ARE ALL CONTRACTUAL OBLIGATIONS CREATED EQUAL?

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BY

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At the core of the economic analysis of contract law lies the concept of options. According to this concept, parties are expected to perform their contractual duties if, and only if, the legal price of breach (i.e. damages) is lower than the cost of performance. This Article challenges this concept, and shows that peoples’ performance decisions are driven by non-instrumental forces such as moral commitments, social norms, and motivated reasoning. To demonstrate this point, this Article presents a series of three experimental surveys that measure and compare participants’ attitudes toward breaching a contract. Participants answered questions in the context of one of several variations of the same hypothetical scenario. While the expected cost of a breach was identical in every variation, they differed along several dimensions, such as the source of uncertainty regarding paying damages (uncertainty stemming from an ambiguous contract vs. uncertainty stemming from lax enforcement) and the type of contract (negotiated contract vs. standard form contract). The results confirmed our hypothesis and showed that performance decisions are affected by a diverse set of variables aside from the monetary incentives set by the legal system. Based on these findings, the Article revisits some of the basic questions of contract law and sheds new light on an array of policy issues.

INTRODUCTION

Contractual obligations are mere options. That is one of the basic assumptions of the economic analysis of contract law regarding the behavior of contracting parties. In other words, parties are assumed to perform their contractual duties if, and only if, doing so enhances their personal welfare. In cases where the legal price of breach is lower than the cost of performance, the promisor will choose to breach and pay that price (i.e. damages). Thus, as a positive matter, contractual obligations

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are viewed as if they lack any non-instrumental dimension that may affect the behavior of contracting parties.

In a recent study, we introduced an empirical framework that could be used to measure the non-instrumental power associated with legal obligations. This framework was based on an experimental design which compared the effect of two types of uncertainty that are associated with legal liability. The first type, legal uncertainty, relates to uncertainty regarding the content of an obligation. In many cases, legal obligations are vague, and therefore, parties may not be sure, ex ante, whether liability will be attached to a certain type of behavior. The second type, enforcement uncertainty, relates to uncertainty regarding implementation of the legal norm. Violations of legal norms often do not entail any consequences due to problems such as lack of detection. Thus, parties again cannot be sure, ex ante, what will actually be the cost of violating the norm.

To the extent that legal compliance is driven by purely instrumental motivations, legal uncertainty and enforcement uncertainty are expected to affect behavior in a similar fashion. Whether the source of uncertainty stems from the content of an obligation or from its enforcement, potential violators will simply discount legal liability by the probability that it will actually be applied to them. To the extent legal obligations carry an expressive force that drives people to conform, however, the two types of uncertainty are expected to affect behavior distinctly. Specifically, legal uncertainty is expected to have a greater effect on the behavior of people than enforcement uncertainty because its introduction not only reduces the expected cost of noncompliance, but also dilutes the expressive power of the legal norm. Thus, by comparing the effect of the two types of uncertainty on the way people treat different types of legal norms, we can ascertain the degree to which each type of norm carries an expressive power that brings about compliance that is not tied to instrumental calculations.

In our previous study, we focused on a regulatory-criminal setting in which the source of the legal norm was the state. We demonstrated that legislation carries an expressive power that induces compliance. Moreover, we showed that this power is sensitive to the type of legislation applicable and is stronger in the context of criminal prohibitions. In this study, we wish to extend this analysis to obligations created by individuals rather than by the state. We explore whether contracts hold an expressive power that induces people to fulfill their promises irrespective of consequential considerations. In addition, we examine whether this power depends on different characteristics of the contractual obligation.

behavior says that when a promisor can make one extra dollar by breaching his contract, he will breach the contract).


4 Id. at 997-98 (describing the composition of the study).

5 Id. at 999-1002 (reporting the results of the baseline study).

6 Id. at 1002-05 (reporting the results of the study comparing criminal and civil sanctions).
In order to answer these questions, we designed a series of between-subject experimental surveys that measured and compared participants’ attitudes toward contractual performance under conditions of uncertainty. In the scenarios given to participants, their chances of facing contractual liability were identical; we manipulated whether the source of uncertainty stemmed from the ambiguity of the contract or from the ability of the promisee to detect the breach. Overall, these studies confirmed our central hypothesis that people are less committed to complying with the terms of a contract when the source of uncertainty is in the contract itself versus when the source of uncertainty is in the enforcement of the contract (holding the expected liability constant in all cases). Thus, the findings indicate that contractual obligations carry an expressive power above and beyond their instrumental power. Furthermore, the results suggest that this power depends on the characteristics of the contractual obligation. For example, they demonstrate that negotiated contracts carry greater expressive power than standard form contracts accepted on a take-it-or-leave-it basis.

