ecgi

Do Wealth Managers understand Codes of Conduct and their ethical dilemmas? Lessons from an online survey

Finance Working Paper N° 801/2021
May 2022

Ewa Lombard
GSCM-Montpellier Business School and GFRI

Rajna Gibson
University of Geneva, GFRI, and ECGI

ECGI Working Paper Series in Finance

Do Wealth Managers understand Codes of Conduct and their ethical dilemmas? Lessons from an online survey

Working Paper N° 801/2021

May 2022

Ewa Lombard
Rajna Gibson

We are very grateful to the BNP Paribas (Suisse) SA for supporting this research (during the post-doctoral work of Ewa Lombard-Miendlarzewska) and for giving us the possibility for conducting this online experiment with their employees. We thank Moez Bennouri for valuable comments and the members of the MOST group at Montpellier Business School for their useful feedback. We also thank the anonymous referee for his or her insightful comments.

Abstract

How do wealth managers understand and comply with the social norms embedded in banks' codes of conduct (CoC) and how do they cope with ethical dilemmas? Do they have a tendency post Global Financial Crisis to prioritize banks' financial security over clients' interests? To answer these and related questions, we conduct a non-incentivized online survey with wealth management employees of the Swiss legal entity of a large multinational bank. We propose a method to estimate the comprehension and the level of expected adherence to the CoC principles that we test with our sample. We further show that framing questions under the label "Financial Security" increased response accuracy and that employees' honesty helped guide their decision-making towards integrity in ethical dilemmas. Thus, besides validating a method for testing the level of CoC comprehension and the expected adherence to its principles, our study is among the first to show that in the wealth management business, honesty and social injunctive norms defined in the bank's CoC reinforce each other.

Keywords: code of conduct corporate governance, client interest, financial security, ethical dilemmas,online survey, social norms

JEL Classifications: G21,G34, G41

Ewa Lombard
Assistant Professor
GSCM - Montpelier Business School
2300, Avenue des Moulins
Montpellier, 34185, France
e-mail: e.lombard@montpellier-bs.com

Rajna Gibson*
Professor of Finance
University of Geneva, The Geneva Finance Research Institute
40 Boulevard du Pont d'Arve
1211 Geneva 4, Switzerland
phone: +41 223 798 983
e-mail: rajna.gibson@unige.ch

*Corresponding Author

Do Wealth Managers understand Codes of Conduct and their ethical dilemmas? Lessons from an online survey

Ewa Lombard
GSCM-Montpellier Business School; Geneva Finance Research Institute

Rajna Gibson
University of Geneva - Geneva Finance Research Institute; European Corporate Governance Institute (ECGI)

Revised 10 May 2022

Abstract (166 words)

How do wealth managers understand and comply with the social norms embedded in banks' codes of conduct (CoC) and how do they cope with ethical dilemmas? Do they have a tendency post Global Financial Crisis to prioritize banks' financial security over clients' interests? To answer these and related questions, we conduct a non-incentivized online survey with wealth management employees of the Swiss legal entity of a large multinational bank. We propose a method to estimate the comprehension and the level of expected adherence to the CoC principles that we test with our sample. We further show that framing questions under the label "Financial Security" increased response accuracy and that employees' honesty helped guide their decision-making towards integrity in ethical dilemmas. Thus, besides validating a method for testing the level of CoC comprehension and the expected adherence to its principles, our study is among the first to show that in the wealth management business, honesty and social injunctive norms defined in the bank's CoC reinforce each other.

Keywords: code of conduct, corporate governance, client interest, financial security, ethical dilemmas, honesty, online survey, social norms.

JEL Classifications: G21, G34, G41

Acknowledgments
We are very grateful to the BNP Paribas (Suisse) SA for supporting this research (during the post-doctoral work of Ewa Lombard-Miendlarzewska) and for giving us the possibility for conducting this online experiment with their employees. We thank Moez Bennouri for valuable comments and the members of the MOST group at Montpellier Business School for their useful feedback. We also thank the anonymous referee for his or her insightful comments.

1 Introduction

The study of conformity to external expectations is a cornerstone of organizational theory research (Zey 2015). Agency problems (information asymmetry, conflicts of interest and opportunistic agent behavior) are universal. In banking and in wealth management in particular, the problem of moral hazard arises frequently in the relations between the bank (or its employees) and the clients. Many management practices aim at instilling a certain followership to a top-down defined set of rules and conformity with social norms is in fact the targeted objective of rules and codes of conducts in an organizational culture (Weaver and Treviño 1999).

Social norms provide implicit incentives to promote certain behaviors and reduce others. Norms that inform about what is typically done are known as descriptive norms whereas those that inform about what is typically approved/disapproved of are called injunctive norms (Cialdini and Goldstein 2004). Injunctive norms are a way of monitoring agent behavior that is typically employed in organizations and contexts where moral hazard may arise. An applied way of introducing injunctive norms is to codify them and communicate them in a firm's Code of Conduct (CoC) but not a lot of research exists as to their effectiveness. Many firms, especially in the finance industry, adopt Codes of Conduct to express social norms of accepted and unacceptable corporate behaviors (Kaptein and Schwartz 2007). The premise behind codes of conducts is that instilling social norms can influence behavior by guiding decision-making, especially in critical dilemma situations (Huang and Wu 1994).

Verifying whether codes of conduct can, in fact, diminish corporate misconduct and deceptive practices in business is important, particularly in industries exposed to moral hazard such as finance or pharmaceuticals. The financial industry has suffered a decline in its reputation as a result of perceived lack of ethical conduct and honesty, which culminated in a historical low in public trust (Stevenson and Wolfers 2011) after the global financial crisis of 2008. The latter is often attributed to the pervasive greed and lack of public responsibility on part of the bankers (Tett 2009). In his Presidential Address, Zingales (2015) argued that in the financial sector "fraud has become a feature and not a bug.[1]"

Moreover, previous experimental studies showed that banking culture can be quite at ease with dishonest behavior (Cohn et al. 2014). Have these negative behavioral tendencies been mitigated by recent changes in the banking regulatory and compliance environments, such as the shift towards more ethical practices in the certified financial analyst (CFA) program (CFA Institute 2017)?

In light of this negative perception of the banking industry post global financial crisis, the first objective of this study is to conduct a non-incentivized online survey in which we measure the comprehension as well as the expected adherence to the CoC amongst wealth managers of a large international bank based in Switzerland. Secondly, we analyze the factors that affect the comprehension of the CoC and its resilience to ambiguous situations, and potential framing effects. Finally, we examine how the comprehension of the CoC principles and the expected choices of the participants are influenced by individuals' honesty. The online survey consisted of two parts: first, an informed consent form, demographic information, and a set of forty situational judgment test questions followed by a ranking of criteria used in answering them. The situational part of the questionnaire was constructed in collaboration with the bank's compliance senior management team to elicit realistic compliance issues and ethical dilemmas that client-facing personnel (wealth managers) encounter in their daily wealth management activities. The questions pertained to two core principles of the CoC and were presented separately – (1) Client's Interest, and (2) Financial Security. However, we designed some of them such that they could pertain to either principle (henceforth called Intersection questions) and asked them once under each principle, in order to test for potential framing effects. The managers' knowledge of formal rules was tested in non-ambiguous questions (for which there was one correct answer), while their tendency to adopt pro-ethical choices was tested in ambiguous questions (situations without a legally prescribed correct choice). The second part of the survey was administered one week after the completion of the first part and contained validated psychometric instruments that were later used as independent variables.

The focus on the wealth management division of the bank is motivated first by the importance of wealth management for the Swiss financial sector, and secondly, by the fact that in this area of banking, the interplay between compliance and client interests is very salient and often results in inherent ethical dilemmas. Indeed,

many choices a wealth manager faces involve a trade-off between his or her client's best interest and compliance with international or national financial regulations, or between self-interest and regulatory compliance, and it may be possible that even careful wording and implementation of a CoC cannot resolve such dilemmas.

2 Theoretical Background

2.1 The functions of codes of conduct

A review of codes of ethics (Helin and Sandström 2007) conducted before the global financial crisis found "an evident lack of insights into how corporate codes of ethics influence behavior in organizations" and that "[B]ehavior related to CCEs *[corporate codes of ethics]* seems to be a question of perception, not action. […] [W]hat is still lacking is how this process of contextualization is carried out. What kinds of problems arise? Which actors translate Corporate Code of Ethics? How is their behavior altered?" (2007, p. 262).

Although the literature on corporate ethics has been bourgeoning since, a more recent review (Babri et al. 2021) found that Codes may be counteractive to moral empowerment (Helin et al. 2011) or be perceived as simultaneously good and bad (Jensen et al. 2015), resulting in variable levels of approval, comprehension and conformity. Some studies on corporate ethics and corporate social responsibility find that, in the absence of audits, codes of conduct may be more of a marketing tool rather than an effective implementation of social norms (López et al. 2021). Although some authors (Adelstein and Clegg 2016) criticized codes of ethics for being conceived as vehicles for compliance with the law and corporate governance, in the case of industries highly sensitive to moral hazard such as finance – ethical decision-making, risk management and legal rules indeed ought to be fully aligned.

In fact, implementing and assessing the effectiveness of a CoC in a financial organization is not an easy feat, as evidenced not only by the lack of literature on the topic but also by the inevitable presence of tensions between the priorities attributed to different principles (such as promoting Client Interest (CI) vs Compliance with

Financial Security rules (FS) vs bank's profitability if we are talking about the Banking industry, for instance). Beyond the difficulty of choice, once articulated and communicated, comprehension of the principles and moral values, and in particular of employees' honesty, are crucial factors in explaining adherence to the CoC principles. There may be situations where the code itself may not be helpful, reflecting the conflict between stakeholders' interests, ethical dilemmas and people's heterogeneity in their interpretation of the CoC guiding principles (Mcdonald 2009; Schwartz 2004). Notably, open-ended vs precise language (Schwartz 2004) and organizational pressure to conform may create difficulties in interpretation (Mcdonald 2009). Crucially, therefore, in order to comply with the norms, people must understand the norms. Statler and Oliver (2016) argue that in order to understand the corporate code of ethics and to provide it with sense-giving, one should also use conversation and communication about ethical dilemmas.

2.2 Conformity to codes of conduct

Our work builds first on the tenets of group conformity put forth by Feldman (1984), wherein group norms are adopted and complied with when they serve group survival and support its performance. This view suggests an important role of recognition and alignment of individual's interests and preferences with that of the group norm. Specifically, according to Feldman (1984), one of the fundamental conditions when group norms are enforced is if they *simplify, or make predictable, what behavior is expected of group members.* Consequently, it is vital that group members (employees) understand the norms when they take the formalized form of, for example, a corporate code of conduct.

Second, our research is embedded in psychology of conformity, notably the work of Cialdini (Cialdini and Goldstein 2004) that emphasizes that social norms become a valuable source of information especially in uncertain situations. Consequently, codified social norms – such as a code of conduct – should aim to provide guidance to resolve such uncertainty. For that reason, the participants in our study were asked to make a decision in ambiguous situations to test the extent of the CoC generalization to resolve ambiguity.

Cialdini emphasizes the role of cognition – i.e., sense making by the target of a request for compliance – in the decision irrespective of whether the required behavior is or is not aligned with his personal goals. That is why,

we also measure the employees' decision-making criteria and their perception of organizational risk climate as independent variables that could confirm goal-alignment and thus promote expected adherence with the principles stated in the CoC.

2.3 Framing effects

Framing effects' are said to occur whenever alternative descriptions of what is essentially the same decision problem give rise to predictably different choices (Kahneman 1984). Here, we refer to framing as accessing cognitive frames, rather than framing as the social construction of meaning. We focus on the micro-level of framing, that is, the priming[2] and activation of knowledge schemas, which guide individual perceptions, inferences, and actions in context (Cornelissen and Werner 2014). Priming in judgment literature and in the context of our study creates a baseline expectation or reference point – in our case, "Client's Interest" or "Financial Security" – that provides a basis that may be specific to scenarios of decision-making and social judgments.

Studies on framing effects in judgments in ambiguous situations have shown no consistent evidence of framing (Voorhoeve et al. 2016). If the code of conduct is written in neutral language, it should not create any bias and there should be no framing effect by either of the guiding principles. Therefore, we have no predominant reason to expect an effect of framing by Client Interest or Financial Security principles on responses in non – ambiguous nor in ambiguous moral dilemmas where we will probe the participants' pro-integrity choice tendency. Thus, under the null Hypothesis, we expect that in Intersection judgment questions that concern both Financial Security (FS) and Clients Interests (CI), the respondents' choice tendency should not differ between the "CI" and the "FS" framings.

Hypothesis 1. Framing (CI vs FS) does not affect CoC comprehension in non-ambiguous situations.

The alternative to Hypothesis 1 is that framing affects decision-making in non-ambiguous situations.

Similarly, in the case of ambiguous situations, the null Hypothesis 2 states that:

Hypothesis 2. Framing (CI vs FS) does not affect CoC comprehension in ambiguous situations. The alternative to hypothesis 2 is that framing affects decision-making in ambiguous situations.

Indeed, in business, frames are seen as the means by which organizational members sort through information (Walsh 1995). Hence, the alternative hypotheses (i.e., confirmed framing effects) may also be interesting, as psychological experiments on conceptual priming show a response consistency effect for semantically related stimuli. This would imply that, in both ambiguous and non-ambiguous situations, framing (i.e., conceptual priming) may also alter expected decision-making (McNamara 2005).

2.4 The role of honesty in ethical decision-making

Recent studies in the area of ethical conduct have focused on how individual factors – such as perception, cultural values and personality traits, including moral disposition (Aquino et al. 2009; Bascle 2016; Desai and Kouchaki 2017; Gibson et al. 2013) – influence behavior. Given the recurring ethical scandals in society, government and corporations, behavioral ethics research is important to understand and predict ethical decision making and conduct.

To understand the drivers of participants' decision making, we considered numerous demographic variables (such as age, gender, education, level of variable compensation and financial literacy), and contextual variables related to the organization such as perceived risk climate as well as the employees' role within the organization. One of the important factors we examined more closely was the role of individuals' honesty. Indeed, research on protected values and deontology has challenged the consequentialist claims by demonstrating that individuals endorsing protected values for honesty are often rather resistant to make trade-offs (for instance trading honesty for monetary benefits; Berns et al., 2012; Dogan et al., 2016). Experimental research has also confirmed that people holding protected values for honesty are more likely to resist financial incentives (Baron and Leshner 2000; Gibson et al. 2013). We thus conjecture that people with high protected

values for honesty can rely on the latter in ambiguous decision-making settings when compliance with corporate rules lies in a grey zone. Thus, we hypothesize that:

Hypothesis 3. Protected values for honesty help guide employees' expected choices towards integrity in ambiguous situations.

