How Much for Your Honesty?
Honesty as a Protected Value and its Implications for Choices in Business

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Abstract
Although examples of deception and fraud in business have generated widespread interest in the motivations for honest behavior, little is known about individual differences in the propensity to tell the truth. This paper highlights the role of honesty as a protected value, maintaining that some individuals feel strongly committed to honesty and motivated to defend this position, even when it is costly. In two experiments we tested honesty’s power to shape the impact of monetary incentives. Experiment 1 investigated managerial choices and demonstrated that variation in honesty helped to explain heterogeneity in resistance to (real) financial incentives and absolute trade-off resistance. In Experiment 2, we studied the impact of the “perceived” protected value for honesty on investors’ decisions and found that CEOs perceived as more committed to honesty were more likely to attract investors, and to foster absolute reliance to their statements, regardless of expected monetary benefits.

Keywords: honesty, protected values, sacred values, morality, business.
Honesty as a Protected Value and its Implications for Choices in Business

Business scandals involving deception and fraud by business executives (e.g., Kenneth Lay, Bernard Madoff) and corporations (e.g., WorldCom, Satyam), as well as the current financial crisis, have raised questions about the conditions and motivations underlying (dis)honest behavior. The most influential view on ethics in business is taken by standard economic theory which “is typically based on the self-interest hypothesis, i.e., on the assumption that all people are exclusively motivated by their material self-interest” (Fehr & Fischbacher, 2002, p. 1). According to this perspective, individuals are opportunists who behave honestly only when such a behavior is beneficial to them (e.g., Grover, 2005; Somanathan & Rubin, 2004; Stevens, 2002).

Indeed, some scholars have asked why should one be honest when honesty does not pay and when lying is rarely detected (Bhide & Stevenson, 1990). Others stated that behaviors such as deception, misrepresentation of information or bluffing are tactics that are not only commonly used but are also considered as essential for effective performance (Lewicki & Robinson, 1998). Shleifer (2004) emphasized that market competition inadvertently drives the development of lying and ethically questionable practices. Clearly, such views portray a fairly pessimistic perspective about the chances to increase compliance with honesty. They lead to the conclusion that treachery is necessary to be successful in business.

Such models, however, neglect the fact that individuals vary in their propensity to tell the truth, and ignore the role of ethical values (such as honesty) as moral guiding principles. Current social and cognitive psychological theorizing posits that individuals may endorse protected values (sometimes referred to as sacred values, taboo values, moral mandates). These are core values which individuals believe ought to be absolute and protected from trade-offs, in particular from trade-offs against monetary benefits (Atran, Axelrod, & Davis, 2007; Baron & Spranca, 1997; Lichenstein, Gregory, & Irwin, 2007; Skitka, 2002; Tanner, 2009; Tanner & Medin, 2004; Tetlock, 2003; Tetlock, Kristel, Elson, Green, & Lerner, 2000). Applied to honesty, treating honesty as a protected value implies that honesty is experienced as a “deontic virtue” (Folger, 2001). Such a value is “not for sale,” and therefore less corruptible by financial incentives.
In contrast to previous work, we suggest that individual differences in honesty levels determine why one behaves honestly only when it is beneficial to him or her, while another one behaves honestly, even when it is costly. To this end, the present research explores the role of honesty as a protected value and of monetary incentives in predicting manager’s and investor’s choices. We propose that the extent to which individuals consider honesty as a protected value largely determines the regulatory potency of monetary incentives. In doing so, this research also contributes to a more optimistic view of human nature than portrayed above by suggesting that honesty may pay off in business decisions. Of course, there are many forms of dishonesty (lying, deceiving, stealing, cheating, fraud, etc.) and a number of definitions of honesty have been advanced. We define dishonesty as the delivery of incorrect information with the intention to mislead other people and to increase one’s payoff (e.g., Grover, 1997).

We wished to test our ideas in experiments simulating realistic business contexts and where living up to honesty entails a sacrifice. In our experiments, we therefore confronted people with trade-offs between real or expected monetary gains and honesty. In Experiment 1, we ask whether individuals in the role of managers treating honesty as a protected value keep behaving honestly, even when it is costly. In Experiment 2, we examine the impact of perceived protected values for honesty on investment decisions. We ask whether investors value honesty in others, even at the risk of foregoing personal financial gains.

Consequentialism and Deontology

The common view that people only behave honestly when it is beneficial for them also posits that decisions are a function of their consequences alone. Such a view derives from consequentialism. In fact, most judgment and decision-making theories have depicted people as “intuitive economists” (Tetlock, 2002), who base their decisions exclusively on the desirability and likelihood of the consequences associated with choice alternatives (for reviews, see Bennis, Medin, & Bartels, 2010; Zey, 1992).

Past research already emphasized essential limitations of the cognitive and computational perspectives of traditional decision theory by identifying that people often use simplifying heuristics when making decisions (e.g., Tversky & Kahneman, 1974). More recently, issues such as the role of emotions, or the fact that people tend to reach (moral) judgments on the basis of affective intuitions rather than on deliberate or analytical reasoning (e.g., Haidt, 2001;
Honesty as Protected Values

Loewenstein, Weber, Hsee, & Welch, 2001) has become a subject of major discussions. Perhaps the most striking difference between various perspectives on decisions, however, has emerged most recently by highlighting the contrast between consequentialist and deontological perspectives.

Deontology derives from the Greek word deon (duty); its focal point is the concept of duty. Unlike consequentialism, deontological principles refer to morally mandated actions or prohibitions, such as the duty to keep promises or the duty not to lie (Darwall, 2003; Greene, 2008). Moral rightness or wrongness resides in the nature of the act per se (“I did it because it was the right thing to do”), whereas consequences are at best secondary. Such moral “oughts” are assumed to play a distinct role because they are ends in themselves, not merely means to maximize personal utilities (e.g., Montada, 1998). Recent research also shows that consequentialist and deontological judgments are associated with different brain activities (e.g., Greene, Nystrom, Engell, Darley, & Cohen, 2004). Thus, modeling decision-making solely in consequentialist terms is of limited value, because it ignores the role of moral principles (Folger, 2001; Greene, 2008; Tanner & Medin, 2004; Tanner, Medin & Iliev, 2008).