This project is part of a growing body of literature that has turned to using empirical methods in order to deepen our understanding of contractual behavior. These studies include both qualitative projects that document contractual behavior in the field, as well as experimental projects that study such behavior in stylized settings. Viewed as a whole, these studies have added richness and complexity to the way in which we model the behavior of contracting parties. More specifically, it has demonstrated that forces such as the moral commitment to promise-keeping, cognitive biases, and reputational concerns may affect contractual relationships. This Article builds on these findings and adds to them along two different dimensions. First, it employs a novel methodology that permits measurement of non-instrumental motivations in a subtle and indirect way. This methodology enables us to distinguish between different types of contractual obligations and to compare their relative expressive power. Second, our focus on uncertainty brings the study closer to real world settings that are inherently probabilistic. This focus allows us to evaluate different aspects of contract law that deal with uncertainty and to predict how parties will behave when their obligations are unclear.


10 See Wilkinson-Ryan & Baron, id. (experimental study of moral motivations to perform); Korobkin, id. (experimental study of cognitive biases and contracting); Bernstein, Cotton Industry, supra note 8 (case study demonstrating the importance of reputational concerns).
The Article is organized as follows: In Part I, we describe the background of the study. We review the traditional law and economics literature modeling the incentives of contracting parties. We then present several bodies of literature that suggest that parties may treat their contractual obligations in a non-instrumental fashion. Part II describes the design of the experiments and their results. Finally, in Part III, we explore potential implications of our results for policymakers as well as contracting parties and address the limitations of our study.

I. BACKGROUND

In this Part, we review the traditional economic literature that focuses on instrumental incentives for performance. Then, in order to introduce our hypothesis that contractual obligations carry an expressive power, we discuss the existing literature on the moral duty to perform, motivated reasoning, and social norms, each of which supports our hypothesis regarding the expressive power of contracts and helps explain our empirical findings.

A. The Economic Approach to Contractual Obligations

The traditional law and economics literature treats contractual obligations as mere options. That is, as a positive matter promisors are expected to perform their contractual obligations only when the cost of doing so is lower than the price that is attached to breach. If, as is commonly the case, the legal remedy for breach is expectation damages, then the promisor will perform the contract as long as the cost of doing so is lower than the expected damages. On the other hand, if the cost of performance — either actual cost (i.e. a rise in production costs) or alternative cost (i.e. a new lucrative offer) — are higher than the expected damages, then the promisor is expected to breach and pay damages.

This positive claim goes hand in hand with the normative claim regarding efficient breach. According to the efficient breach theory, the promisor ought to breach the contract when the utility gained from performance is smaller than its cost. Breaching in such situations, so the argument goes, maximizes the contractual surplus and therefore reflects the ex ante preference of both contracting parties. Promisors can be induced to make efficient breach decisions by setting the cost of breach at the expectation interest of the promisee. Such a system could cause promisors to internalize the full cost of their choices, and incentivize them to breach only if that

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choice enhances the contractual surplus. Thus, breaching and paying expectation damages should be viewed as worthy contractual behavior. As Steve Shavell recently argued, “breach should not be characterized as immoral when expectation damages are paid for breach.”

B. A Non-Instrumental Approach to Contractual Obligations

While the economic model of contractual behavior offers important insights regarding how contracting parties are expected to behave, we argue that it offers an incomplete account of their motivations. Clearly, contracting parties care about the cost of breach. Yet, this still leaves the question of whether this is the only factor that they care about. Several bodies of literature lead us to reject the purely instrumental approach and cause us to conjecture that non-instrumental motivations will also affect the behavior of contracting parties.

1. Moral Obligation

Legal philosophers have argued that breaching a contract is a moral violation. Building on theories of promise-keeping, these theorists have claimed that a “contract must be kept because a promise must be kept.” According to this line of thought, breach represents a type of “moral harm,” and is therefore impermissible notwithstanding its actual effects on the promisee. This view has trickled into the rhetoric of contract law. For example, the Restatement of Contracts refers to the “sanctity of contract and the resulting moral obligation to honor one’s promises.”

To be sure, just as one cannot derive from observing how people behave an answer to the question how they ought to behave, there is no necessary connection

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14 See, e.g., Steven Shavell, Damage Measures for Breach of Contract, 11 BELL J. ECON. 466, 478 (1980) (arguing that expectation damages can lead to optimal performance incentives). To be sure, the analysis in the text only refers to efficiency from the perspective of the parties’ performance decisions. Incorporating other considerations into the analysis may lead to the conclusion that other measures of damages are optimal. See, e.g., A. Mitchell Polinsky, Risk Sharing Through Breach of Contracts Remedies, 12 J. LEGAL STUD. 427, 433-34 (1983) (noting that the expectation remedy would be optimal from the perspective of the allocation of risk only if the buyer is risk averse and the seller is risk neutral); Robert Cooter, Unity in Tort, Contract, and Property: The Model of Precaution, 73 CAL. L. REV. 1, 11-19 (1985) (arguing that expectation damages may lead to inefficient reliance).