2.5 Overview of the Present Research

To summarize, in this study we conduct an online non–incentivized survey to assess the level of comprehension of a bank's CoC principles by the bank's wealth management employees on a set of situational judgment questions that we take as proxy for the expected compliance with the CoC principles. Furthermore, we analyze their responses to measure the impact of heterogeneity (in role, education, seniority, level of financial literacy as well as in individuals' honesty) on the level of expected compliance. Finally, we test three hypotheses focusing on the reported expected compliance with CoC: 1) framing of the questions pertaining to the CoC and 2) the role played by the employees' protected values for honesty, in shaping their expected decision-making. We hypothesize that participants' expected behavior will not be affected by the Client Interest versus Financial Security framing of the questions, and that choices in dilemma questions will be significantly influenced by the employees' protected values for honesty.

To our knowledge, ours is among the first studies to investigate the expected compliance with the CoC in the wealth management division of a bank using realistic situation judgment questions that were designed with and tested by the bank's senior management. However, it is important to mention that since we base our study on self-reported answers that participants provide to ambiguous and non-ambiguous choices in an online questionnaire, we can strictly speaking only capture their expected behavior and thus can only assess their expected compliance to the CoC.

3 Methods

In order to measure the effectiveness of the Code of Conduct in guiding expected decision-making of the employees of the BNP Paribas (Suisse) SA bank along two important principles of the CoC, that is (1) Clients' Interest, and (2) Financial Security, we devised two types of situations – ones where a clear decision rule exists (non-ambiguous) and dilemmas where individual discretion must be applied (ambiguous). The questions in the online survey had to be realistic and to describe the daily compliance challenges faced by the employees.

For that purpose, the content of the questionnaire was prepared by the researchers in collaboration with three members of the senior management of the bank: one from compliance, one from business management and one from business innovation, and their role was to validate the actual regulatory compliance relevance of the situational questions asked in the survey and to insert them into daily problems and dilemmas faced by wealth managers. The overall design of the online questionnaire was validated by an independent academic body with expertise in online survey questionnaires (Ethics Committee of the University of Geneva).

The online survey was undertaken with 111 employees in several offices of BNP Paribas (Suisse) SA and focused on its wealth management division. The full text of the CoC referring to these two principles can be found in Appendix 0. Informed consent was obtained from all individual participants included in the study. This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of the University of Geneva. The identity of the participants was anonymized and thus kept unknown from the bank's management and there were no promotion nor firing consequences associated with the filling of the questionnaires.

3.1 Sample and Procedures

BNP Paribas (Suisse) SA has branches in Basel, Lugano and Zurich, as well as Wealth Management subsidiaries in Monaco and the United Arab Emirates. As of 31 December 2019, BNP Paribas (Suisse) SA Group employed 1270 employees in Switzerland and 86 abroad, and managed customer assets of EUR377 billion (March 2019). The study was conceived and designed in full collaboration with the bank (business

management officer and innovation office were involved throughout the study) and was conducted in 2018-2019. It consisted of a survey administered on-line that was composed of two sets of questionnaires. The first part of the survey consisted of an informed consent form, demographic information (gender, age gap, function in bank, tenure in the industry, location, citizenship, level of education), and a set of forty situational judgment test questions followed by a ranking of criteria used in answering them. The situational part of the questionnaire was constructed so as to elicit realistic dilemmas that client-facing personnel (wealth managers) encounter in their daily work. The second part of the survey was administered one week after the completion of the first part and contained validated psychometric instruments that were used as independent variables. The interval of one week between the two types of questionnaires was included to prevent contamination of the situational judgment test questionnaires by priming from the personal (trait) questionnaires.

In the second part of the survey, we implemented three questionnaires. To assess organizational risk climate perception, we used the Macquarie University Risk Climate Scale (Sheedy et al. 2017) that consists of three factors – Avoidance, Proactive and Risk Manager – and is measured on an analog scale from 1 (strongly disagree) to 6 (strongly agree). To assess financial literacy of the respondents, we implemented the Financial Education Basic and Advanced questions (van Rooij et al. 2011). Finally, to assess the honesty of the participants, we used the Protected Values for Truthfulness(PVT) scale (Gibson et al. 2013) adapted for wealth management employees. The text of the latter questionnaire is described in Appendix 6.3 and the design of the study is depicted in Figure 1 below.

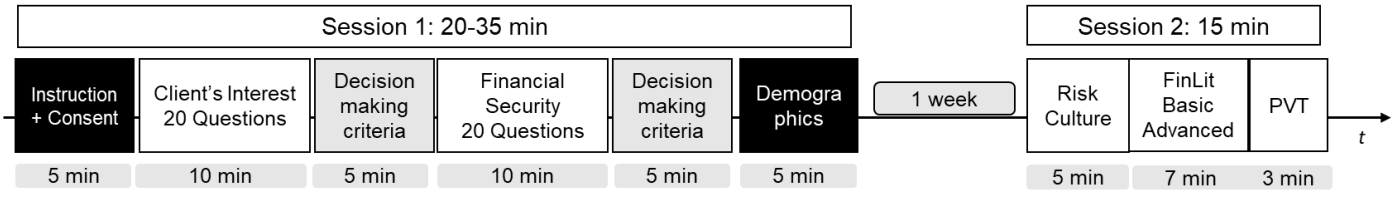


Figure 1. Study design. PVT – Protected Values for Truthfulness; FinLit – Financial Literacy questionnaire.

Eighteen participants from the Geneva office, one of whom belonged to senior management, completed the two-parts pilot study in March 2018. The preliminary data were analysed and the participants were debriefed to

calibrate the questions, survey duration and compatibility. We excluded the data of compliance officers who were surveyed as pilot participants (n=7) from this subsample. Data of the remaining n=11 participants were added to the final data set (relationship managers, n=10, business manager n=1). Following minor corrections and modifications, the full survey was sent out in May-July 2019 to 115 wealth management employees working in 5 different offices in Switzerland, Monaco and Dubai. Ninety-three participants completed the survey. We excluded those incomplete responses where the second part of the survey (notably, the PVT metric) was missing (n=15). The final dataset thus comprised N=89 complete responses (n=40 women) from 3 countries (Switzerland = 71, Dubai = 13, Monaco = 5). We verified that excluding the 11 participants from the 2018 pilot does not change the reported results. Demographic information is presented in Table II.

3.2 Measures

3.2.1 Situational Judgment Questionnaire

For the purpose of our study, we designed thirty-two questions. These situational judgment questions (see Appendix 6.4) presented a decision and asked a question in the form of "How likely are you to…?". The respondent could choose their likelihood from 0% = "I would definitely not do that" to 100% = "I would definitively do that". The questions pertained to two principles of the CoC and were presented in separately blocks of (1) Client's Interest, and (2) Financial Security. Each block was followed by a ranking question where the respondents ranked 9 different criteria they used to make their choices in the preceding section in order of importance. The exact text of the criteria can be found in Table IV below. The criteria were presented in an order randomized within and across participants.

For each CoC principle there were two types of questions: non-ambiguous questions that contained a correct response (either Yes or No, i.e., 0-10% or 90-100%), and ambiguous questions that contained no correct answer. The ambiguous and non-ambiguous questions were mixed and presented in a random order. To the participants, all questions had the same structure. The participants were informed that only a subset of the questions contained a single correct answer whereas for the reminder of the questions, no correct answer

existed, and they were asked to answer using the entire likelihood scale according to their own judgment. The specific number of questions in each category is reported in Table I below.

Table I Study design: situational judgment question categories and counts (q).

Dependent Variable (Hypothesis)	**Type of question**	**Number of questions in Client's Interest (CI)**	**Number of questions in Financial Security (FS)**
Measuring comprehension through Accuracy in CI and FS	Non-Ambiguous	8	9
Framing (*H1*)	Intersection Non-Ambiguous	5	
Framing (*H1*) | Moral dilemmas (*H2*)	Intersection Ambiguous	3	
Moral dilemmas (*H2*)	Ambiguous	4	3

To assess the comprehension of the CoC, we calculated the accuracy of the responses to the non-ambiguous questions from the CI (q=8) and FS (q=9) domains. To test for the effects of framing, we specifically designed 5 non-ambiguous and 3 ambiguous intersection questions that concerned both CoC principles (FS and CI). In the ambiguous intersection questions, the dilemma posed a trade-off between a pro-self (or pro-bank) and a pro-integrity choice. In these situations, there was no clear legal rule to decide, and we specifically designed them to probe the ethical gray zone where the respondents would be forced to make a decision based on intrinsic motivation and personal values, sometimes trading off bank-interest and profit in the name of ethical disclosure of information to the client or to the compliance authorities. To study the influence of honesty on expected decision making, we designed ambiguous questions specific to the CI (q=4) and FS (q=3) domain, and averaged the likelihood of response each participant gave on a scale ranging from a pro-self choice (0) to a pro-integrity choice (100).

3.3 Variables of interest

3.3.1 Dependent Variables

To measure CoC comprehension, we first investigated the accuracy in non-ambiguous questions by taking the average of the responses separately in the CI and FS frame for each participant. A question was considered as answered correctly if – for a correct choice being '*Yes*' – the participant's response was at least 90 on the analog choice likelihood scale from 0 to 100. Analogously, for a correct answer *'No*', a choice of ≤10 was taken to be appropriate. We denote this as a 90|10 response confidence cut-off. Thus, we computed the following accuracy rates: Accuracy in CI questions; Accuracy in FS questions.

In order to test *H1*, the first framing hypothesis which applied to non-ambiguous questions, we computed accuracy in the same way as described above, for non-ambiguous intersection questions that were framed as both CI and FS questions (same questions asked in both the CI and the FS part of the survey).

To measure the effect of honesty in dilemmas as stated in *H3*, we introduced Ambiguous questions. The dependent variables were the average of all ambiguous questions presented in the CI and in the FS part of the survey, expressing the participant's reported likelihood to prioritize the ethical choice (favoring disclosure and honesty). We recoded the answers such that a choice of 0 represented a pro-self choice and a score of 100 indicated a pro-integrity choice. Integrity in this context was defined as making an ethical choice in situations in which no extrinsic punishment could be expected for taking the unethical option. For instance, a pro-integrity choice consisted in disclosing information to the client that was not explicitly required by law but is the honest thing to do; or acting in the interest of the bank where a more selfish option was permitted and available.

Thus, in the analyses designed to explore the role of heterogeneous factors in expected ethical decision-making, our 4 dependent variables were: accuracy in the non-ambiguous intersection questions under the (1) CI and under the (2) FS frames, and the average pro-integrity response to ambiguous intersection questions under the (3) CI and under the (4) FS frames.

For *H3*, we separately tested the additional explanatory power of our honesty predictor in responses to ambiguous questions administered in the CI (4 CI questions and 3 intersection questions) and FS (3 FS questions and 3 intersection questions) domains, and in the accuracy of responses to non-ambiguous questions, for comparison.

3.3.2 Explanatory Variables

In order to examine the drivers of expected decision making, we collected and measured various demographic, contextual and psychometric variables.

3.3.2.1 Demographics and employee characteristics

According to previous research especially two demographic variables may influence misconduct, namely gender and age (Kish-Gephart et al. 2010; Peterson et al. 2001). Demographic data collected in the first part of the survey was transformed into categorical (gender) or ordinal independent variables. The following variables were entered into the regression models: Age [Less than 25 years; 25 - 34 years; 35 - 44 years; 45 - 54 years; 55 years and above], Gender [Man; Woman; Other], Industry Tenure [less than 1 year (1); 1 year to less than 3 years (2); 3 years to less than 5 years (3); 5 years to less than 10 years (4); 10 years to less than 15 years (5); 15 years to less than 20 years (6); 20 years and more (7)], Education [High School diploma; Some college but no diploma; Professional certificate; Associate degree (2 years); Bachelor's degree; Master's degree; Doctoral degree], Seniority [Team Member; Team Leader; Head of Area; Senior Management]. Lastly, we asked for the percentage of variable compensation in the participant's salary [<10% (0); 11-30% (1); >30% (2)]. This variable was included to verify whether monetary incentives have an influence on expected decision- making in situations of conflict of interest that often arise in wealth management – such as when advising riskier products can lead to higher variable compensation for the relationship manager but can risk client's interest and the bank's reputation.

Financial Literacy questionnaire

In the second part of the survey, the participants solved the basic and advanced financial literacy questions (van Rooij et al. 2011). We calculated the accuracy (ranging from 0 to 1) for the basic and advanced questions separately and used their average as separate explanatory variables. Basic financial literacy questions pertain to general economic concepts such as inflation and the differences between a bond and a stock, whereas advanced questions test the understanding of concepts such as diversification of risk, financial instruments' returns and fluctuations.

3.3.2.2 Contextual explanatory variables

We furthermore collected information on the participants' function in the bank [Assistant / Service Executive; Front Manager Investment Manager / Advisory; Relationship Manager; Risk Management; Other]. For the purpose of data analysis, given our particular focus on the role of Relationship Manager (RM) as the agent of decision– making on behalf of the client, in the models we used a dummy variable "Relationship Manager" to represent the role of RM as 1 and all other roles as 0[3]. In the tables reporting the regression analyses, these variables are defined as "Context".

Risk Climate questionnaire

The objective of the risk climate scale was to measure the shared perceptions among employees of the relative priority given to risk management, including perceptions of the risk-related practices and behaviors that are expected, valued and supported (Sheedy et al. 2017). In the context of our study, it reflected the contextual elements of embedment of the principles of CoC, particularly of Financial Security, and was therefore an important proxy of role-modeling ethical culture by management, as employees are more likely to deduce the desired business code ethics from the behavior and conduct of their managers than from the document itself (Kaptein 2011). The risk climate questionnaire consisted of three separate indices based on fourteen questions measuring the participants' judgment on a 6-point scale (1 = strongly disagree, 6 = strongly agree). The first index comprised three items that captured a tendency within the organization to ignore or avoid employees'

questions about risk taking and acceptable risk, which was labeled as '*Avoidance'*. A second index represented by two items measuring the degree to which risk management and risk managers were valued and respected throughout the organization ('*Manager'*). Finally, five items measuring practices to actively address risk management were extracted as a third '*Proactive'* index. The values on the three indices ranged from 1 to 6 for each participant and were entered as a scale variable.

3.3.2.3 Protected Values for Honesty

Gibson et al. (2013) showed how the effects of economic incentives vary with individuals' moral preferences for honesty. Similarly, we measured the strength of individual commitments to honesty as a "protected value," drawing on established scales (see Gibson et al., 2013; Tanner et al., 2009). This independent variable captures the intrinsic importance of honesty for each participant and his or her willingness to make trade-offs between honesty and monetary gains. The composite index (Gibson et al. 2013) is an average of two scales measuring 1) affective reactions to (real or anticipated) violations of honesty and 2) the more cognitive notion of an individual's unwillingness to consider trade-offs based on an economic cost-benefit analysis of choosing between truthfulness and lying. The exact questions of each sub-scale and of the full protected value index adapted to the wealth management environment can be found in the Appendix 6.3. Both scales have high Cronbach's alpha (0.9 and 0.75, respectively). Both scales take on values between 0 (for an individual with no protected values) and 6 (for an individual with maximum protected values).

