The following cluster analysis (Table 3) shows that we can split the customer population into two groups: Cluster 1 contains customers with a high level of delegation and low level of expertise; Cluster 2 contains participants with a low level of delegation and high level of expertise.

Table 3

Cluster Analysis of Delegation and Expertise

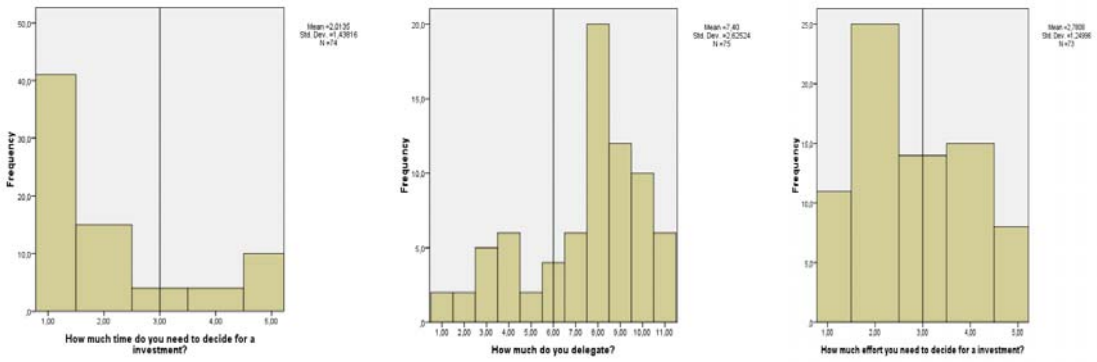
Key features	Cluster 1 means	Cluster 2 means
How much do you delegate?	8.53	4.76
How well do you understand your investments?	7.31	9.43
How naïve do you consider yourself in your financial understanding?	6.84	3.81
How much of an expert do you consider yourself?	1.94	2.76

On the other hand, a second reason to delegate that emerged from customers' questionnaires was the desire to minimize the amount of time and effort devoted to making decisions. As Figure 6a reveals, more than 40% of the interviewed customers spent less than 1 hour per month on their insurance/investment decisions and they invested little effort (Figure 6b). Figure 6c show that customers did not play an active role in the management of their money; they delegated to their advisors.

Figure 6

Time (a) and effort (b) customers devoted to their financial decisions on a 5-point scale. (c) How much customers delegated to their advisors on an 11-point scale

a b c



Customers who delegated often also seemed not to have frequently checked or updated their investment portfolio; they reconsidered their economic decisions, on average, half as often as those who delegated little. They also spent just 25% of their allocated time collecting useful information while the nondelegating customers spent more than twice as much time searching for appropriate information, as can be seen from the comparison of the two identified clusters of customers.

The correlation analysis reveals that delegation and trust were positively correlated (0.404). Effort and time devoted to investment decisions were also positively correlated (0.581) and this measure can be assumed to be a proxy for the desire to participate in the decision-making process.

Customers seemed to delegate too much and advisors tended to react this tendency in their customers. We found confirmation of this effect in the advisors' interviews; they said that they were very frequently asked by customers to decide on their behalf. A common request was, "Please, help me make this decision as if I was your mother/father."

4.2.6
Why customers delegate

To test the customers' awareness of their motives for delegating, we asked them the following question:

Q45: Why do you delegate your insurance and investment decisions to your financial advisor?

The majority of participants recognized that they often delegated because they were not experts and also because they trusted their advisor very much. It is important to note that most of them considered delegating as the default option to manage their economic resources once trust was established. They did not see a need and did not have incentives to develop a better understanding of insurance and financial issues or to participate more actively in the decision-making process; this brings to mind a paternalistic perspective instead of a more deliberate and shared decision process.

4.2.7
Communication and trust

We also considered another central aspect affecting customer–advisor interactions: the quality of the communication. Several questions were aimed at collecting data on this issue:

Q24: How well do you understand your advisor?

Q33: How clear is the information that you receive from your advisor?

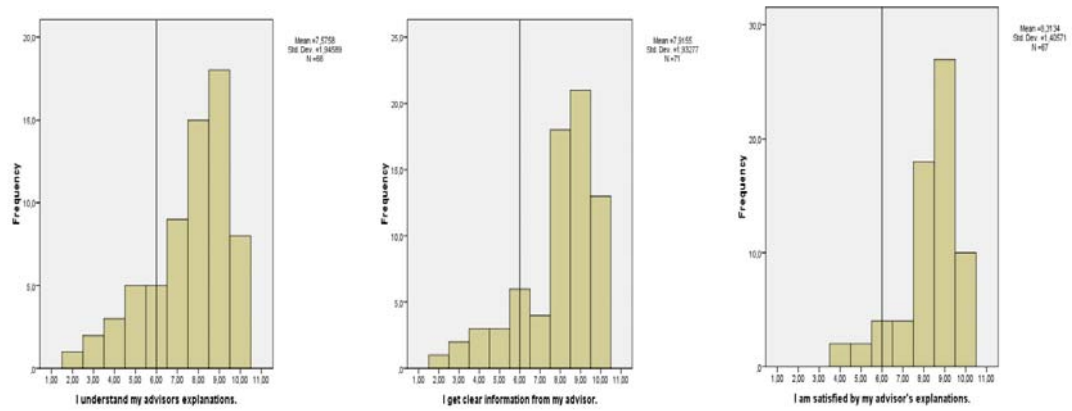
Q34: Are you satisfied with your advisor's explanations?