Protected Values

Protected values (or sacred values, taboo values, moral mandates, for similar notions) are defined as core values individuals are strongly committed to and which they deem as absolute and excluded from trade-offs (Atran, Axelrod, & Davis, 2007; Baron & Spranca, 1997; Skitka, 2002; Tanner, 2009; Tanner, Ryf, & Hanselmann, 2009; Tetlock, 2003; Tetlock et al., 2000). They differ from instrumental ones by being rooted in moral norms that “drive action in ways dissociated from prospects of success” (Atran et al, 2007, p. 1039). Importantly, protected values meet specific criteria that go beyond simply valuing honesty. Three characteristics deserve specific attention:

(1) Protected values are associated with enhanced or even absolute trade-off resistance, reflecting non-instrumental defense reactions (Atran et al, 2007; Baron & Spranca, 1997; Lichtenstein et al., 2007; Tetlock et al., 2000). This presents a challenge for traditional decision-making models, which assume that trade-off are always possible. Indeed, individuals tend to respond with harsh reactions to violations of such values or moral mandates. Such reactions will typically involve moral outrage (e.g., Tetlock et al., 2000; Tetlock, 2003), increase of social and
physical distance to the transgressors (Skitka, Bauman, & Sargis, 2005; Wright, Cullum, & Schwab, 2008), or even the intention to sanction the transgressors (Atran, Axelrod, & Davis, 2007; Ginges, Atran, Medin, & Shikaki, 2007).

However, the belief that sacred values ought to be protected from trade-offs neither implies that individuals always show absolute trade-off reluctance (Bartels, 2008, Tetlock, 2003), nor that people are “immune to material considerations” (Atran, 2007, p. 1039). This emphasis is important. The protected value approach posits that individuals are sincere about their positions, but there may be circumstances in which the costs of upholding protected values become unbearable (Tetlock, 2003). Nonetheless, recent research suggests that even under circumstances where trading off protected values appear to be unavoidable, people with high levels of protected values are more likely than other people to search for ways that maximize the protection of the value at risk (Bartels & Medin, 2007). Other studies have shown that people are emotionally stressed when compromising values that they deem as inviolable (Hanselmann & Tanner, 2008; Lichtenstein et al., 2007). These findings indicate that the individual’s commitments to them are real even when trade-off reluctance is not expressed in its strongest version (Baron & Leshner, 2000).

(2) People endorsing protected values are often prone to nonconsequentialist reasoning. For example, Baron and Spranca (1997) found that sacred values are associated with insensitivities to the magnitude and probability of outcome occurrences. Another implication of deontological reasoning is that it should make a difference whether outcomes derive from an act or an omission, whereas from a consequentialist perspective, this difference should be irrelevant. Thus, if protected values reflect deontological perspectives, involvement of protected values should also go along with a greater sensibility to distinguish between acts and omissions. Consistent with this conjecture, studies have shown that people endorsing protected values and a deontological focus are more sensitive to the act-omission distinction than people with a consequentialist focus (Tanner, 2009; Tanner et al., 2008). (See Bartels & Medin, 2007, for exceptions under which people endorsing protected values become utilitarian.)

(3) Protected values result in stronger resistance to situational influences. First evidence for this claim has been found in studies investigating framing effects (Tanner & Medin, 2004; Tanner et al., 2008). Framing effects stand for subtle contextual influences on decision-making (Tversky & Kahneman, 1981). They refer to the effect that different but otherwise equivalent
descriptions of choice problems give rise to preference reversals. In the risky-choice framing task, the typical finding is that people are sensitive to whether the outcomes of the options are described in terms of gains or losses (positive vs. negative frame): People are more risk-seeking in the negative frame and more risk-averse in the positive frame. Tanner and colleagues slightly modified the task to manipulate both whether the outcomes were positively or negatively framed and whether the outcomes were related to an action or an omission. Notably, the results revealed that people endorsing sacred values and deontological orientations were immune to the framing of the outcomes, while framing effects were only demonstrated by participants high on consequentialism.

Importantly, protected values are related but not identical to other value concepts, commonly seen as stable beliefs about desirable states or conducts of behaviors (e.g., Rokeach, 1973; Schwartz, 1992). While values guide actions by affecting preferences, protected values are experienced as non-negotiable (trading them of elicits outrage), and they display an affinity for non-consequentialist reasonings (Tanner, Medin & Iliev, 2008). Protected values have intrinsic value, which manifests itself through non-instrumental defense reactions (Atran, Axelrod, & Davis, 2007). Furthermore, consistent with the notion of moral mandates put forward by Skitka, protected or sacred values are similar to strong and important attitudes, but include the layer of strong moral conviction (e.g., Skitka, Bauman, & Sargis, 2005). Tetlock (2002) used for this kind of mindset the metaphor of the “intuitive moralist-theologian”.

The aim of the present research is to examine how the specific attributes of protected values (such as trade-off reluctance, absolute trade-off resistance, resistance to situational influences) come into play in business decision-making situations that tap into honesty and how people’s levels of protected values for honesty interact with monetary gains.

**Overview of Experiments and Predictions**

We wished to cast the experiments in realistic business contexts that involve conflicts between personal gains and honesty. *Earnings management* is such a context. It occurs when managers change reported earnings to mislead stakeholders about the accurate economic performance of the company (Healy & Wahlen, 1999). Hence, earnings management can be viewed as a form of deceiving or dishonesty. Typically, a manager’s salary has a variable
component that is tied to the announced earnings. That is, managers can gain financially from behaving dishonestly.

We explored the possible implications of honesty as a protected value from the perspective of the manager’s view (Experiment 1) and the investor’s view (Experiment 2). The goal of Experiment 1 was to examine how individuals endorsing honesty as a protected value respond to trade-offs between (real) monetary gains and honesty. For this purpose, each participant was placed in the situation of a manager and confronted with multiple choice tasks; in each of them, he or she had to choose between an honest or dishonest option. The situations only varied in terms of opportunity costs that were associated with behaving honestly. That is, managers lost more or less of their variable salary when selecting the honest option. We used real financial consequences in this study to provide a stronger test of our predictions than hypothetical questions allow. Standard decision models predict that managers are likely to lie when they benefit from doing so by getting an increased salary. In contrast, we conjectured that the impact of opportunity costs will be shaped by the extent to which individuals consider honesty as a protected value. Specifically, we hypothesized that with an increasing level of protected values for honesty, individuals would become more resistant to financial costs in their decisions, and also more likely to demonstrate absolute trade-off reluctance.