3.4 Analysis

We analyzed the dependent variables in sequential models using a general linear regression model with the following independent variables entered in three blocks. In the first block (Model 1), we entered independent variables related to basic demographic and employee characteristics as well as to financial literacy: Financial Literacy Basic, Financial Literacy Advanced, Education, Seniority, Tenure in the industry, Age, Variable compensation, Gender. Next, in Model 2, we included independent variables related to the Risk Climate questionnaire (*'Proactive', 'Avoidance'*, and *'Manager'*), and the relationship manager dummy variable (RM

Role). As a third block, to create Model 3, we added the participant's score on the Protected Values for honesty index. In tables V-IX, we report for the three models and for their respective independent variables: the standardized coefficients (betas), adjusted R square and change in R square between models where appropriate. Standardized beta coefficients are the coefficients obtained as if the variables in the regression had been converted to z-scores before running the analysis. Standardized beta coefficients have standard deviations as their units, which allows an easy comparison across the variables. The models were computed using the forward entry method in the linear regression implemented in SPSS Version 24 (IBM Corp 2016).

In order to compare the respondents' answers on different types of situational judgment questions, we used the Wilcoxon Signed-rank test which is non-parametric and adapted to the small sample size (Harris and Hardin 2013). Throughout the text, we report the results of this test as sum of positive ranks (W), standardized test statistic (*Z*), significance level p-value, and effect size *r*, computed as $\frac{Z}{\sqrt{n}}$, where n is the number of pairs compared (n=89 in our sample, unless indicated otherwise). Effect size is a quantitative measure of the magnitude of the experimental effect. The larger the effect size, the stronger the relationship between the variables. Effect size *r* can be gauged according to Cohen's classification as small (of 0.1), moderate (0.3) and large (0.5 and above).

Through tables III-VIII we report linear regression results using the same convention reporting standardized beta coefficients, adjusted R^2 and change in R^2 between models. The number of participants is N=89 for tables III-IX, N=39 for Table S3 and N=53 for Table S4. In all tables q denotes the number of questions the dependent variable is composed of.

4 Results

4.1 Demographics of the sample

Table II reports the descriptive statistics of the study's variables. Women constituted 45% of the sample. Examining the financial literacy tests, we found that the participants' financial literacy was high [M(±St.Dev) Basic Financial Literacy : 84%(22.3%), Advanced Financial Literacy : 89.6%(13.9)], and was significantly higher for advanced than for basic questions [Wilcoxon 2-sided signed-rank test, sum of positive ranks test statistic W=1333.5, standardized test statistic Z=2.508, p=.012, effect size r=.266]. These data confirm that our participants have advanced knowledge that is more relevant to finance (more prevalent in the Advanced Financial Literacy questionnaire) than economics (more prevalent in the Basic Financial Literacy Questionnaire).

From the linear correlation analysis reported in Table III, we note that in our sample, women had relatively lower education, lower variable compensation, lower accuracy in basic financial literacy, but had a higher perception of proactive approaches in the bank's risk climate. We also observe that those with higher proportion of performance-dependent (variable) compensation were more likely to be male, were more senior and more highly educated. Better performance in the test of advanced Financial Literacy was positively correlated with age, tenure, variable compensation and basic financial literacy. Importantly, Protected Values for Truthfulness (PVT) – the metric we used to test *H3* – did not correlate significantly with any of the remaining explanatory variables.

Table II Means and Standard Deviations for Studied Variables. N=89.Gender is dummy-coded (1 = female, 0 = male); Relationship manager role is dummy coded (1 = relationship manager, 0 = not a relationship manager).

Variable	Minimum	Maximum	Mean	Std. Deviation
1. Age bracket [0 = less than 25 years old; 1 = 25-34 years; 2 = 35 – 44; 3 = 45 -55; 5= over 55]	0 = Less than 25	5= 55 and over	40	10
2. Gender (Woman=1)	0	1	.45	.50
3. Seniority bracket 1=Team Member, 2= Team Leader, 3= Head of Area	1=Team Member	4 = Senior Management	1.58	.90
4. Tenure bracket	.00, less than 1 year	7.00, more than 25 years	4.71, ~13.25 years	1.58
5. Education bracket	.00, High School graduate	6.00, doctoral degree	3.38	1.83
6. Variable Compensation bracket	.00, less than 10%	2.00, >30%	.74	.68
7. Role: Relationship manager	.00	1.00	.43	.49
8. Protected Values for Truthfulness	3.25	7.00	5.58	.89
9. Accuracy in Basic FinLit [0-100%]	.00	1.00	.84	.23
10. Accuracy in Advanced FinLit [0-100%]	.36	1.00	.89	.14
11. Risk Climate scale: Avoidance	1.00	4.67	2.31	.88
12. Risk Climate scale: Proactive	1.40	6.00	5.07	.75
13. Risk Climate scale: Manager	1.00	6.00	5.34	.88

*Table III Pearson Correlations [r] for Studied Variables. *p < .05; **p < .01*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Age bracket	1	.282** (p=.007)										
2. Gender (Woman=1)	.282** (p=.007)	1										
3. Seniority bracket	.100 (p=.35)	-.085 (p=.429)	1									
4. Tenure bracket	.589** (p<.001)	.096 (p=.371)	.312** (p=.003)	1								
5. Education	-.132 (p=.218)	-.288** (p=.006)	.008 (p=.942)	-.078 (p=.465)	1							
6. Variable Compensation bracket	-.110 (p=.306)	-.388** (p<.001)	.414** (p<.001)	.140 (p=.192)	.224* (p=.034)	1						
7. Role: Relationship manager	.045 (p=.677)	-.115 (p=.283)	-.146 (p=.172)	.049 (p=.65)	-.011 (p=.917)	.136 (p=.204)	1					
8. Protected Values for Truthfulness	-.045 (p=.673)	.084 (p=.436)	-.018 (p=.864)	.035 (p=.745)	-.140 (p=.191)	.090 (p=.402)	-.035 (p=.743)	1				
9. Accuracy in Basic FinLit	-.062 (p=.563)	-.275** (p=.009)	.090 (p=.401)	.248* (p=.019)	.113 (p=.294)	.183 (p=.086)	-.130 (p=.223)	.157 (p=.143)	1			
10. Accuracy in Advanced FinLit	.214* (p=.044)	-.182 (p=.088)	.065 (=.547)	.488** (p<.001)	.170 (p=.111)	.298** (p=.005)	.139 (p=.192)	.004 (p=.967)	.505** (p<.001)	1		
11. Risk Climate scale: Avoidance	.025 (p=.818)	-.154 (p=.151)	.158 (p=.139)	.131 (p=.22)	.030 (p=.778)	-.011 (p=.916)	-.120 (p=.263)	-.096 (p=.371)	.027 (p=.804)	-.161 (p=.131)	1	
12. Risk Climate scale: Proactive	.037 (p=.729)	.279** (p=.008)	-.044 (p=.682)	-.023 (p=.832)	-.115 (p=.282)	-.071 (p=.509)	.160 (p=.133)	.112 (p=.296)	-.191 (p=.074)	.033 (p=.758)	-.512** (p<.001)	1
13. Risk Climate scale: Manager	-.095 (p=.375)	.165 (p=.123)	-.015 (p=.888)	-.094 (p=.382)	-.143 (p=.183)	-.079 (p=.463)	.148 (p=.167)	.197 (p=.065)	-.204 (p=.055)	.012 (p=.909)	-.346** (p=.001)	.676** (p<.001)

4.2 CoC comprehension measured through Response Accuracy

We first analyzed CoC comprehension based on an objective metric of response accuracy in non-ambiguous situational judgment questions. For such questions there was only one correct response (yes | no). In order to leave the same discretion to the participants across all questions, we used the same scale from 0 to 100 for both non-ambiguous and ambiguous questions. Thus, for the non-ambiguous questions, we calculated all responses above or equal to "90" on our likelihood scale as a 'yes'; and all those at or below "10" as a 'no'. To test the robustness of the accuracy calculation, we also conducted analyses with a lower cut-off of response confidence for computing accuracy ("80" for 'yes' and "20" for 'no'). These analyses are briefly discussed in Appendix 6.1. We verified that accuracy was significantly different from chance [1-sample T-test against 0.5 CI: $t(88)$= 13.235, p<.001; FS: t(88)= 13.190, p<.001]. Overall, average accuracy was high at M=78.04%, St.Dev.=16.58%. Accuracy was slightly but not significantly higher for questions in the CI domain [M(±St.Dev) in CI: 76.79%(±16%) vs in FS: 74.18%(16%), Wilcoxon signed-rank test, sum of positive ranks W=1521, z=-1.506, p=.132, ns; Figure 2]. This difference became significant at a more lenient response confidence cut-off of 80 | 20 points for Yes | No response [82.84% vs 78.06%; W=1250, z=-2.389, p=.017, effect size r=.253; Figure 2].

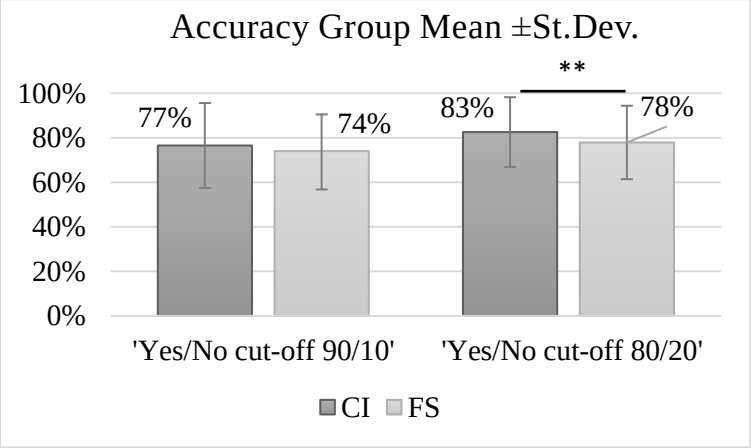


Figure 2 *Average accuracy percentages in non-ambiguous questions for Client's Interest and Financial Security. N=89; error bars are standard deviations, **p<.01. Analysis performed on two thresholds of response confidence: 90|10 and 80|20. For more details of the 80|20 cut-off, see Appendix 6.1.1.*

With average accuracy percentages above 70% using the most conservative confidence threshold, we conclude that the level of CoC comprehension in our sample is quite high. This is not surprising after the big shift towards more compliance awareness in the financial service industry following the 2008 Global Financial Crisis but also considering the specific design of our online survey. First, since the employees were required by senior management to take the online survey, there was no selection bias but it is likely that the response rates' accuracy were biased upward since the employees knew which behavior – especially compliance with financial security – was deemed desirable by the bank. Second, the self-reported answers capture individuals' expected behavior with respect to their adherence to the CoC principles. This means that the accuracy we observe could be due either to their comprehension and correct application of the CoC or due to some other factors. For instance, some people may have had little understanding of the CoC principles but still be expected to behave ethically because they were guided by their moral values (see our third hypothesis discussion which supports this conjecture). In contrast, one might also observe some individuals that understand the CoC well, but simply will not comply with it because of a lack of ethics[4].

4.3 Exploring drivers of decision making

We next investigated what drives individuals' expected decisions in the situational judgment questions focusing on the decision-making criteria, demographics, professional role- and context-related explanatory variables. We expected that these factors may affect the ambiguous (probability of choice) and non-ambiguous (accuracy) situations differently.

4.3.1 Decision- Making Criteria

To better understand the response differences between Client's Interest and Financial Security questions, we first asked the participants to prioritize the criteria they used to guide their expected choices. To that aim, the participants ordered 9 different criteria in order of importance. These answers refer to both ambiguous and non-ambiguous questions as this differentiation was not known to the participants.

As illustrated in Table IV and in Figure 3, the participants used the same top three criteria to answer the situational judgments questions we posed in both the CI and FS-related situations and the top criterion was compliance with financial security rules of the Code of Conduct. Criteria ranked second and third, respectively, were '*best interest of the bank (risk management and reputation)*', and '*Client's best Interest'*. Furthermore, we found that '*compliance with financial security rules of the CoC'* criterion was ranked as significantly more important in the FS than in the CI questions [Wilcoxon Signed-rank test, Test statistic W=13, standardized test statistic Z=-3.53, p<.001, effect size r=.376], while '*Client's best Interest'* was ranked significantly higher in the CI (compared to FS) questions [Wilcoxon Signed-rank test W=452, Z=3.261, p=.001, effect size r=.345; Figure 3]. '*Best interest of the Bank: risk management and reputation'* was ranked second in both frames [W=166.5, Z=-1.137, p=.256, ns].

Table IV Ranked Criteria for decisions in Client's Interest and Financial Security questions. Values from 1-9, lower value means higher ranking. Nb of Respondents in FS = 89, Nb of respondents in CI = 80.

Decision-making Criterion	Mean ranking CI	St. Dev CI	Mean ranking FS	St.Dev FS
Compliance with financial security rules of CoC	1.93	1.27	1.55	0.88
Best interest of the bank (risk management and reputation of the bank)	2.68	1.37	2.58	1.45
Client's best interest	2.91	1.99	3.36	1.91
My personal ethical values	3.98	1.88	4.01	1.68
Own expertise based on past experience	5.65	1.4	5.54	1.83
Best interest of the bank (profitability)	5.61	1.55	5.9	1.27
The decision meets the management objectives of the team	6.31	1.42	6.4	1.55
The decision should also provide me with some non-financial benefits (promotion, recognition by my manager, etc.)	8.03	1.19	7.79	1.05
The decision should also provide me with some financial benefits (higher variable compensation)	7.91	1.03	7.93	1.29

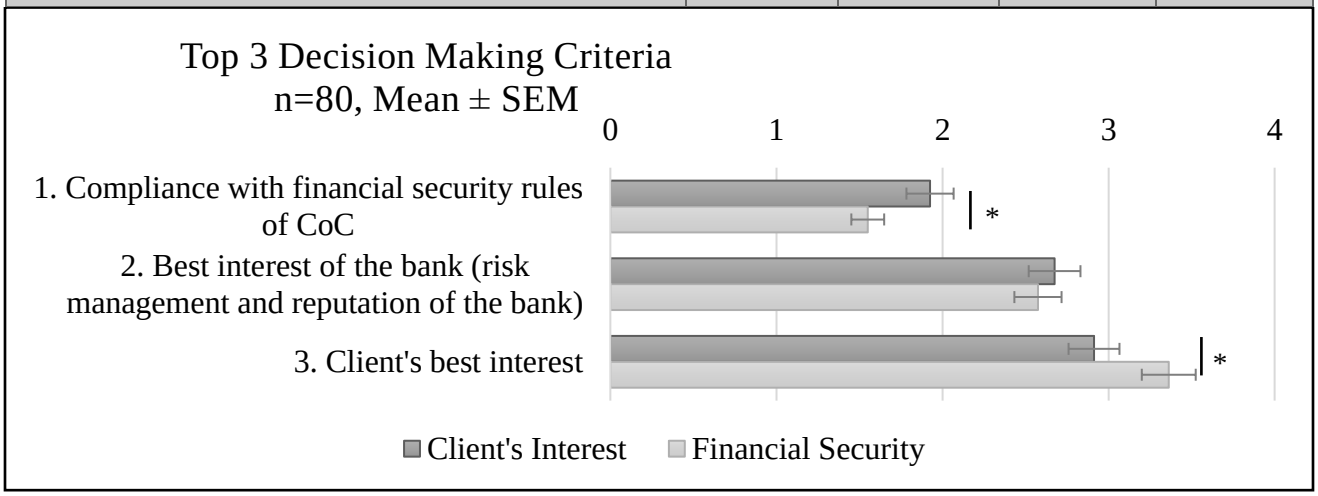


*Figure 3 Top three Decision Making criteria for Client's Interest and Financial Security questions. Lower values indicate higher importance. *p<.05. Eighty participants answered the ranking question for CI and N=89 answered for the FS domain.*

4.3.2 Factors affecting accuracy in CoC comprehension

To identify the drivers of the differences in accuracy between CI and FS, we further analyzed the data using regression analysis, the results of which are presented in Table V. In the first step, we investigated the role of demographics and of financial literacy (Model 1, Table V) and found that accuracy in CI non-ambiguous questions was explained only weakly (R2=11.5%) by basic demographic data: Age had a significant positive effect on accuracy (B=.254*), while Basic Financial literacy had a negative effect (B=-.216*). Adding contextual variables improved the model fit, (Model 2; adjusted R2=.175) with perceived 'Avoidance risk management' being an additional highly significant predictor (B=-.292**).