If we analyze the histograms below (Figure 7), we recognize that customers thought they were receiving clear information that they understand quite well (subjectively self-reported and not tested). This is one of the reasons why most of the customers were satisfied with the explanations they received from their advisor even if they were not good at testing their understanding.

Figure 7

Customers' understanding of and satisfaction with information provided by their advisors.

a b c



If we also consider the correlation analysis (Table 4), we see that the collected data are all positively correlated. In particular, customers' satisfaction was highly positively correlated (0.8) with the clearness of the information presented by the advisor.

Table 4

Correlation Analysis of Communication and Satisfaction

	I understand my advisor	I receive clear information	I am satisfied with the explanations
I receive clear information	0.60	–	–
I am satisfied with the explanations	0.64	0.80	–

5.
GENERAL DISCUSSION

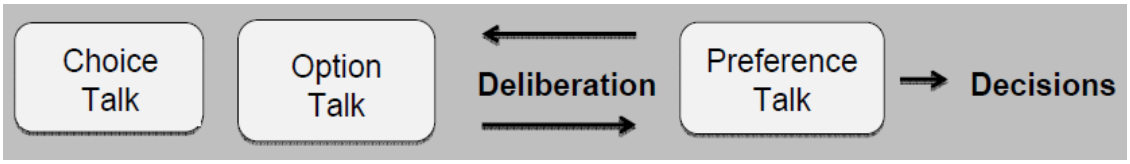
5.1
Transparent ways of communicating risk and engaging in shared decision making

If taking advice is the adaptive decision strategy nonexpert insurance consumers adopt by default, then professional advisors should enhance their engagement, using their influence to increase their customers' willingness to make their own informed decisions. By adopting more transparent and cognitively suitable ways of conveying risk and salient information, advisors can design a learning path for their customers that leads them from paternalism to shared decision making to informed choice.

Shared decision making is an approach in which advisors and consumers work together using the best available evidence to make decisions. Consumers must be encouraged to deliberate the possible attributes and consequences of options (choice talk and option talk phases in the below figure) and to develop informed preferences (preference talk) before making a determination about the best course of action, which should respect consumer autonomy, where this is desired, ethical, and legal.

Figure 9

An example of deliberate and engaging interaction process



Decision-support interventions should help consumers think about the choices they face: They should describe where and why choice exists and they should provide information about the decision options, including, where reasonable, the option of taking no action. Such interventions should be designed to help people deliberate their options—independently or in collaboration with others—by considering relevant attributes and to predict how they might feel about short, intermediate, and long-term outcomes that have relevant consequences, in ways that help support the process of constructing preferences and eventual decision making and are appropriate to their individual situation. We can distinguish two different moments within the decision-making process when such interventions would be appropriate:

- Before deliberation
- After deliberation.

Advisors should assess their customers' knowledge, preferences, decision processes, and intentions, both before and after deliberation. Their target should be improving their customers' decision quality, that is, the alignment of their customers' intentions with their informed preferences.

5.2
Toward a more participatory insurance decision-making process

Risk and uncertainty can be communicated in transparent fashion by means of simple representations (Gigerenzer, 2002). For example, one might create pictures of various housing options that would be available at different levels of retirement income that depend on insurance decisions and contribution plans. A very small, possibly run-down apartment might represent the poorest outcome, a large estate with a swimming pool, the highest. Visual displays such as these could be incorporated into regular feedback to individuals about how they are doing in reaching their retirement savings goals. For instance, participants could be told in their annual report that they are currently headed for the hovel, but if they increase their savings rate now (or join Save More Tomorrow), they could still get to the two-bedroom condo. This is a simple example of how information can be more easily conveyed, thereby supporting smarter decisions.

We can design smarter information environments that make important features more salient and cognitively accessible. Visual analytical tools and easy-to-read reports can transform complexity into something manageable and therefore allow for better decisions. Information customization and simplification could be tailored to the level of detail advisors consider useful for their particular audience, for instance, providing just the minimal subset of specifications that will help rather than inhibit the decision maker. Making comparisons between similar insurance products would elicit better understanding of the important information that must be taken into consideration in the decision process.

Advisors could promote a more engaged and shared decision-making perspective. This can be achieved by assessing customers' "sufficiently informed preferences" by presenting the available evidence in a cognitively suitable manner. To do so, advisors should consider that how they convey information influences how their customers shape concepts. Because there is no one best decision for all, investment and insurance decisions must be "preference sensitive" and, therefore, should depend on the trade-offs consumers subjectively perceive. Consultations should thus be aimed at eliciting and implementing the consumers' preferences.

In the future, insurance consumers might want to know more than just what their advisors think, and in particular, they could be asking for a different, more participating way to share information. For sure they want to know about possible options in order to better understand risks involved in decisions. Advisors should recognize that a more psychologically grounded, customer-centric approach would enhance their customers' participation in their economic decisions. Active and knowledgeable economic agents may design more efficient markets, which may be beneficial for the overall economy.

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