These predictions simply follow from the claim that trade-off reluctance is a crucial property of protected values and that people endorsing such values are less sensitive to situational influences. People endorsing protected values are therefore predicted to be less inclined to trade-off honesty for their material self-interest, and more willing to forego monetary benefits. Of course, it is impossible to literally test absolute trade-off reluctance because one cannot offer infinite or extremely large sums of money in an experiment. Therefore, when we refer to absolute trade-off reluctance, we mean absoluteness relative to the monetary gains offered within the sample.

The goal of Experiment 2 was to examine the possible implications of perceived honesty as a protected value in investment decisions. For this purpose, each participant set in the situation of an investor had to decide in which of two companies he or she wanted to invest. The situations only varied in terms of announced future returns by the CEOs. Again, the experiment simulated typical features of real business decisions. These entail a) that investment decisions are usually about choosing between several alternatives (companies), and b) that investors have
incomplete information about CEOs and need to infer CEOs’ characteristics from their observed behaviors. In the study, participants were provided with partial information about two companies and their CEOs based upon which they had to infer which CEO was more or less committed to honesty.

We expected that the impact of announced returns would be shaped by the level of protected values for honesty attributed to the corresponding CEOs. Specifically, we hypothesized that as a CEO was perceived as relatively more committed to honesty, the impact of his announced future returns on investment decisions would decrease. We also expected that individuals would be more likely to even demonstrate absolute reliance on the CEO that they perceived as relatively more committed to honesty, irrespective of the future returns announced by both CEOs. These predictions follow from the idea that honesty as a protected value implies a manager’s obligation to live up to honesty, fostering investors’ trust into returns a CEO predicts.

The extent to which participants treated honesty as a protected value or attributed honesty as a protected value to others was separately assessed using a measure by Tanner et al. (2009). This measure consists of two subscales designed to assess the level of protected values: One subscale measures protected values more “indirectly” by assessing people’s moral outrage reactions to violations of norms and principles. The second subscale assesses such values more “directly” by asking questions that tap into important features of protected values (e.g., unwillingness to sacrifice a value, rejection of cost-benefit comparisons, incommensurability, etc.). In previous research, the subscales have been found to be highly correlated and to have good internal consistency, reliability and validity (Tanner et al., 2009). Further validation studies revealed that this measure reflects strong moral stances and core beliefs that are related but go beyond strong attitudes (Tanner et al., 2009). It correlates positively with moral identity (Reed & Aquino, 2003), positively with deontology and intuitionism (Witte & Doll, 1995) and ethical idealism (Forsyth, 1980). Finally, the measure was found to not be correlated with measures of social desirability (Merz & Tanner, 2009).

Experiment 1

Methods
Participants and design. A total of 361 students participated in this experiment, ranging in age from 18 to 53 years ($M = 24$ years). Of this sample, 52% were psychology and 48% economics students; 46% were women. Furthermore, 337 individuals completed the online and 24 the paper-pencil version of the study.

The design contained repeated measures with five choices in favor of the honest (vs. dishonest) option as the dependent variable. The choices only differed in opportunity costs. The cost of behaving honestly ranged from CHF 0.00 (not-costly) to CHF 1.20 (costly), in steps of 30 cents. Opportunity costs and honesty as protected values ($PV_{honesty}$) served as independent variables.

Participants were randomly assigned to one of two orders of the five choice situations (from low to high opportunity costs or vice versa) and one of two measurement times of $PV_{honesty}$ (prior or after the choice tasks). These variations did not affect any result. We neither found any differences between psychology and economics students, men and women, nor between online vs. paper-pencil versions of the study.

Procedure. Participants were informed that they would be cast in the role of a CEO who is facing multiple occasions to announce earnings per share (EPS) of his or her firm. They were told that the CEO’s salary compensation consisted of a fixed and a variable component, the latter depending on the announced earnings. Then, they learned that this quarter the market expected an EPS of 35 cents. The CEO, however, knew that an EPS of 31 cents would reflect the true earnings of the firm. Participants were told that they would have the possibility of increasing the announced EPS to 35 cents using permissible accounting procedures. It would be their decision to announce an EPS of 31 or 35 cents.

Furthermore, participants were informed that they would individually get a payment of CHF 5 for their participation in the study, and an additional amount that depended on their choices. This additional experimental payoff was converted into real money at the rate of CHF 100,000 = CHF 0.5. Overall, participants could earn between CHF 5 to CHF 20 (≈ $19). Crucially, participants earned less when choosing the honest option.

Before the actual experiment started, participants had to respond correctly to several test questions to ensure that they understood the task in the experiment. They were then told that they would have to report financial statements today and that they could choose between announcing
31 or 35 cents as EPS. The choices differed with respect to the level of compensation associated with announcing 31 or 35 cents. Specifically, participants were provided with the following tasks (one of two orders):

Which earnings will you announce?

___ 31 cents per share -- In this case, your compensation will be CHF 60,000 (CHF 0.30)
___ 35 cents per share -- In this case, your compensation will be CHF 300,000 (CHF 1.50)

___ 31 cents per share -- In this case, your compensation will be CHF 120,000 (CHF 0.60)
___ 35 cents per share -- In this case, your compensation will be CHF 300,000 (CHF 1.50)

___ 31 cents per share -- In this case, your compensation will be CHF 180,000 (CHF 0.90)
___ 35 cents per share -- In this case, your compensation will be CHF 300,000 (CHF 1.50)

___ 31 cents per share -- In this case, your compensation will be CHF 240,000 (CHF 1.20)
___ 35 cents per share -- In this case, your compensation will be CHF 300,000 (CHF 1.50)

___ 31 cents per share -- In this case, your compensation will be CHF 300,000 (CHF 1.50)
___ 35 cents per share -- In this case, your compensation will be CHF 300,000 (CHF 1.50)

Further questions served to verify that participants identified the 31 cents option correctly as the honest, and the 35 cents option as the dishonest option. Participants indicated on scales ranging from -2 to +2 to which extent they judged announcing 35 cents (announcing 31 cents) as dishonest vs. honest, manipulative vs. not manipulative, short-term vs. long-term oriented, and as being associated with personal financial losses vs. personal financial gains.