Accuracy in all FS non-ambiguous questions, on the other hand, was explained to a higher extent (R2=.258) by demographic variables. Notably, being a Woman was a strong positive predictor of accuracy (B=.297**), as was having a higher Variable Compensation (B=.235*). We also observed the same counterintuitive effect of scoring high on basic financial literacy test as in the CI questions, which was negatively related with accuracy on financial security questions (B=-.417**). All these predictors were maintained in the expanded model (Model 2, Table V below) where we additionally found a positive influence of one of the risk culture metrics – the perception of Proactive risk management (B=.265**) and Model 2 explained 32% of variance[5].

In summary, in our sample, older participants with lower financial literacy and higher regard for how the organization handles avoiding risk management issues showed better comprehension of the CoC in the Clients' Interest domain. In the Financial Security domain, participants who were women, those with higher variable compensation, lower basic financial literacy and higher perception of proactive risk management within the organization, performed better.

*Table V. Regression analysis results for non-ambiguous questions in CI and FS. Nb of Participants = 89. *p<.05, **p<.01, ***p<.001*

Non-Ambiguous questions	**Standardized coefficients**		
	DV = Accuracy NonAmbiguous CI, q=8	DV = Accuracy NonAmbiguous FS, q=9	

	Model 1 Demographics	Model 2 Demographics + Context	Model 1 Demographics	Model 2 Demographics + Context
Variables				
Education	-.072	-.063	.092	.108
Tenure	-.074	-.019	-.07	-.039
Seniority	<.001	.047	-.02	-.013
Woman	.158	.109	**.297****	**.229***
Age	**.254***	**.262****	.041	.07
Basic FinLit	**-.216***	**-.207***	**-.417*****	**-.360****
Advance FinLit	-.034	-.116	.193	.144
Variable Compensation	.022	.018	**.235***	**.231***
Relationship Manager Role		-.028		-.078
Manager risk management		.072		.079
Avoidance risk management		**-.292****		-.16
Proactive risk management		.192		**.265****
Adjusted R^2	.098	.175	.222	.279
ΔR^2 between model 1 and model 2		0.085		.062

4.3.3 Response patterns in ambiguous questions

The responses to ambiguous questions represent the participants' likelihood to choose a pro-integrity answer in dilemmas where no strict legal rule exists. Comparing the ambiguous questions that focused on one of the two CoC studied principles (3 questions in FS and 4 questions in CI), we found that the participants were significantly more likely to make a pro-integrity choice in the FS than in the CI questions [M(±St.Dev); CI: 80.19 (15.38), FS:93.36(13.65); Wilcoxon signed-rank test, W=2790, Z=5.614, p<.001, effect size r=.595; Figure 4 left].

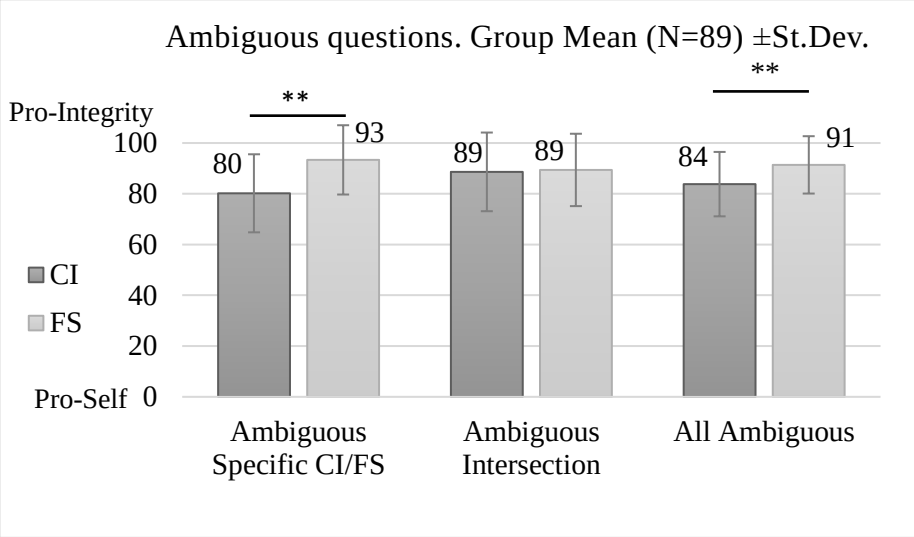


Figure 4. Average choice likelihood in ambiguous questions.

Interestingly, we note that on average, the participants were rather certain of their decisions as the choice was above 80% of the designated likelihood scale.[6] A purely agnostic decision would reflect an "I don't know" answer with equal probability of choosing yes and no – i.e., a score of ~50. Secondly, we found that the responses to ambiguous questions in FS and CI were not correlated [Pearson's r=.16, p=.134], suggesting that the average difference was not driven by a subset of participants with a general tendency to favor pro-integrity.

In order to explore the factors contributing to the decision-making in ambiguous situations in a regression analysis, we decided to keep the number of questions in the dataset balanced between ambiguous and non-ambiguous questions. Therefore, for the regression analysis, we averaged the responses from all ambiguous questions, including those asked under framing (3 ambiguous intersection questions for each FS and CI).

The regression analysis revealed that the variability in the tendency to favor an ethical, pro-integrity choice was positively influenced by two demographic and contextual variables. While 17.3% of variance in choices in CI questions were explained by basic financial literacy (B=-.179, p=.076, ns) and by how the respondents perceived the Proactive management of risk in the organization (B=.343**), in the FS questions, 11% of variance was explained by being a woman (B=.166, p=.111, ns), and having a high regard for the role of Managers in managing risk in the organization (B=.261*; Model 2, Table VI).

In comparison to non-ambiguous questions, the variance in the ambiguous situations depends on fewer factors. The only common explanatory variable for both types of questions is basic financial literacy (negative effect in the CI domain)[7], and being a woman (positive effect) on responses in the FS domain. Notably, age and variable compensation that had a significant explanatory effect in the non-ambiguous questions (CI and FS, respectively), had no effect in moral dilemmas. There was also a common positive effect of the risk climate although with different sub-metrics: moral dilemmas in the FS frame depended on how positively the respondents perceived the role of their manager in risk management, and on proactive risk management in the CI domain. For non-ambiguous questions, the most important factors were perceived risk avoidance for CI, and proactive risk management for the FS domain, respectively.

*Table VI. Factors explaining variance in ambiguous questions. Nb of Participants = 89. *p<.05, **p<.01, ***p<.001.*

Ambiguous questions (moral dilemmas)				
	DV = Tendency to favor Integrity under CI Frame, q=7		**DV = Tendency to favor Integrity under FS Frame, q=6**	
	Model 1 *Demographics*	Model 2 *Demographics + Context*	Model 1 *Demographics*	Model 2 *Demographics + Context*
Variables				
Education	.011	.044	.028	.055
Tenure	-.096	-.105	.109	.14
Seniority	-.028	-.018	.023	.023
Woman	.069	-.016	**.209***	.166
Age	.061	.052	.139	.183
Basic FinLit	**-.245***	-.179	-.119	-.076
Advanced FinLit	-.006	-.067	.106	.095
Variable Compensation	.007	.02	.01	.015
Relationship Manager Role		-.121		-.015
Manager risk management		.198		**.261***
Avoidance risk management		-.087		-.081
Proactive risk management		**.343****		-.097
Adjusted R^2	0.049	.154	.033	.089
ΔR^2 between model 1 and model 2		**.113**		**.066**

4.4 Framing

Hypotheses 1 and *2* state that framing situational questions as "Client's Interest" or "Financial Security" should not influence the respondents' choices. We tested it by asking 5 non-ambiguous and 3 ambiguous questions twice: once under the CI and once under the FS frame. This was done to additionally verify the comprehension in non-ambiguous questions for which the accuracy should not differ between the frames, as well as to test whether the participants responded deliberately rather than automatically.

We found that accuracy for non-ambiguous intersection questions was higher under the FS frame [Mean(±St.Dev). for N=89: M(FS) = 85.17%(±18.71%), M(CI)=79.10%(±20.87%); Wilcoxon signed-rank test sum of positive ranks W=601.5, Z=3.149, p=.002, effect size r=0.334; Figure 5], demonstrating a framing effect that reject *H1* . This framing effect could be due to the higher attention the participants paid when the questions were presented under the frame of "Financial Security", possibly due to their extensive training on compliance matters. Through the lens of the dual-system framework for morality, the words "Financial Security" becomes a bottom-up symbol of compliance, making ethical constructs more accessible and increasing response accuracy. However, because the order of the question block presentation was not randomized and the FS block appeared always after the CI block, learning effects cannot be excluded as an explanation for the higher accuracy under the FS frame.

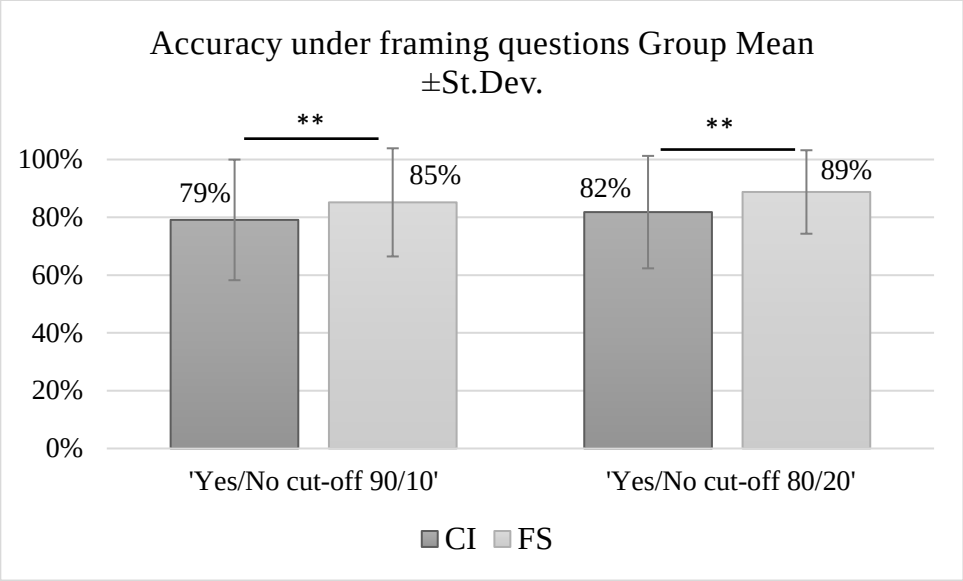


Figure 5 Accuracy in non-ambiguous (intersection) questions under framing.

Interestingly, framing had no effect on ambiguous questions and the mean likelihood of choosing a pro-integrity answer was the same under the CI and FS frame [M(FS)= 89.4(±14.26); M(CI)=88.63(±15.5); Wilcoxon signed-rank test, W=577.5, *Z*=.678, p=.498, ns]. Thus, *H2* which states that framing does not affect CoC comprehension nor expected decision-making in moral dilemmas is supported by the data.

In our interpretation, framing had no effect on the ambiguous questions because they required more deliberation and eventually had no definitive correct answer. This further affirms that the participants were not responding at random and maintained the same likelihood of choice for dilemmas, regardless of the principle of the code of conduct they were primed with.

4.5 The role of honesty

In *H3*, we assume that honesty as proxied by PVT, helps guide choices, specifically in ambiguous situations. To test this hypothesis, we added PVT as an explanatory variable in addition to the demographic and contextual variables in the regression model, and once again ran the analysis on the accuracy data for non-ambiguous questions and on the pro-integrity choice tendency data for the ambiguous questions.

Protected Values for Truthfulness was a significant positive predictor of response accuracy in non-ambiguous situations but only in the domain of Clients' Interest. It explained 3.6% of variance in addition to the

demographic and contextual factors of age (B=.269**), basic financial literacy (B=-.238*) and perception of avoidance in organizational risk management (B=-.273**). PVT did not contribute significantly to accounting for the variance in response accuracy in the FS questions and was excluded by the model (B=.082, p=.388, ns., Table VII left).

Next, we examined the effect of PVT on accuracy in the intersection questions. Recall that we found a framing effect with higher accuracy for non-ambiguous questions framed as "Financial Security" situations. However, we found that protected values for honesty was a significant positive predictor of accuracy in these judgment questions only under the CI frame (B=.191*; Table VII right). This was not the case for FS questions, where the PVT was discarded as an explanatory variable due to a p-value slightly above the accepted threshold of statistical significance (B=.185, p=.07, ns.; Table VII right).

To sum up, we found that protected values for truthfulness was a positive predictor of accuracy in non-ambiguous situational judgments but only for the questions related to Client's Interest. In our interpretation of this result, judgments in the Financial Security domain depend more on education and compliance knowledge as well as of the threat induced by the existing regulations, while protecting the client's interests may rely more on honesty to curb individuals' selfish motives.

*Table VII Regression analysis on accuracy in non-ambiguous questions: the role of honesty (Model 3). PVT = Protected Values for Truthfulness. Nb of Participants = 89 *p<.05, **p<.01, ***p<.001*

NonAmbiguous questions	**Standardized coefficients**			
	DV = Accuracy NonAmbiguous CI, q=8	DV = Accuracy NonAmbiguous FS, q=9	DV = NonAmbiguous questions Accuracy under CI framing, q=5	DV = NonAmbiguous questions Accuracy under FS framing, q=5
	Model 3 Demographics + Context + PVT	Model 3 Demographics + Context + PVT	Model 3 Demo + Context + PVT	Model 3 Demo + Context + PVT
Variables				
Education	-.032	.108	-.048	-.021
Tenure	-.029	-.039	-.043	.163
Seniority	.049	-.013	**.197***	.16
Woman	.082	**.229***	**.388*****	**.226***
Age	**.269****	.07	.086	.116
Basic FinLit	**-.238***	**-.36****	-.078	-.048
Advance FinLit	-.093	.144	-.078	.027
Variable Compensation	.007	**.231***	.028	.121
Relationship Manager Role	-.023	-.078	.055	-.002
Manager risk management	.029	.079	-.047	.102
Avoidance risk management	**-.273****	-.16	-.055	**-.216***
Proactive risk management	.169	**.265***	.009	.099
PVT	**.194***	.082, ns.	**.191***	.185, ns. (p=.07)
Adjusted R^2	.203	.175	0.197	.279
ΔR^2 between model 2 and model 3	0.036	No change	0.036	No change

Turning to the ambiguous questions, we found that adding the PVT variable improved the predictive power of the model (ΔR^2 CI=.162, FS=.09; Table VIII). For Client Interest questions, the PVT explained an additional 16.2% of variance and was a strong positive predictor of a pro-ethical judgment (B=.412**) together with perception of Proactive risk management (B=.283**) and basic financial literacy (B=-.256**). For the FS questions, PVT explained an additional 9% of variance in the data and was also a highly significant positive predictor of a pro-integrity choice (B=.306**) along with perception of the role of management in organizational risk management (B=.204*).