We assessed the extent to which participants treated honesty as a protected value (PV\text{honesty}) at the beginning or at the end of the experiment (Tanner et al., 2008). One subscale (five items) assessed people’s reactions to violations of honesty, anchored at 1 and 7: (1) very immoral - very moral, (2) not at all praiseworthy - very praiseworthy, (3) not at all blameworthy - very blameworthy, (4) not at all outrageous - very outrageous, (5) not at all acceptable - very acceptable. Another subscale asked participants to indicate the extent of their agreement with four statements on scales ranging from 1 (strongly disagree) to 7 (strongly agree): “Honesty is a value (1) ...that we should not sacrifice”, (2) “...for which I think it is right to make a cost-benefit analysis”, (3) “…that cannot be measured monetarily”, and (4) “...that requires flexibility based
on the situation at hand.” After appropriate recoding, the average of all nine responses was used as a global index of PV\textsubscript{honesty} ($\alpha = .85$).

At the end, people were debriefed. To guarantee anonymity, participants received a code at the beginning of the experiment. Based on this code, the experimenter prepared an envelope, containing the money. About one week later, participants received the sealed envelope when indicating their personal code.

**Results and Discussion**

**Preliminary analyses.** Paired samples t-tests confirmed that participants perceived announcing an EPS of 31 cents compared to announcing an EPS of 35 cents as significantly more honest ($M_{31} = 1.58$ vs. $M_{35} = -0.74$), as associated with personal financial losses ($M_{31} = 0.77$ vs. $M_{35} = -1.32$), as long-term oriented ($M_{31} = 0.84$ vs. $M_{35} = -0.50$) ($t(360) < 13.38$, $p < .001$), and less manipulative ($M_{31} = -1.40$ vs. $M_{35} = 0.74$), $t(360) = -23.99$, $p < .001$.

**Effects of opportunity costs and of honesty as a sacred value.** In about 46.1% of the situations, participants chose the honest option, foregoing monetary benefits. In doing so, participants sacrificed 31.1% of the total amount of money they could have earned.

To understand the determinants of variations in behavior, we analyzed the effects of monetary costs and PV\textsubscript{honesty}. Because the dependent variable consists of repeated measures, we used Generalized Estimating Equations (GEE) for binary outcomes with a logit link (Zeger & Liang, 1986). The GEE approach is an extension of the Generalized Linear Model of Nelder and Wedderburn (1972). It allows to examine main effects and interactions, no matter whether the variables are categorical or continuous. It accounts for correlations among repeated measures, thereby reducing the problem of biased regression estimates (Ballinger, 2004) and it is also robust to misspecifications (Ghisletta & Spini, 2004).

A GEE analysis was performed using PV\textsubscript{honesty}, opportunity costs and the interaction terms as predictors, and choices in favor of the honest option as the outcome variable. Because the level of opportunity costs was a within-subject variable, it was treated as a categorical variable, with CHF 0.00 as reference group. In the tables, we use odds ratios (ORs) to describe the association between our various predictors and the dependent variable. ORs greater than 1 are interpreted as increasing, whereas ORs smaller than 1 are interpreted as decreasing the odds.
of an outcome. To provide an additional interpretation of the results, our graphical presentation further below uses predicted probabilities.

Consider Table 1. The results revealed that $PV_{\text{honesty}}$ and opportunity costs were significant predictors of the honest choices. Specifically, the odds of honest choices increased significantly with participants stating higher $PV_{\text{honesty}}$ (OR 1.97). Our estimates reveal that for every 1-unit increase in $PV_{\text{honesty}}$ the odds of announcing the true EPS almost doubled (they increased by factor 1.97), when opportunity costs are held constant at CHF 0.00. In addition, the odds of honest choices decreased significantly with increasing opportunity costs as compared with CHF 0.00 (ORs ranging from 0.27 to 0.04).

More importantly, significant opportunity cost x $PV_{\text{honesty}}$ interactions indicate that the effects of opportunity costs on honest choices were moderated by $PV_{\text{honesty}}$. As expected, participants with higher levels of $PV_{\text{honesty}}$ reacted less to costs associated with honest behavior than participants with lower levels of $PV_{\text{honesty}}$. Table 1 indicates that the opportunity cost x $PV_{\text{honesty}}$ interaction terms were significant for the levels CHF 0.90 and 1.20 (ORs, 1.48, 1.65) and marginally significant for level CHF 0.60 (OR, 1.37; $p = .12$), with CHF 0.00 as reference group. That is, individual differences became particularly salient when honest behavior was more costly.

Figure 1 further clarifies the implications of these interactions. In order to facilitate the interpretation, we transformed odds ratios into predicted probabilities. Thus, Figure 1 displays the predicted probability of honest choices for the various levels of costs as a function of $PV_{\text{honesty}}$. In contrast to odds ratios, the changes in predicted probabilities are not constant as we move up the $PV_{\text{honesty}}$ scale. At low levels of $PV_{\text{honesty}}$, the increase in the probability of honest choices from increasing $PV_{\text{honesty}}$ is bigger (proportionally) than at the top. Moreover, the predicted probabilities converge with increasing levels of $PV_{\text{honesty}}$ to those of the reference group (CHF 0.00), indicating that participants with higher levels of $PV_{\text{honesty}}$ differentiated less between varying costs. In contrast, participants low on $PV_{\text{honesty}}$ were only then more likely to choose the honest option when the latter choice was free or very cheap and less likely to choose
the honest option when it was costly. In short, the impact of opportunity costs decreased with increasing levels of $PV_{honesty}$.