Note that for ambiguous situational judgment questions in both the CI and the FS domain, Protected Values for Truthfulness was the highest coefficient in the linear regression fitting all demographic and contextual variables collected in the study (CI: B=412**, FS: B=.306**; Table VIII below).

*Table VIII Regression analysis on all ambiguous questions: role of honesty (Model 3). N= 89 participants. *p<.05, **p<.01, ***p<.001*

Ambiguous questions (moral dilemmas)		
	DV = Tendency to favour Integrity in CI, q=7	DV = Tendency to favour Integrity in FS, q=6
	Model 3 Demographics + Context + PVT	Model 3 Demographics + Context + PVT
Variables		
Education	.107	.089
Tenure	-.101	.125
Seniority	-.007	.027
Woman	-.061	.15
Age	.068	.198
Basic FinLit	**-.256****	-.156
Advanced FinLit	-.014	.091
Variable Compensation	-.009	-.031
Relationship Manager Role	-.106	.003
Manager risk management	.098	**.204***
Avoidance risk management	-.073	-.073
Proactive risk management	**.283****	-.08
PVT	**.412*****	**.306****
Adjusted R^2	**.312**	**.171**
ΔR^2 between model 2 and model 3	**.162**	**.09**

To summarize, we found that PVT had a highly significant strong positive effect on the pro-integrity choice in moral dilemmas. Its influence, however, was much weaker for the non-ambiguous questions in the CI domain, and null for non-ambiguous questions in the FS domain. We interpret these results as evidence that honesty and resistance to trade it off against monetary benefits play a significant role mainly in ambiguous decision–making situations and less so in straightforward decision-making settings, especially when the impact of regulatory compliance is salient. These results are consistent with the fact that honest individuals may perhaps be better equipped to deal with dilemmas even in the absence of a deep comprehension of the CoC core principles[8]. Intuitively, they just know and do what is morally right.

5 Discussion

Our study investigated ethical decision-making among wealth management employees of a large international bank headquartered in Switzerland. Using a specially designed questionnaire combining situational judgment tests, demographic, contextual and moral values metrics, we found that the comprehension of the Code of Conduct principles was high (average accuracy in non-ambiguous questions M=78.04%, St.Dev.=16.58%) and was driven primarily by financial security considerations. Our main findings thus first demonstrate that post-global financial crisis, wealth managers are strongly focused on financial security compliance as the major driver in their decision-making, even in the domain of customer's interest. However, this high level of accuracy may also be partially driven by the fact that this online survey was mandatory and that the participants may have responded with a view to please their senior management by embracing financial security as a core principle of their expected behavior.

Secondly, in *H1* and *H2*, *we* postulated that framing (Client's Interest vs Financial Security) should not affect the comprehension of the Code of Conduct and its application in decision-making. The results suggest that this is confirmed for *H2* but not for *H1* since ambiguous situational judgment questions were not subject to framing while we found a significantly higher accuracy under the "FS" frame for non-ambiguous questions. Therefore, conceptual framing affected CoC comprehension for decisions for which a clear rule exists but not for moral

dilemmas where the participants needed to exercise personal judgment. This FS-specific framing effect could be caused by the fact that "Financial Security" triggered higher attention from the bank employees, which in turn may have its origin in their extensive training on compliance matters. Yet, we found that in ambiguous situations concerning the CoC, expected decision-making was less prone to a framing effect. Alternatively, it is possible that the higher accuracy in FS was at least partially due to learning effects since the FS question block appeared always after the CI block.

Thirdly, *H3* predicted that honesty, proxied by individual scores on the protected values for truthfulness (PVT) scale, helps explain the behavioral tendency to favor pro-integrity choices in the dilemma situations. The results confirm that hypothesis by demonstrating that PVT was the strongest significant predictor in the regression models contributing positively to a pro-integrity choice. Higher honesty may have guided some participants somewhat "mechanically" towards pro-integrity choices even if they did not fully understand the CoC when addressing the ethical dilemmas in the questionnaire.

Of note, PVT was also a positive contributor, albeit of lesser magnitude and explanatory power, to the variance explained in the non-ambiguous questions in the Client's Interest but not in the Financial Security domain. In our interpretation of this result, judgments in the area of Client's Interest demand personal consideration of the relationship with the client, and thus protected values for truthfulness can also guide expected decision-making for the client's best interest in the case of non-ambiguous choices. Interestingly, the participants reported using the same top three criteria in answering the questions under both the CI and the FS frames – '*compliance with financial security rules of CoC'* being the first one, followed by '*best interest of the bank'*, and thirdly, '*client's best interest'*. Combined with the fact that conceptual priming (framing) with FS increased the respondents' accuracy, the role of financial security appears very powerful in guiding wealth management employees' expected decision-making. It is possible that the words "financial security" and "compliance" already acted as moral primes (Welsh and Ordóñez 2014) or moral symbols (Desai and Kouchaki 2017) that increased moral awareness and ethical choices. These and other significant predictors discovered in the regression analyses are summarized in Table IX below.

Table IX Summary of results.

Tested Effect	Type of situational judgment	Results reported in Table	Significant predictors	
			Client's Interest	**Financial Security**
Factors driving accuracy	Non-Ambiguous	Table V, Table VII left	Age ↑, Basic Financial Literacy ↓, Avoidance Risk Management ↓, PVT+	Woman ↑, Basic Financial Literacy ↓, Variable compensation ↑, Proactive Risk Management ↑
H1. Framing does not affect CI and FS in non-ambiguous situations	Non-Ambiguous	Table VII, right	Woman↑, PVT↑	Woman ↑, Avoidance Risk management ↓
H2. Framing does not affect CI and FS in ambiguous situations	Ambiguous	Table VI (Models 1&2)	Proactive Risk Management↑ ;	Manager Risk Management ↑ ;
H3. Honesty helps guide decisions in morally ambiguous situations	Ambiguous	Table VIII	Basic Financial Literacy ↓ , Proactive Risk Management ↑, PVT↑,	Manager Risk Management ↑, PVT ↑

Next, we tested whether having good compliance knowledge in a given domain had an effect on pro-integrity choices in dilemma situations by introducing an additional factor "accuracy on non-ambiguous questions" to the analysis of ambiguous questions (Model 5 in Table S1). This analysis (see Appendix 6.1.2.1) revealed that both protected values for truthfulness and the level of knowledge in the respective field, as proxied by "accuracy in non-ambiguous questions", are strong positive factors related to pro-integrity choices. Honesty therefore still bears additional influence on the resolution of dilemmas even when the compliance knowledge is high in the client-interest domain. This is not the case for dilemmas in Financial Security where being a woman and having high advanced financial literacy increase the tendency to choose pro-integrity.

5.1 Theoretical implications

In terms of theory, our findings hold implications for modeling the impact of social norms within corporations. We provided a simple way to empirically test embedment of and expected compliance with a code of conduct (Kaptein 2011) by using responses to situational judgment questions that are non-ambiguous (a correct answer exists) and ambiguous (personal discretion must be applied). We conducted one of the first studies on the determinants of expected effectiveness of a code of conduct in wealth management and found that wealth managers, in the post-global financial crisis Switzerland, use the same principal criterion in situations handling financial security and client's interest, and that is, regulatory compliance. This may be specific to the bank that we studied but there is evidence suggesting that many large players in the financial industry – driven largely by the increasing role of banking regulation internationally – have now began putting client second (or third, as in our case), and prioritizing compliance with banking laws. We found that when faced with dilemmas weighing own or bank's interest versus client's interest, wealth managers were prone to choose financial security even in dilemmas where no legal consequences (cost of extrinsic punishment) were at stake. One should however examine if this finding can be generalized to the entire industry by conducting additional studies in which participation would not be mandatory so as to limit the social desirability effect that may have led some of the participants to want to please the senior management by favoring financial security (over their own or the clients' interests) in their reported choices.

Second, our study extends the literature on the application of injunctive norms in a reputation-sensitive industry by demonstrating how situational judgment questions can be used to measure their expected effectiveness when incorporated in a code of conduct, and by exposing the role of honesty in guiding expected choices in the areas where corporate norms are ambiguous.

We find that protected value for truthfulness is the strongest predictor of a pro-integrity choice in the absence of clear extrinsic moral guidelines (legal or social norms). Thus, in legally ambiguous situations, PVT as a main proxy for honesty, steers individuals towards the pro-integrity choices. Our conclusion is that there is a

complementarity between the extrinsic moral codes and honesty and that the latter are most helpful in ambiguous situations. This behavior is in line with the predictions of the moral utility theory that posits increased moral utility of ethical norm conformity in individuals with high moral values (Hirsh et al. 2018). Our findings also add to Kaptein's (2011) summary of factors that render a business code of ethics effective. Namely, we confirmed that not only familiarity but comprehension of the CoC is desirable. However, our results also suggest that the latter comprehension may to some extent, and especially in moral dilemmas, be substituted by strong ethical values of the employees. We further demonstrate the role of the perceived organizational risk climate – a derivative of the company's perceived risk culture that encapsulates managerial role-modeling – on individual ethical decision making.

In addition, we demonstrate that in our sample the concept of financial security automatically triggers the tendency to decide pro-compliance, even in situations that primarily emphasize the client's interest. More research is needed to extrapolate whether this increased compliance, attention and awareness is a general phenomenon in the financial services industry in the post-global financial crisis context.

5.2 Practical implications

Wealth managers who participated in our study were sensitive to the framing of situations and changed their answers significantly depending on whether they were framed as "Client interest" or "Financial Security". Therefore, organizations should beware of language used to present the CoC principles as rules may seem flexible in the CI frame and stricter in the FS frame. We recommend using language and tone in written and oral communication that reduces this cognitive bias when promoting the CoC principles. Ideally, training on CoC should encourage staff's critical and nuanced thinking and a distance from acting based on pure financial knowledge (which may be the default automatic decision-making criteria). Yet, framing had no impact on the choices in ambiguous situations where participants rather seemed to be driven by honesty. Specifically, a pro-integrity choice in ambiguous questions related to wealth management depended strongly on the individual's protected value for honesty. Thus, to enhance the effectiveness of CoC also in the ethical gray zone areas, it is suggested to consider assessing new employees' levels of honesty (for instance, using the questionnaire on

Protected Values for Truthfulness during the hiring process but blending it with other types of questionnaires to keep the employees unaware that they are being probed for their levels of integrity).

In addition, we found that accuracy in non-ambiguous questions had a strong positive impact on pro-integrity choices in dilemma questions but only for Client's Interest (Table S1, Model 5). As a result, we recommend that training the personnel on non-ambiguous questions since this can also be beneficial for ethical dilemmas, at least in the CI domain.

As a strategic recommendation, we observe that the omnipresent emphasis on risk mitigation and compliance has rendered Client's Interest somewhat less important than Financial Security in guiding employees' choices. The integration of CI into the CoC should emphasize that the two principles are not necessarily mutually exclusive if consistently understood, communicated and managed. This is important given that wealth management as a banking activity should remain service and thus client focused.

5.3 Limitations and Future Direction

In terms of limitations concerning the analysis of our data, we first observed that the demographic factor Woman in our sample was positively correlated with Proactive and negatively correlated with Basic Financial Literacy which may explain why we see these three factors co-appear in the results of the regression analysis on FS comprehension. Yet, regardless of the response confidence threshold used, Woman remains a significant predictor of accuracy in the intersection questions, in the CI domain, which leads us to believe that women indeed show a better comprehension of ethical situations, corroborating previous studies on gender differences in honesty (Grosch and Rau 2017).

Secondly, as we did not counterbalance the order of appearance of the sections titled "CI" and "FS" across participants in the data collection process, it is possible that framing effects stem from learning in addition to actual conceptual priming.

Third, as already discussed when we commented on the high accuracy of the answers to the questionnaire, given that the participants were required to fill the online survey by senior management, the answers provided

by the employees could have been biased in the direction expected by the bank. This could have inflated the levels of expected accuracy. In particular, the binding nature of our online survey most likely affected the answers to questions were the employees' self-interest needed to be traded against regulatory compliance. Yet, this concern is somewhat mitigated by the high level of protected values for truthfulness identified among the participants (see discussion above in section 5.1). Indeed, we know from the psychology literature that individuals with high level of protected values for honesty are intrinsically motivated to "do the right thing" irrespective of any external pressure or sanctions.

In terms of future research directions on the effectiveness of CoCs, we note that this is a first study of its kind as wealth management is a sensitive area not easily accessible to researchers. Therefore, the generalization of our findings is limited by the small sample size (N=89) and its pioneering character, and more such studies on ethical decision -making and the effectiveness of CoCs in other areas of banking, such as trading, and in other sectors, such as the insurance industry, are needed to confirm or nuance our conclusions.

Among issues that may open new challenges to applied ethical decision-making in the finance industry is the emerging role of digitalization. We suggest that future studies be conducted to analyze the role of honesty in neo-banking and virtual services such as robo-advisory. Indeed, many studies in psychology and behavioral finance have demonstrated that the propensity to act unethically is increased as the distance between act and the representation of the consequences is increased. For instance, people are more willing to cheat to obtain "tokens" than money (Mazar et al. 2008), therefore the question is, would we expect Wealth Managers to act more or less ethically in a highly digitalized service industry in which contact with the client becomes even less personal?

6 Appendix

6.1 Supplemental analyses

6.1.1 Robustness analysis

In order to verify that the observed results are not significantly affected by varying the adopted accuracy threshold, we conducted additional regression analyses on accuracy data computed using two lower thresholds of response confidence – 80|20, and 75|25 [9]. Recall that the respondents indicated their likelihood to choose a response on an analog scale from 0 ("I would definitely not do that") to 100 ("I would definitely do that"). For the reported analyses, we adopted a very conservative response confidence threshold for computing accuracy: only answers ≥90 were treated as a "I would do that" choice (and ≤10 as "I would not do that").

In summary, the accuracy data tested with a lower response-confidence threshold confirmed the results obtained with a more conservative threshold: accuracy is high (above 78.04% at a 90|10 cut-off; 80.83% at 80|20; 82.22% at 75|25) and significantly higher for CI compared to FS questions. Accuracy in non-ambiguous questions for both domains is driven by being a Woman in the 80|20 cut-off. With the lower response confidence cut-off, a high perception of proactive risk management in the organization is a dominant driver for CI questions, while basic financial literacy is the main negative driver in the FS domain. While variable compensation is a significant coefficient in the 80|20 cut-off, it is no longer significant at the more lenient threshold. This result partially echoes the main result we reported and in which the role of Woman is significant only in the FS domain (see Table V).

In the intersection questions and, as in the main result, Hypothesis 1 is not confirmed as we again observe a significant framing effect, with higher accuracy under the FS frame. And while the role of PVT is significant in predicting accuracy in both CI and FS domain under the 80|20 cut-off, it is no longer significant for FS at a more lenient threshold. The role of gender as a predictor of accuracy remains significant for both CoC domains and under both cut-off thresholds.

6.1.2 Additional regression analyses

6.1.2.1 Using accuracy in non-ambiguous decisions as an additional explanatory variable

First, we tested whether having good compliance knowledge in a given domain had an effect on pro-integrity choices in dilemma situations by introducing an additional factor "accuracy on non-ambiguous questions" to the analysis conducted for ambiguous questions (Model 5 in Table S1). This analysis revealed a strong positive effect of accuracy on pro-integrity decisions in the CI domain (B=.402, p<.001) but not in the FS (B=.155, p=.143). Likewise, PVT remained a significant positive predictor for pro-integrity CI choices (B=.262, p=.003) but it was no longer the case for FS (B=.195, p=.054). In contrast to the previous models, Basic Financial Literacy was not a significant predictor (B=-.028, p=.076 in CI and B=-.111, p=.358 in FS), but advanced financial literacy (B=.255, p=.015) and female gender (B=.287, p=.007) emerged as two additional positive predictors of pro-integrity in Financial Security.

To conclude this comparison, we find that both protected values for honesty and the level of knowledge in the respective field, as proxied by accuracy in non-ambiguous questions, are strong positive factors related to pro-integrity choices. Honesty therefore maintains additional influence on the resolution of dilemmas even when the compliance knowledge is high in the client-interest domain. This is not the case for dilemmas in Financial Security where being a woman and having high advanced financial literacy increase the tendency to favor pro-integrity.

Table S1 Control regression analysis on Ambiguous questions N=89 participants excluding factor "Basic Financial Literacy" (Model 4) and with factor "Accuracy in non-ambiguous questions" (Model 5).

Ambiguous Questions				
	DV = Tendency to favour Integrity in CI	**DV = Tendency to favour Integrity in FS**	**DV = Tendency to favour Integrity in CI**	**DV = Tendency to favour Integrity in FS**

	Model 4 Demographics *excluding Basic Financial Literacy* + Context + PVT	**Model 4** Demographics *excluding Basic Financial Literacy* + Context + PVT	**Model 5** Demographics *Accuracy in non-ambiguous questions* + Context + PVT	**Model 5** Demographics and *Accuracy in non-ambiguous questions* + Context + PVT
Variables				
Education	0.102	0.008	0.139	0.053
Tenure	-0.092	0.108	-0.097	0.108
Seniority	-0.003	0.013	-0.019	0.013
Woman	0	**.287****	-0.044	**.287****
Age	0.1	0.058	0.029	0.058
Accuracy in Non-Ambiguous questions	-	-	**.402*****	0.155
Advanced FinLit	-0.032	**.255***	0.009	**0.255***
Basic FInLit	-	-	-0.028	-0.111
Variable Compensation	-0.06	-0.033	-0.041	-0.033
Relationship Manager Role	0.039	0.015	0.038	0.015
Manager risk management	0.12	0.096	**.255****	0.096
Avoidance risk management	-0.083	-0.049	-0.063	-0.049
Proactive risk management	**0.368*****	-0.071	0.141	-0.071
PVT	**0.339*****	0.195	**.262****	.195 (p=.054)
Adjusted R^2	**0.261**	**0.1**	**0.372**	**0.1**

6.1.2.2 Understanding the role of Basic Financial Literacy

In the following table, we present the results of an analysis that addresses a possible weakness of the independent variable Basic Financial Literacy which correlates with Advanced FinLit. In order to address it, we reran the analyses including only one of the two metrics, “Advanced FinLit”.

These analyses (results in Model 4, Table S1 and Table S2) have yielded largely similar results to the original Model 3 for non-ambiguous CI questions but indicated a role of perceived proactive risk management rather than avoidance (B=.325, p=.001) and no significant effect of PVT.

The analyses yielded no differences for the intersection questions (testing effects of framing; Table S2 right). For ambiguous questions, removing Basic Financial Literacy did not change the results – we found an effect of PVT (B=.339, p<.001) and Proactive risk management (B=.368, p<.001). For FS dilemma questions, in contrast, Advanced Financial Literacy (B=.255, p=.015) and female gender (B=.287, p=.007) were the only positive contributors to a pro-integrity choice (Model 4 in Table S1).

Table S2 Control regression analysis on Non-ambiguous questions N=89 participants excluding factor "Basic Financial Literacy" (Model 4).

NonAmbiguous questions	**Standardized Beta coefficients**			
	DV = Accuracy NonAmbiguous CI	**DV = Accuracy NonAmbiguous FS**	**DV = NonAmbiguous questions Accuracy under CI framing**	**DV = NonAmbiguous questions Accuracy under FS framing**
	Model 4 Demographics *excluding Basic Financial Literacy* + Context + PVT	**Model 4** Demographics *excluding Basic Financial Literacy* + Context + PVT	**Model 4** Demographics *excluding Basic Financial Literacy* + Context + PVT	**Model 4** Demographics *excluding Basic Financial Literacy* + Context + PVT
Variables				
Education	-0.058	0.114	-0.048	-0.021
Tenure	-0.137	-0.054	-0.043	0.163
Seniority	-0.005	-0.034	.197*, p=.043	0.16
Woman	0.122	**.287**, p=.009**	**.388***, p<.001**	**.226*, =.031**
Age	**.256*. p=.011**	0.1	0.086	0.116
Basic FinLit	-	-	-	-
Advance FinLit	-0.15	-0.034	-0.078	0.027
Variable Compensation	0.005	**.234*, p=.026**	0.028	0.121
Relationship Manager Role	-0.017	-0.005	0.055	-0.002

Manager risk management	-0.032	0.128	-0.047	0.102
Avoidance risk management	-0.178	-0.149	-0.055	**-.216*, p=.038**
Proactive risk management	**.325**, p=.001**	**.322**, p=.002**	0.009	0.099
PVT	0.148	0.008	**.191*, p=.05**	.185 (p=.07)
Adjusted R^2	**0.158**	**0.203**	**0.197**	**0.092**

6.1.2.2 Analyses on specific subsets of participants

We conducted additional analyses on two subsets of participants to test whether the results changed if we only focus on Relationship Managers. There were N=39 participants with the role "relationship manager", n=4 with the role "Investment Manager" and n=10 "front managers". We first conducted the regression analyses on the RM-only dataset which we report in Table S3.

In this analysis (N=39 employees with job title "Relationship Manager"), we find that the model has higher explanatory power model (R^2=.239, adjusted R^2 = .218) and the results are largely conforming with whole-dataset results for ambiguous CI questions: significant effect of PVT (B=.489, p=.002) and Proactive Risk Management (B=.283, p=.048). There are also some differences - Basic financial literacy is no longer a predictor of answers on ambiguous CI questions (Table S3 right). For ambiguous FS questions, the model indicates Basic Financial Literacy (B=-.477, p=.015) and Advanced Financial Literacy (B=.537, p=.007) as well as a negative effect of variable compensation on ethical resolution (B=-.335. p=.033) and a positive effect of PVT (B=.39, p=.016). However, when Basic Financial Literacy is removed, the model can no longer be constructed using the forward model selection method. However, we obtain the same result as with the full dataset using the enter method[10], with a positive effect of PVT (B=.371, p=.027; Table S3 right).

For non-ambiguous questions, similarly to the results from the full dataset, Avoidance of risk management was still a significant negative predictor of accuracy (B=-.462, p=.003) on Client Interest questions. However, Age and Basic Financial Literacy and PVT were no longer significant predictors. Instead, Education (B=-.366,

p=.011) and Advanced Financial Literacy (B=-.379, p=.011) were significantly negatively related to accuracy on CI questions in relationship managers. In FS questions, being a woman and the level of variable compensation were not related to accuracy rate in RMs (Table S3 left).

Table S3 Regression results for NonAmbiguous and Ambiguous questions for a subsample of n=39 participants with job title "Relationship Manager".

	NonAmbiguous questions		**Ambiguous questions (moral dilemmas)**	
	DV = Accuracy NonAmbiguous CI	**DV = Accuracy NonAmbiguous FS**	**DV = Tendency to favour Integrity in CI**	**DV = Tendency to favour Integrity in FS**
	Model 3 Demographics + Context + PVT	Model 3 Demographics + Context + PVT	Model 3 Demographics + Context + PVT	Model 3 Demographics + Context + PVT
Variables				
Education	-.366*	0.142	0.053	-0.111
Tenure	-0.112	-0.111	-0.141	-0.155
Seniority	0.202	-0.022	-0.033	0.18
Woman	0.244	0.033	0.148	0.067
Age	0.259	0.028	0.259	-0.004
Basic FinLit	-.276	**-.366****	-.025	**-.477***
Advance FinLit	**-.379***	-0.042	-0.081	**.537****
Variable Compensation	-0.159	0.166	-0.073	**-.332***
~~**Relationship Manager Role**~~	-	-	-	-
Manager risk management	0.284	**.283***	0.168	-0.076
Avoidance risk management	**-.462****	**-.433****	-0.226	-0.067
Proactive risk management	0.251	-0.004	**.283***	-0.047
PVT	0.139	0.122	**.489****	**.390***
Adjusted R^2	**0.192**	**0.451**	**0.218**	**0.252**

For completeness, we reran the same regression analyses on an enlarged subset of the data (Table S4). Namely, we included relationship managers (n=39), front managers (n=10) and investment managers (n=4) as all of these roles are client-facing and encounter the decisions we tested in the questionnaire most frequently.

For non-ambiguous questions in client-facing managers (n=53), we found that neither factor Age (B=.057, ns.) nor Basic Financial Literacy (B=-.168, ns.) were determinant of accuracy in the CI questions (Table S4 left). Rather than avoidance in risk management, in this subset of participants, Proactive risk management was highly positively related to accuracy in CI questions (B=.461, p=.001). PVT was no longer significant (B=.228, p=.058).

For non-ambiguous FS questions, we did not find the positive effect of being a woman (B=.036, ns.), possibly because most of this subsample are males. However, we confirmed all the remaining findings from the analysis on the complete dataset, namely a negative effect of Basic Financial Literacy (B=-.375, p=.002), a positive effect of variable compensation (B=.295, p=.014), and a highly positive effect of Proactive risk management (B=.401, p<.001).

In dilemma questions (Table S4 right), we confirmed the significance of PVT for CI (B=.412, p=.001) as a positive predictor of pro-integrity decisions. For FS, no significant predictors could be selected in the first block when Basic Financial Literacy was included, however, excluding that variable due to its collinearity with Advanced Financial Literacy resulted in a positive effect of PVT (B=.273, p=.048). For CI, we also confirmed the role of perceived proactive risk management (B=.303, p=.015). In CI situations, we did not find an effect of Basic Financial Literacy, while in FS situations, we did not find any effect of factor “manager in risk management”.

Table S4 Main analyses on a subset of client-facing participants (Participant role = Relationship Manager | Front Manager | Investment Manager = 1, n=53).

	NonAmbiguous questions		**Ambiguous questions (moral dilemmas)**	
	DV = Accuracy NonAmbiguous CI	**DV = Accuracy NonAmbiguous FS**	**DV = Tendency to favour Integrity in CI**	**DV = Tendency to favour Integrity in FS**
	Model 3 Demographics + Context + PVT	Model 3 Demographics + Context + PVT	Model 3 Demographics + Context + PVT	Model 3 Demographics + Context + PVT
Variables				
Education	-0.133	0.162	.143	-.112
Tenure	-0.179	-0.186	-.138	.062
Seniority	0.022	-0.074	.008	.204
Woman	0.118	0.036	.004	0.119
Age	0.057	-0.009	.142	.094
Basic FinLit	-.168	**-.375****	-.168	-.153
Advance FinLit	-0.189	0.07	-.054	.111
Variable Compensation	0.115	**.295***	-.036	-.153
~~**Relationship Manager Role**~~	-	-	-	-
Manager risk management	-0.05	0.084	.047	0.143
Avoidance risk management	-0.127	-0.152	-.116	-.074
Proactive risk management	**.461****	**.401*****	**.303***	.071
PVT	.228 (p=.058)	0.166	**.412****	**.273***
Adjusted R^2	**0.248**	**0.333**	**0.248**	**0.056**

6.2 Wording of BNP Paribas Group Code of Conduct

1. Customers' interests

Our success lies in being our customers' preferred choice. To gain our customers' trust, all employees must always act in a way that protects customers' interests while complying with all relevant laws. To achieve this, the BNP Paribas Group invests in understanding its customers' needs. Communication with customers is open and honest and the services offered to them should be the most appropriate choice to meet their needs and goals. All employees always endeavor to ensure that clients' long-term interests are taken into account. In case a customer is unsatisfied, action must be taken swiftly to make things right.

UNDERSTANDING THE CUSTOMERS' NEEDS

We have a duty to understand customers' needs and there is a responsibility to:

> Seek always to understand the needs, expectations and interests of customers in order to provide them with appropriate products and services

ENSURING FAIR TREATMENT OF THE CUSTOMERS

It is essential to ensure fair treatment of customers and expectations are to:

> Act fairly, honestly and transparently in all professional actions to gain the trust of customers

> Avoid providing any customer with undue preferential treatment

> Work with customers who find themselves in financial difficulty in order to find a mutually beneficial solution to their situation.

PROTECTING CUSTOMERS' INTEREST

We have a strong commitment to protect the customers' best interests, which requires us to:

> Know and comply with the rules protecting consumers' rights in markets where the Group operates

> Design products with customers' interests in mind

> Ensure the products sold are easy to explain

> Ensure products can be understood by clients

> Apply fair and transparent pricing in accordance with applicable laws and regulations

> Ensure that the activities comply with applicable laws and regulations, including tax rules

> Never act on behalf of a customer without authorization (e.g. a mandate, or customer instruction) In the relationship with third party distributors, there is a responsibility to:

> Seek to partner with distributors who share our Values and Code of Conduct Principles.

> Understand the roles and responsibilities of product manufacturer and distributor and ensure there are no conflicts of interest that could negatively affect customers.