Furthermore, 21.3% of the participants revealed absolute trade-off resistance, i.e., these individuals kept on behaving honestly, irrespective of the financial costs involved. The results of a logistic regression showed that $PV_{honesty}$ significantly predicts whether or not a participant showed absolute trade-off resistance, $\chi^2 = 50.49$, $df = 1$, $N = 361$, $p < .001$. The odds ratio suggest that the odds of absolute trade-off resistance increase as $PV_{honesty}$ scores increase, OR $= 2.79$, $p < .001$, (CFI 95% = 2.03-3.82).

In sum, the impact of opportunity costs was shaped by how strongly participants treat honesty as a binding value. People with higher levels of protected values were more resistant to financial incentives and were more likely to show absolute trade-off resistance.

### Experiment 2

#### Methods

**Participants and design.** A total of 141 students participated in this study, ranging in age from 19 to 51 years ($M = 24$ years). Out of this sample, 37% were psychology and 63% economics students; 42% were women. Ninety-six individuals completed the online and 45 the paper-pencil version of the study.

Participants were set in the situation of investors who had to decide in which of two companies (one managed by CEO A and the other by CEO B) they wanted to invest their money. The design contained repeated measures with choices in favor of CEO A (vs. CEO B) as the dependent variable (four investment choices). These choices only varied in terms of announced future returns by the two CEOs (one CEO announced 10%, 20%, 30% or 40% as expected future returns, while the other CEO announced 40%, 30%, 20% or 10%). The same PV scale as before was used with the exception that participants were now asked to state the extent to which they believed that the corresponding CEOs considered honesty as protected value (Attributed $PV_{honesty}$).
The order of the announced returns combination was randomized. Again, we found no differences between psychology and economics students, men and women, or between online vs. paper-pencil versions.

**Procedure.** Participants were informed that they would be in the situation of investors who had to make several decisions to invest with one of two companies. They were also informed that they would get paid at the end of the experiment. Participants received a fixed amount of CHF 10 (≈ $ 9) for their participation and a flexible amount up to CHF 10 (≈ $ 9), depending on their responses in the decision tasks.

Some information of two companies was then provided. Participants were told that the two companies were identical, except that CEO A and CEO B announced different earnings per share (EPS) and thus received different salaries. Specifically, participants received following information:

Company A and company B only differ with respect to their announced earnings per share and the variable component of the salaries of their respective CEOs.

The salary of each CEO consists of a fixed and a variable component. The variable component is a bonus, which depends on the announced earnings per share and each CEO can influence the announced earnings per share within legal accounting standards.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Market’s expected earnings per share</th>
<th>Real earnings per share</th>
<th>Earnings per share announced by the CEOs</th>
<th>CEO’s salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>35</td>
<td>Known only by CEO</td>
<td>31</td>
<td>CHF 1,300,000</td>
</tr>
<tr>
<td>B</td>
<td>35</td>
<td>Known only by CEO</td>
<td>35</td>
<td>CHF 2,200,000</td>
</tr>
</tbody>
</table>

The table shows: CEO B announced higher earnings per share and, therefore, CEO B received a higher salary. If CEO A had announced the same earnings per share as CEO B, he would have earned the same salary of CHF 2,200,000.
Given this information, we expected that participants would infer that CEO A is more committed to honesty (and does not engage in earnings management), while CEO B is less committed to dishonesty (and engages in earnings management).

Participants had then to respond to several test questions to ensure that they understood the task of the experiment. In addition, they indicated on scales ranging from -2 to +2 to which extent they judged CEO A (CEO B) as trustworthy vs. not trustworthy, short-term vs. long-term oriented, and willing to make financial sacrifices vs. not willing to make financial sacrifices.

Participants were then presented sequentially with four investment choices, which varied in terms of announced future returns by the CEOs. In two choices CEO B announced a higher future return (i.e., negative return difference) than CEO A, and in the other two choices CEO A announced a higher future return (i.e., positive return difference) than CEO B (see Table 2). An example of such a choice situation was:

You have the possibility to invest CHF 50,000 in firm A or B.

CEO A claims an increase of the shareholder value by 10%. \( \rightarrow \) If this turns out to be true, you will receive CHF 5,000 (CHF 0.50) next year, plus your investment amount of CHF 50,000.

CEO B claims an increase of the shareholder value by 40%. \( \rightarrow \) If this turns out to be true, you will receive CHF 20,000 (CHF 2.00) next year, plus your investment amount of CHF 50,000.

In which company would you like to invest your money? __ A __ B

Table 2 shows the four choices participants had to make one at a time (the order was randomized). If a participant solely focused on the announced future returns and took them at face value, he or she would invest money in the company announcing higher future returns (i.e., in company B when given choice 1 and 2, and in company A when given choice 3 and 4).

Next, we assessed the extent to which investors believed that the corresponding CEOs considered honesty as a PV (Attributed PV\textsubscript{honesty} CEO A; Attributed PV\textsubscript{honesty} CEO B). The same measure as in the previous study was used. The only difference was that we were now interested
in how participants perceived CEO A’s and B’s respective commitment to honesty. Specifically, with regard to the first subscale (five items), participants were asked what they thought the CEO’s beliefs or opinions would be about managing the earnings of their respective firms (‘CEOs have possibilities for changing reports to increase personal benefits. What do you think is A’s [B’s] opinion on this topic? I believe that CEO A [CEO B] thinks that such a behavior is ‘...very immoral to very moral,...not at all blameworthy to very blameworthy, etc.’). With regard to the second subscale (four items), participants were asked what they thought the CEO of the corresponding company may think about the value of honesty (‘What do you think does CEO A [CEO B] believe about honesty? He may think that honesty is a value...that we should not sacrifice,...that requires flexibility based on the situation at hand,...’, etc., scale ranging from strongly disagree to strongly agree). The measures showed very good reliability ($\alpha_{\text{CeoA}} = .93$, $\alpha_{\text{CeoB}} = .90$).

At the end, participants were debriefed and paid. Participants were informed at the end whether their investment was successful or not. The relationship between investment and benefits that we implemented here was that participants earned more money when they invested with the “honest” CEO (i.e., CEO A). Specifically, participants received the announced future return when they invested with the honest CEO, but received nothing when they invested with the dishonest CEO. For example, if CEO A announced 10% and CEO B announced 30% as a future return, individuals investing in A received 10% of 50,000 / 10,000 = CHF 0.5, while individuals investing in B received zero. Thus, the maximum of CHF 20 was reached when they invested with the honest CEO across all choice situations. Anonymity was ensured using the same procedure as in Experiment 1.