PROTECTING CUSTOMERS' CONFIDENTIALITY

It is important that customers' confidentiality remains protected, which means to:

> Treat all customers relationships as strictly confidential

> Keep client information confidential at all times unless disclosure and/or use of the information is permitted by applicable law and/or with the expressed consent of the client

> Share client information within the BNP Paribas Group with those colleagues who genuinely need to see it to serve the clients best interests in accordance with the applicable law and internal rules

> Only collect data necessary for a specific professional purpose

> Comply with the Group’s system of information barriers

COMMUNICATING TRANSPARENTLY IN SALES AND MARKETING

All commercial communications addressed to customers aim to be transparent with respect to the services and products offered and we are expected to:

> Aim to ensure that all customer communications are fair, honest, transparent, understandable and not misleading

> Provide all the required information in order to enable customers to understand:

- What they are buying, including the expected performance, pricing and risk characteristics.

- What they are paying for, including the cost of the products, services and advice chosen.

> Carry out sales and marketing of the Group's products and services with integrity

> Answer customer's questions to the best of our ability and in a timely manner

DEALING FAIRLY WITH CUSTOMERS' COMPLAINTS

We have a duty to deal fairly with customers' complaints, which means we:

> Handle customers' complaints in a fair, transparent and timely manner

> Set things right as soon as possible, if errors are identified.

2. Financial Security

The BNP Paribas Group is dedicated to serving its customers. At the same time, the Group always needs to be conscious of the impact its actions can have on wider society. The BNP Paribas Group is committed to complying with all applicable laws for preventing criminal and terrorist activities, and to upholding international action that is conducted through the financial industry. Because these laws can be complex, and apply differently across businesses and regions, the Group is committed to promoting clear rules to foster a strong culture of compliance and ethics.

FIGHTING AGAINST MONEY LAUNDERING, BRIBERY, CORRUPTION AND TERRORIST FINANCING

It is every employee's responsibility to support the Group in fighting against economic crime including fraud, money laundering, bribery, corruption and terrorist financing. Everyone is therefore required to:

> Be alert to and contribute to fighting against all forms of economic crime including fraud, money laundering and terrorist financing, regardless of the circumstance or stakeholder involved

> Make sure adequate integrity and controls are performed to know the customers and how they use the Group's products and services

> Be vigilant that customer transactions are not related to bribery or corruption. Report any suspicious operation to Senior Management or to local Compliance

COMPLYING WITH SANCTIONS AND EMBARGOES

The Group is committed to complying with applicable sanctions and embargoes, which means an obligation to:

> Understand the economic sanctions and embargoes applicable in the markets where the Group operates, or is in contact with

> Abide by the Group's policy and the local laws with regards to sanctions and embargoes in the country in which the Group operates

> Report to Group Financial Security any attempt to circumvent the sanctions regime

6.3 Protected Values for Truthfulness Questionnaire

Q1 (affective part)

A wealth manager finds out that a fund he recommended to his long-term clients is underperforming. One day later, he receives a phone call from one such client and says nothing about the fund's underperformance. The client has invested 10% of his wealth in this fund upon the wealth manager's recommendation. What do you think about the fact that the wealth manager did not talk about this underperforming fund to his client during their phone call? Please choose the appropriate category. This is:

Very immoral Very moral

1 2 3 4 5 6 7

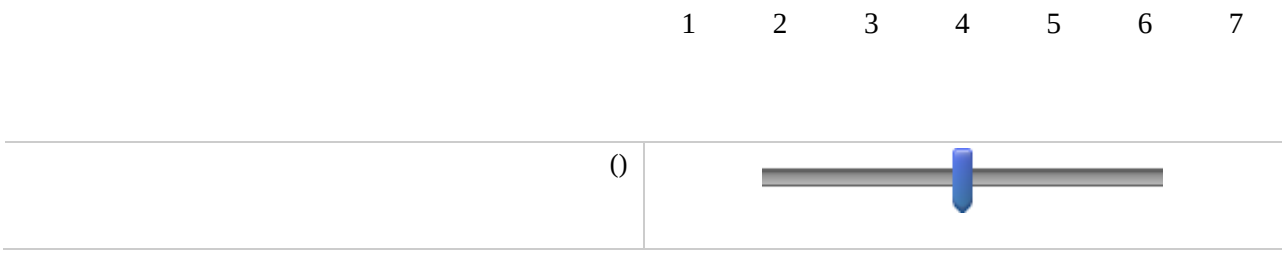
()

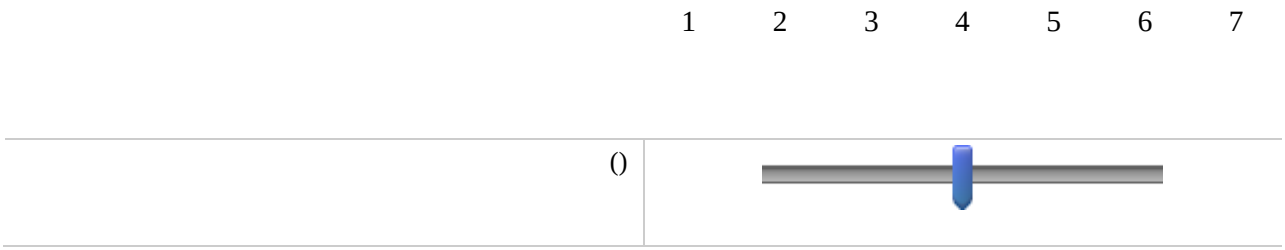
Not at all praiseworthy Very praiseworthy

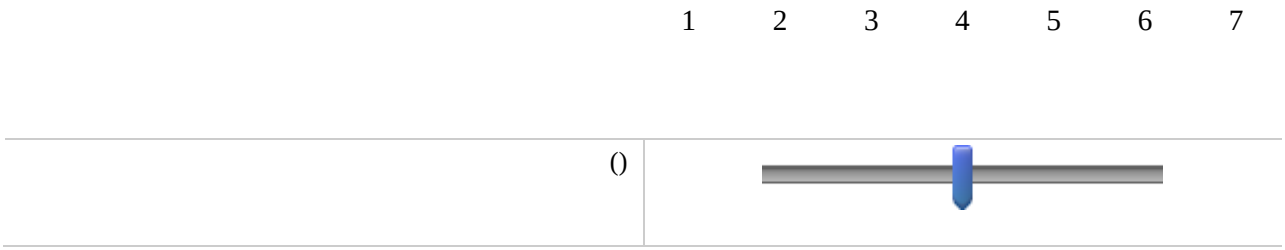
1 2 3 4 5 6 7

()

Not at all blameworthy Very blameworthy







Q2 (cognitive part)

A wealth manager finds out that a fund he recommended to his long-term clients is underperforming. One day later, he receives a phone call from one such client and says nothing about the fund's underperformance. The

client has invested 10% of his wealth in this fund upon the wealth manager's recommendation. Some view such silence as a violation of truthfulness; others regard it as acceptable protection of personal interests. What do you think about the value of truthfulness in such a situation?

Truthfulness is something:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
	1	2	3	4	5	6	7
... that one should not sacrifice, no matter what the (material or other) benefits ()							
... for which I think it is right to make a cost-benefit analysis ()							
... that cannot be measured in monetary terms ()							
... about which I can be flexible if the situation demands it ()							

6.4 Situational Judgment Questionnaire

Q1.1 Instructions

We are interested in understanding the effectiveness of implementation of the Code of Conduct. You will be presented with information relevant to two parts of the CoC (Client's Interests and Financial Security) and asked to answer some questions about it. Please be assured that your responses will be kept completely anonymous and confidential and will not be accessible to the management of BNP Paribas. This survey is carried out by independent researchers from the University of Geneva and your responses will be anonymized (codified) before data analysis. Only aggregated group results will be provided to your employer BNPP.

The study consists of two parts. The first one relates directly to the code of conduct and will take 20-40 minutes to complete. The second one consists of a set of 4 questionnaires and will take about 20 min. You can see your progress on the red bar on top of the page.

You may notice that some questions will appear twice in this survey. It is not an error.

Your participation in this research is voluntary. Thus, we kindly ask for your voluntary consent to use your responses for scientific research by authorized researchers from the University of Geneva. If you agree to participate, we would greatly appreciate if you could fill in both parts of the survey. If you would like to contact the Principal Investigator in the study to discuss this research, please e-mail Dr xyz. To thank you for your participation, 10 randomly selected participants will be awarded a gift certificate for chocolates (value 50 CHF)

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age.

6.4.1 Q2.1 Block 1: Clients' Interest

You will see hypothetical situations regarding **Client's Interest**. In each one, you will be asked to indicate your willingness or probability of performing a certain action. You can indicate it on the provided likelihood scale:

0% = I would definitely not do that

100% = I would definitively do that

Please note that for **some of the questions there *is* one correct response (yes or no)**. However, **for some of them – *there is no one correct answer***. Therefore, please feel free to use the entire scale to respond according to your decision-making criteria.

6.4.1.1 Ambiguous questions

Q2.3 A client is a young entrepreneur. His/her risk profile is *moderate* but you know that setting it to *advanced* would offer him/her access to a wider palette of financial products.

	0% 100%
How likely are you to ask him/her to recommend increasing his risk profile? ()	

Q2.4 A long-term client has recently fallen very ill and you suspect that his risk profile has therefore changed. The upcoming meeting with the client should take place in 8 months. Their portfolio is performing well.

	0% 100%
How likely are you to call the client immediately to talk about his risk profile? ()	

Q2.5 A new pricing scheme is introduced by the bank. The fees have increased for certain services. It implies additional costs for one client and you notice that the service offered in return doesn't correspond to his needs.

0% 100%

How likely are you to call the concerned client and inform them about it? ()	

Q2.6 You have noticed that one of the bank's funds is performing alarmingly worse than predicted. You remember having recommended it to one of the long-term clients who subsequently purchased it following your recommendation. The next meeting with this client is scheduled in 6 months.

0% 100%

How likely are you to immediately inform him about the underperformance of the fund? ()	

6.4.1.2 Non-Ambiguous questions

Q2.2 After a client meeting, you notice that the client forgot to cross a box in the email waiver document you handed him.

0% 100%

How likely are you to call him for verification? (Correct Answer : 100%)	

Q2.7 Your manager sets a target for the sale of a newly launched secure structured product. Clearly, it is high on the team priority list. The product meets the client's needs and fits her risk profile well. There is also an attractive launch offer that will soon end. You leave the client a voice message but they haven't returned your call.

0% 100%

How likely are you to buy the product immediately without contacting the client? (Correct Answer : 0%)	

Q2.8 The client is a widow who has heard about hedge funds and wants to invest in a specific event driven hedge fund that has performed very well recently. Her risk profile is low.

0% 100%

How likely are you to allocate 10 % of her wealth in that hedge fund? (Correct Answer : 0%)	

Q2.9 The pricing of banking services has been reviewed. You find that due to a pricing error a client has been charged too much for some services.

0% 100%

How likely are you to credit back your client's account? (Correct Answer : 100%)	

Q2.10 Your manager sets a target for the sale of a newly launched secure structured product. Clearly, it is high on the team priority list. A client calls and you mention the new product. The client does not clearly understand this type of product.

0% 100%

How likely are you to recommend that he/ she purchases the product? (Correct Answer : 0%)	

Q2.11 You detect a pricing error (in favor of the client) in a client's reporting data. You correct it.

0% 100%

How likely are you to call the client to inform about it? (Correct Answer: 100%)	

Q2.12 One of your conservative clients without mandate wants to delegate the management of his portfolio.

0% 100%

In order to improve the expected return, what is the likelihood that you would offer him a lombard loan for a value of 40% of his portfolio? (Correct Answer: 0%)	

Q2.13 One of your colleagues asks you to validate alongside her a $5'000 transfer as a holiday deposit for a well-known client of your market.

0% 100%

What is the likelihood that you will validate without getting further information? (Correct Answer : 0%)	

6.4.2 Intersection Questions

6.4.2.1 Ambiguous questions

Q2.14 A loyal Swiss client asks the Bank to make a transaction to pay her architect on their Swiss account. The transaction is for 250’000 USD and the client asks for urgent execution.

	0% 100%
How likely are you to investigate the supplier’s background? ()	

Q2.15 Your team leader asks you to co-sign a letter to validate a complex transaction for a valued client in replacement for an absent colleague.

	0% 100%
How likely are you to demand more information? ()	

Q2.16 You detect a pricing error (in favor of the bank) in a client’s reporting data. You correct it.

	0% 100%
How likely are you to call the client to inform about it? ()	

6.4.2.2 Non-Ambiguous questions

Q2.17 A colleague of yours asks you to perform a transaction in his place while he’s blocked in a meeting with a client. You do not have all the information but he tells you that the client is in a hurry.

	0% 100%
How likely are you to carry out the transaction? (Correct Answer : 0%)	

Q2.18 Your manager sets a target for the sale of a newly launched product. Clearly, it is high on the team priority list. You know a client for whom this offer could be of interest, he / she lives in Ferney-Voltaire

	0% 100%
How likely are you to call the client in France to propose them the new product? (Correct Answer : 0%)	

Q2.19 A loyal Swiss client asks the Bank to make a transaction to pay a third-party supplier on their Swiss account. The transaction is for 250’000 USD and the client asks for urgent execution and the client insists and explains that this transaction is vital for his business.

	0% 100%
How likely are you to execute the transaction immediately, based on your previous experience of similar situations? (Correct Answer : 0%)	

Q2.20 A client moved to the US. You sent him documents to sign but it has been six months and he has not returned them.

0% 100%

How likely are you to report this to the US Committee? (Correct Answer : 100%))	

Q2.21 A client travels to the US for medical treatment. Her condition is serious and she has been remaining there already for more than 2 months. She asks you for a money transfer of 50'000 $ to the US to cover her medical expenses.

0% 100%

How likely are you to inform the US Committee? (Correct Answer : 100%))	

6.4.3 Q4.1 Block 2: Financial Security

You will see hypothetical situations regarding **Financial Security**. In each one, you will be asked to indicate your willingness/probability of performing a certain action. You can indicate it on the provided likelihood scale.

0% = I would definitely not do that

100% = I would definitively do that

Please note that for some of the questions there is one correct response (yes or no). However, for most of them – there is no one correct answer. Therefore, please feel free to use the entire scale to respond according to your decision-making criteria.

6.4.3.1 Ambiguous questions

Q4.2 A client asks you to bring him 5'000CHF in cash while he's on holidays in Verbier.

	0% 100%
How likely are you to comply with her request? ()	

Q4.5 You understand from a conversation with your client, a businessperson active in the Telecom industry, that he has a relation with a Russian parliamentary. You checked the lists and nothing appeared.

	0% 100%
How likely are you to report this information to compliance? ()	

Q4.8 A trusted colleague asks you to validate an unusual transaction in her/his absence.

	0%	100%
How likely are you to check the background and purpose of this transaction? ()		

6.4.3.2 Non-Ambiguous questions

Q4.3 You suspect that a Swiss client who's been with the bank for over 30 years has double nationality (Swiss-US). However, he always shows only his Swiss passport.

	0%	100%
How likely are you to ask to see his second passport the next time you meet him? (Correct Answer : 100%)		

Q4.4 A very well-known client sends in a request for an 25'000.- CHF transfer titled "personal expenses". You know that this client likes to keep things discrete and is a little susceptible.