Results and Discussion

Preliminary analyses. A paired $t$-test showed that CEO A was on average seen as having a much higher level of $\text{PV}_{\text{honesty}}$ than CEO B, (Attributed $\text{PV}_{\text{honesty}}$ CEO A: $M = 4.46$; Attributed $\text{PV}_{\text{honesty}}$ CEO B: $M = 3.31$), $t(140) = 6.52$, $p < .001$. Because this experiment investigates whether a CEO, perceived as more committed to honesty, relative to another CEO, would be more likely to attract investors, we calculated the difference between the two Attributed $\text{PV}_{\text{honesty}}$ measures (= Diff $\text{PV}_{\text{honesty}}$). A higher value of Diff $\text{PV}_{\text{honesty}}$ indicates that CEO A was perceived as being more strongly committed to honesty than CEO B.
We also examined the correlations between Diff PV\text{honesty} and Diff Trustworthiness (trustworthiness\textsubscript{CEO A} - trustworthiness\textsubscript{CEO B}), Diff Long-term orientation (long-term orientation\textsubscript{CEO A} - long-term orientation \textsubscript{CEO B}) and Diff Financial sacrifices (willingness to make financial sacrifices\textsubscript{CEO A} - willingness to make financial sacrifices\textsubscript{CEO B}). These analyses indicated that the strength of perceived relative PV for honesty coincided strongly with relative trustworthiness ($r = .76$, $p < .001$), and moderately with relative long-term (rather than short-term) orientation ($r = .38$, $p < .001$) and with the relative willingness to make financial sacrifices ($r = .23$, $p = .007$). The high correlation with relative trustworthiness also suggests that participants associated more confidence with CEO A’s than with CEO B’s promised future returns.

**Effects of announced future returns and attributed honesty as a protected value.**

Overall, in 61% of the cases, participants chose to invest with CEO A.

To understand how announced future returns and attributed PV\text{honesty} drove investment behavior, we again used GEE. Diff PV\text{honesty} was entered as the continuous variable. In addition, because investor choice is expected to be influenced by the comparison of both CEOs’ expected returns, we calculated the differences in their announced future returns (-30%, -10%, 10%, 30%). Preliminary analyses revealed that people did not differentiate much between the two negative returns on the one hand and the two positive returns on the other hand. We therefore created a Diff Return variable that combined the negative return differences (-30%, -10%; Diff Return Negative) and positive return differences (30%, 10%; Diff Return Positive). Specifically, Diff Return Negative indicated that CEO A announced lower future returns than CEO B, Diff Return Positive indicated that CEO A announced higher future returns than CEO B. Diff Return was the within-subject variable and treated as categorical variable, with the negative return differences as reference group.

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Table 3 shows that Diff Return and Diff PV\text{honesty} turned out to be significant predictors of investment choices in favor of CEO A, indicating that decisions were a function of both incentives and of how strongly CEOs were perceived relative to each other in treating honesty as a protected value. Specifically, participants were significantly more likely to invest into firm A.
Honesty as Protected Values when CEO A was claiming higher future returns than CEO B (Diff Return Positive) (OR 4.36, compared with Diff Return Negative as reference). Furthermore, participants were more likely to invest into firm A, the more CEO A was perceived as being more strongly committed to honesty than CEO B (OR 1.56).

More importantly, the significant interaction between Diff Return Positive and Diff PV_{honesty} (see Table 2), indicate that the effects of claimed relative future returns on investment choices were moderated by the perceived relative PV_{honesty} (OR 0.79, with Diff Return Negative as reference). To understand what this means, recall that the main effect of Diff Return Positive shows an odds ratio of 4.36. Clearly, it is attractive to invest with the honest CEO when he announces relatively higher future returns. But the odds ratio on the interaction effect of less than one means that the stronger the attributed relative protected values were, the less of an effect a change in Diff return had on the investor choosing to invest with the honest CEO. In other words, with increasing perceived relative PV_{honesty}, the CEO’s claimed relative returns mattered less.

Figure 2 further clarifies this finding. Again, ORs were translated into predicted probabilities. The figure displays the trends in choices in favor of CEO A as a function of Diff PV_{honesty} and Diff Return Negative and Diff Return Positive. As can be seen, the two predicted probabilities strongly converge with CEO A being increasingly perceived as treating honesty as a protected value. That is, those investors who believed that CEO A was strongly committed to honesty relative to CEO B made their decision less dependent on the claimed returns. They continued to invest in firm A, independently of which CEO announced higher returns. Conversely, those investors who believed that CEO A was only weakly committed to honesty were more sensitive to the claimed returns. They were more likely to invest into the firm whose CEO announced higher returns.

Furthermore, we found that 21.3% of the participants revealed absolute reliance on CEO A. The results of a logistic regression showed that Diff PV_{honesty} significantly predicts whether or not a participant showed absolute reliance in CEO A, \(\chi^2 = 21.44, df = 1, N = 141, p < .001\). The odds ratio suggest that the odds of absolute reliance in CEO A increase with investors’
perceiving CEO A as relatively more committed to honesty than CEO B, OR = 1.69, \( p < .001 \), (CFI 95% = 1.31-2.18). That is, those participants who believed that CEO A was more strongly committed to honesty than the other CEO were also more likely to invest in all decision situations in firm A, regardless of the claimed relative returns.

Finally, in order to get more information about the role of trustworthiness, we tested whether the effects of Attributed PV_{honesty} on investment choices was mediated by the perception of CEO’s trustworthiness. A variable is called a mediator to the extent that it carries the influence of the predictor variable to the dependent variable (Baron & Kenny, 1986; Preacher & Leonardelli, 2001). In our case, the predictor variable was Diff PV_{honesty} (X). The expected mediator variable was Diff Trustworthiness (M). The number of investment choices in favor of firm A (coded 0-4) served as dependent variable (Y). Mediation effects are typically detected using a series of regression models (Baron & Kenny (1986). Statistically, a mediation is said to occur when (1) X significantly affects Y, (2) X significantly affects M, (3) M significantly affects Y, and (4) the effect of X on Y drops significantly when Y is regressed on both X and M. If all these conditions are met, one can conclude that variable M mediates the relationship between the predictor and the dependent variable.

To examine whether mediation occurred, we first ran a regression with Diff PV_{honesty} predicting investment choices in favor of CEO A (Model 1), then a regression with Diff PV_{honesty} predicting Diff Trustworthiness (Model 2), then a regression with Diff Trustworthiness predicting investment choices in favor of CEO A (Model 3), and finally a regression with Diff PV_{honesty} and Diff Trustworthiness predicting the dependent variable (Model 4).

The results were as follows: Diff PV_{honesty} predicted invest choices in favor of CEO A, \( \beta = .53, p < .001 \) (Model 1); Diff PV_{honesty} predicted Diff Trustworthiness, \( \beta = .76, p < .001 \) (Model 2); Diff Trustworthiness predicted invest choices in favor of CEO A, \( \beta = .63, p < .001 \) (Model 3); and the relation between Diff PV_{honesty} became no longer significant when Diff Trustworthiness was added, \( \beta = .11, p = .26 \) (Model 4). These results demonstrate that the influence of perceived honesty as a protected value is carried by perceived trustworthiness.

In sum, as hypothesized, the impact of announced relative returns decreased with the extent to which CEO A was perceived as being committed to honesty relative to CEO B. Participants who perceived a CEO to be relatively more committed to honesty were less responsive to claimed relative returns, and were more likely to demonstrate absolute reliance on
this CEO. Finally, the results also strongly support the view that higher perceived commitment to honesty contributes to higher trust, while perceived trustworthiness, in turn, fully mediates the influence of perceived commitment to honesty on investment choices.

**General Discussion**

The results of these two experiments suggest that individuals vary in their propensity to tell the truth and highlight the role of honesty as a “deontic virtue.” Treating honesty as a protected value does not only imply that honesty is valued. It includes the additional layer of moral, deontological commitment. From this perspective, honesty has intrinsic rather than instrumental value, which is expressed in the stronger resistance to trade honesty off against money. In Experiment 1, the impact of monetary benefits decreased with the extent to which honesty was considered as a protected value. Individuals with stronger sacred values for and demonstrated greater resistance to financial incentives, in its strongest form even absolute resistance within the range of financial incentives offered. In Experiment 2, the impact of announced relative returns decreased with the extent to which one CEO was perceived as being more committed to honesty than the other. Investors who perceived a CEO to be relatively more committed to honesty were more willing to invest into this CEO’s firm even when he announced lower future returns than his competitor, and these choices were even more robust against differences in announced returns when investors attributed stronger values to the CEO with the lower returns. The results from Experiment 2 suggest that honesty as a protected value may be economically significant: If an individual (such as an investor) perceives an agent (such as a CEO) to be relatively more committed to honesty, this can have important consequences for the behavior of the former because it fosters trust.

We took care to rule out some other possible explanations for our findings, such as strategic considerations or impression management (e.g., Stevens, 2002; Tedeschi, 1981). The notion of strategic concerns suggests that individuals behave honestly because they expect reciprocity in social interactions. The impression management approach implies that individuals behave honestly because they anticipate social approval or other benefits from establishing a reputation (for honesty). While the former mechanism requires that people are involved in repeated interactions, the latter presupposes that there are other people forming impressions of the actor’s reputation in order to be effective. Our experimental design, however, did not allow
for reciprocity and strategic interactions, nor could our participants have benefited from having a good reputation. Furthermore, we undertook a great deal of effort to guarantee anonymity when paying out the participants in order to rule out possible effects of social desirability.

Theoretical Contributions

To our knowledge, this is the first psychological study that contrasts predictions of classic decision-making models with the role of honesty as a deontic virtue within business contexts and including real financial incentives. The notion of protected values clearly departs from consequentialist views on ethics in business, according to which individuals behave honestly only when such a behavior is (monetarily) beneficial to them. In contrast, our results advance theory and research on ethical decision-making by highlighting individual predispositions in action upon honesty. For some individuals honesty is non-selfish and non-instrumental. They behave honestly because they intrinsically want to be honest. They are, therefore, less inclined to act against this moral principle for the sake of material self-interest.

In addition, studying honesty as a protected value may complement other views of honesty which also contrast with the self-interest view of honesty. One such emerging research line is the approach of self-concept maintenance (e.g., Mazar et al., 2008; Mead, Baumeister, Gino, Schweitzer & Ariely, 2009). Similar to the notion of protected or sacred values, it also suggests that people may have strong internal standards about honesty with which they want to comply, even when doing so involves sacrifices. The idea is that individuals may be torn between competing motivational forces – gaining from dishonesty versus maintaining a honest self-concept. In solving this problem, people make trade-offs and try to find a balance between these two motivational forces (Mazar et al., 2008). It would certainly be an interesting avenue for future research to distinguish between these various approaches. Both approaches will arrive to similar predictions about which individuals are more likely to behave honestly, but they differ in the assumptions about the underlying processes. The self-concept maintenance approach depicts people still as consequentialist who conduct cost-benefit analyses, whereas the protected value approach, portrays individuals as principled, deontological decision-makers (even though humans rarely display complete lack of concerns for consequences, e.g., Bartels, 2008). Furthermore, a distinct feature of the latter is also the idea of aversions and responses of moral outrage to trade-offs. Prior research suggests that the crucial distinction between individuals with
lower or higher levels of protected values lies in their different social-cognitive responses when trading off protected values (e.g., Bartels & Medin, 2007; Hanselmann & Tanner, 2008; Tetlock et al., 2000). Nonetheless, still very little is known about how people committed to honesty think, feel and rationalize when behaving inconsistently. For instance, we would expect people treating honesty as a protected value to be more likely to interpret offers to trade-off honesty for money as involving bribery or corruption.