	0%	100%
How likely are you to ask him to explain what this is for? (Correct Answer : 100%)		

Q4.6 A client's account hasn't been active for a long time and now several transactions have recently been executed in less than a week via the e-banking platform.

	0%	100%
How likely are you to call and ask for clarifications from the client? (Correct Answer : 100%)		

Q4.7 A Swiss client is on holidays in his house on the Côte d'Azur. He calls for an urgent money transfer of €50'000.

	0%	100%
How likely are you to immediately authorise the transaction? (Correct Answer : 0%)		

Q4.9 A client asks you to bring him 5'000CHF in cash while he's on holidays in Megève.

	0%	100%
How likely are you to comply with his request? (Correct Answer : 0%)		

Q4.10 Browsing through Facebook last weekend you find out by accident that a client is a distant cousin of a public personality who has recently been accused of money laundering.

	0%	100%

How likely are you to report this information to compliance? (Correct Answer : 100%)	

Q4.11 Browsing Facebook last weekend, you find out by accident that a client seems to be a distant cousin of a Hollywood personality who has recently been implicated in a sexual harassment scandal. The next annual meeting with him is not due before next 8 months.

0% 100%

How likely are you to call and ask him about this immediately? (Correct Answer : 100%)	

Q4.12 A client requests the issue a letter of guarantee by the Bank for the export of agricultural products to Cuba. You know that she is very active in the South American area.

0% 100%

How likely are you to authorise the issuing of the letter? (Correct Answer : 0 %)	

Q4.13 A Geneva-based philanthropist (private person) asks you to transfer (10’000 USD) to the branch of the Red Cross in Syria.

0% 100%

How likely are you to carry it out? (Correct Answer : 0 %)	

7 References

Adelstein, J., & Clegg, S. (2016). Code of Ethics : A Stratified Vehicle for Compliance. *Journal of Business Ethics*, (February 2015), 53–66. https://doi.org/10.1007/s10551-015-2581-9

Aquino, K., Freeman, D., Reed, A., Lim, V. K. G., & Felps, W. (2009). Testing a social-cognitive model of moral behavior: The interactive influence of situations and moral identity centrality. *Journal of Personality and Social Psychology*, *97*(1), 123–141. https://doi.org/10.1037/a0015406

Babri, M., Davidson, B., & Helin, S. (2021). *An Updated Inquiry into the Study of Corporate Codes of Ethics : 2005 – 2016*. *Journal of Business Ethics* (Vol. 168). Springer Netherlands. https://doi.org/https://doi.org/10.1007/s10551-019-04192-x

Baron, J., & Leshner, S. (2000). How serious are expressions of protected values? *Journal of Experimental Psychology: Applied*, *6*(3), 183–194. https://doi.org/10.1037/1076-898X.6.3.183

Bascle, G. (2016). Toward a Dynamic Theory of Intermediate Conformity. *Journal of Management Studies*, *53*(2), 131–160. https://doi.org/10.1111/joms.12155

Berns, G. S., Bell, E., Capra, C. M., Prietula, M. J., Moore, S., Anderson, B., et al. (2012). The price of your soul: Neural evidence for the non-utilitarian representation of sacred values. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *367*(1589), 754–762. https://doi.org/10.1098/rstb.2011.0262

CFA, & Institute. (2017). Standards of Practice Guidance 2014. *Ethics and the Investment Industry Updated October 2017*. https://www.cfainstitute.org/en/ethics-standards/codes/standards-of-practice-guidance/ethics-and-investement-industry. Accessed 18 February 2021

Cialdini, R. B., & Goldstein, N. J. (2004). Social Influence: Compliance and Conformity. *Annual Review of Psychology*, *55*(1), 591–621. https://doi.org/10.1146/annurev.psych.55.090902.142015

Cohn, A., Fehr, E., & Marechal, M. A. (2014). Business culture and dishonesty in the banking industry. *Nature*, *516*(729), 86–89. https://doi.org/10.1038/nature13977

Cornelissen, J. P., & Werner, M. D. (2014). Putting Framing in Perspective: A Review of Framing and Frame Analysis across the Management and Organizational Literature. *The Academy of Management Annals*,

8(1), 181–235. https://doi.org/10.1080/19416520.2014.875669

Derek, Q., Yang, H., Lievens, F., & Mcdaniel, M. A. (2018). Optimizing the validity of situational judgment tests : The importance of scoring methods. *Journal of Vocational Behavior*, *104*(November 2017), 199–209. https://doi.org/10.1016/j.jvb.2017.11.005

Desai, S. D., & Kouchaki, M. (2017). Moral symbols: A necklace of garlic against unethical requests. *Academy of Management Journal*, *60*(1), 7–28. https://doi.org/10.5465/amj.2015.0008

Dogan, A., Morishima, Y., Heise, F., Tanner, C., Gibson, R., Wagner, A. F., & Tobler, P. N. (2016). Prefrontal connections express individual differences in intrinsic resistance to trading off honesty values against economic benefits. *Scientific Reports*, *6*(April), 1–12. https://doi.org/10.1038/srep33263

Dyck, A., Morse, A., & Zingales, L. (2010). Who Blows the Whistle on Corporate Fraud? *The Journal of Finance*, *65*(6), 2213–2253. https://doi.org/10.1111/j.1540-6261.2010.01614.x

Feldman, D. C. (1984). The Development and Enforcement of Group Norms, *9*(1), 47–53.

Gibson, R., Tanner, C., & Wagner, A. F. (2013). Preferences for truthfulness: Heterogeneity among and within individuals. *American Economic Review*, *103*(1), 532–548. https://doi.org/10.1257/aer.103.1.532

Grosch, K., & Rau, H. A. (2017). Gender differences in honesty: The role of social value orientation. *Journal of Economic Psychology*, *62*, 258–267. https://doi.org/10.1016/j.joep.2017.07.008

Gurun, U. G., Stoffman, N., & Yonker, S. E. (2018). Trust busting: The effect of fraud on investor behavior. *The Review of Financial Studies*, *31*(4), 1341–1376.

Harris, T., & Hardin, J. W. (2013). Exact Wilcoxon signed-rank and Wilcoxon Mann-Whitney ranksum tests. *Stata Journal*, *13*(2), 337–343. https://doi.org/10.1177/1536867x1301300208

Helin, S., Jensen, T., Sandström, J., & Clegg, S. (2011). On the dark side of codes: Domination not enlightenment. *Scandinavian Journal of Management*, *27*(1), 24–33.

Helin, S., & Sandström, J. (2007). An inquiry into the study of corporate codes of ethics. *Journal of Business Ethics*, *75*(3), 253–271.

Hirsh, J. B., Lu, J. G., & Galinsky, A. D. (2018). Moral Utility Theory: Understanding the motivation to

behave (un)ethically. *Research in Organizational Behavior*, *38*, 43–59. https://doi.org/10.1016/j.riob.2018.10.002

Huang, P. H., & Wu, H. M. (1994). More Order Without More Law: A Theory of Social Norms and Organizational Cultures. *The Journal of Law, Economics, and Organization*, *10*(2), 390–406. https://doi.org/10.1093/oxfordjournals.jleo.a036856

IBM Corp. (2016). IBM SPSS Statistics for Windows, Version 24.0. Armonk, NY: IBM Corp. https://www-01.ibm.com/support/docview.wss?uid=swg21476197

Jensen, T., Sandström, J., & Helin, S. (2015). One code to rule them all: Management control and individual responsibility in contexts. *Business and Professional Ethics Journal*, *34*(2), 259–290.

Kahneman, D. (1984). Choices , Values , and Frames. *American Psychologist*, *39*(4), 341–350.

Kaptein, M. (2011). Toward Effective Codes: Testing the Relationship with Unethical Behavior. *Journal of Business Ethics*, *99*(2), 233–251. https://doi.org/10.1007/s10551-010-0652-5

Kaptein, M., & Schwartz, M. S. (2007). The Effectiveness of Business Codes: A Critical Examination of Existing Studies and the Development of an Integrated Research Model. *Journal of Business Ethics*, *77*(2), 111–127. https://doi.org/10.1007/s10551-006-9305-0

Karpoff, J. M., Lee, D. S., & Martin, G. S. (2008). The cost to firms of cooking the books. *Journal of financial and quantitative analysis*, *43*(3), 581–611.

Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad Apples, Bad Cases, and Bad Barrels: Meta-Analytic Evidence About Sources of Unethical Decisions at Work. *Journal of Applied Psychology*, *95*(1), 1–31. https://doi.org/10.1037/a0017103

López, D., Eduardo, J., Dittmar, C., Patricia, J., & Portillo, V. (2021). New Directions in Corporate Social Responsibility and Ethics : Codes of Conduct in the Digital Environment. *Journal of Business Ethics*, (0123456789). https://doi.org/10.1007/s10551-021-04753-z

Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, *45*(6), 633–644. https://doi.org/10.1509/jmkr.45.6.633

Mcdonald, G. M. (2009). An anthology of codes of ethics. *European Business Review*, *21*(4), 344–372. https://doi.org/10.1108/09555340910970445

McNamara, T. P. (2005). *Semantic priming: Perspectives from memory and word recognition*. Psychology Press.

Peterson, D., Rhoads, A., & Vaught, B. C. (2001). Ethical beliefs of business professionals: A study of gender, age and external factors. *Journal of Business Ethics*, *31*(3), 225–232. https://doi.org/10.1023/A:1010744927551

Schwartz, M. S. (2004). Effective corporate codes of ethics: Perceptions of code users. *Journal of Business Ethics*, *55*(4), 323–343. https://doi.org/10.1007/s10551-004-2169-2

Sheedy, E. A., Griffin, B., & Barbour, J. P. (2017). A Framework and Measure for Examining Risk Climate in Financial Institutions. *Journal of Business and Psychology*, *32*(1), 101–116. https://doi.org/10.1007/s10869-015-9424-7

Statler, M., & Oliver, D. (2016). The Moral of the Story: Re-framing Ethical Codes of Conduct as Narrative Processes. *Journal of Business Ethics*, *136*(1), 89–100. https://doi.org/10.1007/s10551-014-2505-0

Stevenson, B., & Wolfers, J. (2011). Trust in public institutions over the business cycle. *American Economic Review*, *101*(3), 281–287.

Tanner, C., Ryf, B., & Hanselmann, M. (2009). Geschützte Werte Skala (GWS). *Diagnostica*, *55*(3), 174–183. https://doi.org/10.1026/0012-1924.55.3.174

Tett, G. (2009). *Fool's gold: How unrestrained greed corrupted a dream, shattered global markets and unleashed a catastrophe*. Hachette UK.

van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, *101*(2), 449–472. https://doi.org/10.1016/j.jfineco.2011.03.006

Voorhoeve, A., Binmore, K., Stefansson, A., & Stewart, L. (2016). Ambiguity attitudes, framing, and consistency. *Theory and Decision*, *81*(3), 313–337. https://doi.org/10.1007/s11238-016-9544-1

Walsh, J. P. (1995). Managerial and Organizational Cognition: Notes from a Trip Down Memory Lane.

Organization Science, *6*(3), 280–321. http://www.jstor.org/stable/2635252

Weaver, G. R., & Treviño, L. K. (1999). Compliance and Values Oriented Ethics Programs: Influenceson Employees' Attitudes and Behavior. *Business Ethics Quarterly*, *9*(2), 315–335. https://doi.org/10.2307/3857477

Welsh, D. T., & Ordóñez, L. D. (2014). Conscience without cognition: The effects of subconscious priming on ethical behavior. *Academy of Management Journal*, *57*(3), 723–742. https://doi.org/10.5465/amj.2011.1009

Zey, M. A. (2015). *Rational Choice and Organization Theory*. *International Encyclopedia of the Social & Behavioral Sciences: Second Edition* (Second Edi., Vol. 19). Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.73109-6

Zingales, L. (2015). Presidential address: Does finance benefit society? *The Journal of Finance*, *70*(4), 1327–1363.

8 Endnotes

[1] Fraud has important negative consequences for finance as well as for financial markets more generally (Dyck et al. 2010; Gurun et al. 2018; Karpoff et al. 2008)

[2] 'Priming' refers to the activation of a cognitive frame as a knowledge structure which can affect the speed with which it is accessed and directs and guides information processing.

[3] Results of separate analyses on a reduced dataset including solely participants with job title "relationship manager" (n=39) and only client-facing personnel (n=53) are available in the robustness checks presented in Appendix 6.1.2.2.

[4] We would like to thank an anonymous reviewer for highlighting this issue.

[5] In unreported results available upon request, we also separately investigated non-ambiguous questions that had been asked twice – the intersection questions. Fitting the data into our regression models, we found that being a Woman was a strong positive predictor of accuracy under both the CI (B=.404***) and FS frame (B=.259*), explaining on its own 15% of variance under the CI frame, and 6.7% in the FS. Under the FS frame, the perception that risk management is not avoided in the organization was also related to higher accuracy (B=-.216*).

[6] If the continuous scale we used were to be converted to a categorical Likert scale measuring response confidence in 5 bins, as typically recommended in the literature (Derek et al. 2018), a conservative threshold for a highly confident answer would be set at ≥80% for 'yes' and ≤20% for 'no'.

[7] Among other drivers of the wealth management employees' decision making, we noted the puzzling negative influence of basic financial literacy on pro-ethical choice tendency in dilemmas in the CI domain. This effect is

ever more puzzling as advanced Financial Literature was positively related to pro-integrity decisions. It could be due to a more general phenomenon that has been observed, whereby economics (and perhaps financial) education leads individuals to find a justification for selfish and dishonest decision-making (Mazar et al. 2008), which could diminish their tendency to decide in favor of pro-integrity in moral dilemmas. However, we are cautious about the robustness of this factor as the variable "score on basic financial literacy questionnaire" was positively correlated with tenure and negatively correlated with female gender and could anticorrelate with other latent variables. It could be that longer-tenured employees are used to the previously prevailing norms and regulations that put less emphasis especially on compliance, and they have not adapted well to correctly answer the questions we posed. Or that they simply forget basic principles in finance though they master topics more related to their daily business activities.

In order to test whether this puzzling result was not driven by multicollinearity between two correlated factors, namely Basic FinLit and Advanced FinLit, we reran the analyses including only one of the two metrics, "Advanced FinLit".

Results of these analyses can be found in Appendix 6.1.2, Model 4 in Table S1 and Table S2.

[8] We test this conjecture by adding accuracy in non-ambiguous situations as an explanatory variable in the regression model in Model 5, Table S1 in Appendix 6.1.2.1 and find interestingly that this variable helps explain ambiguous choices as well.

[9] Detailed results available upon request.

[10] In the forward selection method for model selection, in each forward step, one variable that gives the single best improvement to the model is added. By contrast, in the enter method, all independent variables are included in the regression equation at once.

about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities.*

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

ECGI Working Paper Series in Finance

www.ecgi.global/content/working-papers

Electronic Access to the Working Paper Series

The full set of ECGI working papers can be accessed through the Institute's Web-site (www.ecgi.global/content/working-papers) or SSRN:

Finance Paper Series	http://www.ssrn.com/link/ECGI-Fin.html
Law Paper Series	http://www.ssrn.com/link/ECGI-Law.html