**Practical Implications**

Beyond advancing theory and research on honesty, we believe that this work has practical implications which will be of interest for business situations and corporate leadership. Similar to strong values or attitudes, protected values possess features of stability and behavioral predictability. Since individuals committed to honesty are less easily prone to change in response to financial incentives, we also expect such individuals to be less tempted by fraud and corruption, less sensitive to social pressure and to herding behavior. Furthermore, since these agents’ actions are driven by moral principles, they do not require costly monitoring in order to avoid misconduct. They may, of course, also be more rigid and less flexible when it comes to adapting to new circumstances. Nonetheless, in interactions with others, we conjecture that agents endowed with the attribute of being committed to ethical principles are more likely to generate trust from employees, customers, business partners or shareholders, etc. The findings also suggest that there may be an important niche for honest managers who are able to attract investors. At least within the confines of our experiment, strong (perceived) commitment to honesty is more likely to foster than to hinder economic success.

Analyzing these implications is a promising avenue for future research. For now, our findings give rise to a more optimistic view about individual decision-making than suggested at the beginning. Giving honesty the status of a protected value may pay off for business choices after all.
References


Merz, C., & Tanner, C. (2009). *Validierung der Geschützten Werte Skala [Validation of the Sacred Value Measure (SVM)]*. Unpublished manuscript, University of Zurich, Switzerland.


Honesty as Protected Values


Footnotes

1 The actual term for the equivalent of cents in the Swiss currency is “Rappen,” and the experiment used the precise Swiss terminology. For simplicity, we refer to “cents” throughout the text.
Table 1

*Experiment 1: Results of (repeated) binary logistic regressions, predictors of honest choices (N = 361)*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Honest choices</th>
<th>OR</th>
<th>95% CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV_{honesty}</td>
<td></td>
<td>1.97</td>
<td>[1.43-2.72]</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Opportunity costs [CHF]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.30</td>
<td></td>
<td>0.27</td>
<td>[0.20-0.36]</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>0.60</td>
<td></td>
<td>0.10</td>
<td>[0.07-0.13]</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>0.90</td>
<td></td>
<td>0.06</td>
<td>[0.04-0.08]</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>1.20</td>
<td></td>
<td>0.04</td>
<td>[0.03-0.16]</td>
<td>&lt; .001</td>
</tr>
<tr>
<td><strong>Interaction effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunity costs [CHF] X PV_{honesty}</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.00 X PV_{honesty}&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.30 X PV_{honesty}</td>
<td></td>
<td>1.08</td>
<td>[0.79-1.47]</td>
<td>.625</td>
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<tr>
<td>0.60 X PV_{honesty}</td>
<td></td>
<td>1.37</td>
<td>[0.96-1.95]</td>
<td>.085</td>
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<tr>
<td>0.90 X PV_{honesty}</td>
<td></td>
<td>1.48</td>
<td>[1.01-2.16]</td>
<td>.045</td>
</tr>
<tr>
<td>1.20 X PV_{honesty}</td>
<td></td>
<td>1.65</td>
<td>[1.13-2.42]</td>
<td>.010</td>
</tr>
</tbody>
</table>

*Note.* OR = odds ratio; CI = confidence interval. <sup>a</sup>Reference group.
### Table 2

*Overview of the structure of the four different investment choices in Experiment 2*

<table>
<thead>
<tr>
<th>Choice</th>
<th>Company</th>
<th>Claimed returns in %:</th>
<th>Return difference (CEO A–CEO B) in %:</th>
<th>Claimed returns in CHF:</th>
<th>Return difference (CEO A–CEO B) in CHF:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CEO A</td>
<td>10</td>
<td>-30</td>
<td>5'000</td>
<td>-15'000</td>
</tr>
<tr>
<td></td>
<td>CEO B</td>
<td>40</td>
<td></td>
<td>20'000</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CEO A</td>
<td>20</td>
<td>-10</td>
<td>10'000</td>
<td>-5'000</td>
</tr>
<tr>
<td></td>
<td>CEO B</td>
<td>30</td>
<td></td>
<td>15'000</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CEO A</td>
<td>30</td>
<td>+10</td>
<td>15'000</td>
<td>+5'000</td>
</tr>
<tr>
<td></td>
<td>CEO B</td>
<td>20</td>
<td></td>
<td>10'000</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>CEO A</td>
<td>40</td>
<td>+30</td>
<td>20'000</td>
<td>+15'000</td>
</tr>
<tr>
<td></td>
<td>CEO B</td>
<td>10</td>
<td></td>
<td>5'000</td>
<td></td>
</tr>
</tbody>
</table>
Table 3

Experiment 2: Results of (repeated) binary logistic regressions, predictors of choices in favor of company A over B (N = 141)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Choices in favor of company A</th>
<th>OR</th>
<th>95% CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diff PV&lt;sub&gt;honesty&lt;/sub&gt;</td>
<td></td>
<td>1.56</td>
<td>[1.30-1.86]</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Diff Return</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td></td>
<td>4.36</td>
<td>[2.48-7.68]</td>
<td>&lt; .001</td>
</tr>
<tr>
<td><strong>Interaction effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diff Return × Diff PV&lt;sub&gt;honesty&lt;/sub&gt;</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative × Diff PV&lt;sub&gt;honesty&lt;/sub&gt;&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive × Diff PV&lt;sub&gt;honesty&lt;/sub&gt;</td>
<td></td>
<td>0.79</td>
<td>[0.64-0.99]</td>
<td>.038</td>
</tr>
</tbody>
</table>

*Note.* OR = odds ratio; CI = confidence interval; Diff PV<sub>honesty</sub> = Attr PV<sub>honesty</sub> A − Attr PV<sub>honesty</sub> B; Diff Return = Return<sub>A</sub> − Return<sub>B</sub>.<sup>a</sup> Reference group.
Figure 1. Predicted probabilities of honest choices as a function of $PV_{honesty}$ and opportunity costs ($N = 361$).
Figure 2. Predicted probabilities of choices in favor of CEO A as a function of attributed protected values for honesty (Diff PV_{honesty}) and announced future return differences (Diff Return) \((N = 141)\). A higher value of Diff PV_{honesty} indicates that CEO A was perceived as being more strongly committed to honesty than CEO B. Positive Diff Return means that CEO A announced higher future returns than CEO B; Negative Diff Return means that CEO A announced lower future returns than CEO B.