17 See Wilkinson-Ryan supra note 9 at 639-40 (viewing breach “as a moral harm irrespective of the availability of damages for the promise”). To be sure, there are other deontological theories of contracts that offer a more nuanced view on the topic. For a review, see EYAL ZAMIR & BARAK MEDINA, LAW, ECONOMICS, AND MORALITY 260-61 (2010).

between how people ought to behave and how they actually behave. Nevertheless, we assume that there might be a correlation between commonly perceived concepts of morality and actual behavior. This correlation may rest on two causal mechanisms. First, individuals may find guidance in normative claims regarding how they should behave. Thus, their behavior will tend to converge with the dictates of moral rules. Second, despite the normative-positive dichotomy, philosophers may build some of their insights on commonly-held intuitions regarding desired human behavior. In that way, entrenched patterns of behavior may manifest themselves in moral reasoning.

The connection between moral intuitions and contractual behavior has recently been studied empirically by Wilkinson-Ryan and Baron. Using questionnaires, they presented subjects with dilemmas regarding breach of contract. Subjects were then asked to express their views regarding the legal, economic, and moral implication of breach. The findings demonstrated that people view breach as immoral. Furthermore, issues that are irrelevant from an economic perspective but relevant from a common-sense/morality perspective, such as the motivation for breach (forgoing a gain in an alternative deal compared to avoiding a loss in the current deal), affected the way in which subjects evaluated the breach decision. People viewed breach aimed at avoiding losses as less objectionable and worthy of a mitigated legal reaction. These findings led Wilkinson-Ryan and Baron to conjecture that “[p]eople’s moral intuitions about contract law may make breach less frequent than is economically efficient.”

In light of these findings, we hypothesize that the introduction of contractual uncertainty will bring about more selfish behavior when compared to the introduction of enforcement uncertainty. Whereas both types of uncertainty reduce the expected cost of selfish behavior, the former also affects the non-instrumental motivations of individuals as it may erode the power of the contractual obligation itself. Arguably, breaching a clear contract is more immoral than breaching an ambiguous contract that can also be read as if it permits the self-interested behavior in question.

2. Motivated Reasoning

Whereas the previous subsection dealing with the philosophical literature suggests that people’s performance decisions are driven by an internal commitment to fulfill a promise, the psychological literature suggests that additional forces may be at play. A significant body of scholarship has documented the tendency of people to

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19 Recent findings in the area of evolutionary ethics suggest that many moral intuitions are in fact a result of a long process of evolutionary adaptation. See generally Philip Kitcher, *Biology and Ethics, in The Oxford Handbook of Ethical Theory* 163-85 (David Copp ed., 2006).


21 *Id.* at 412-20 (describing the results of the study).

22 *Id.* at 413-14 (describing the results of experiment 1).

23 *Id.* at 422.
engage in motivated reasoning. According to this scholarship, decision-makers attempt to make choices that they believe can later be justified to a dispassionate observer. In other words, people’s self-interest affects how they think they ought to behave. Thus, they clinch to uncertainty associated with their choices in order to portray those choices as worthy and just rather than as immoral or dishonest.

Several concrete examples for this type of behavior can be found in recent studies that added elements of uncertainty to the dictator game. In the dictator game, participants (“dictators”) are asked to choose between an option that maximizes their payoff and an option that offers them a lower payoff yet serves the interests of the other player. A voluminous body of literature has demonstrated that dictators systematically diverge from the selfish behavior predicted by rational choice theory, and opt for the altruistic option. This altruistic tendency, however, diminishes significantly once uncertainty is introduced into the game.

In a recent study, Haisley and Weber altered the classic dictator game and introduced uncertainty with respect to the adverse effect caused by a selfish decision made by the dictator. One group of dictators were asked whether they would agree to forgo part of their payment in order to give the opposing player $1.75 rather than a 50% chance to win $0.50. The second group of dictators faced a similar choice, yet instead of the clear 50% chance, they were informed that the chance of the opposing player to win $0.50 is equally distributed between 0% and 100% (thus, from an objective perspective both options are identical). Interestingly, dictators in the second group displayed a greater tendency to behave in a selfish manner. As Haisley and Weber note, the lack of knowledge regarding the precise implications of

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24 For a review of this literature and a description of the various mechanisms underlying motivated reasoning, see generally Ziva Kunda, The Case for Motivated Reasoning, 108 PSYCHOL. BULL. 480 (1990).

25 Id. at 493.


29 See Haisley & Weber supra note 27.

30 Id. at 617-18.

31 Id.

32 Id. at 620-21.
their choices allowed players to engage in “moral wiggling” and “behave self-interestedly without explicitly appearing so to themselves or others.”

In a study more closely tied to this article, Schweitzer and Hsee explored the way in which motivated reasoning may affect contractual negotiations. They demonstrated that, in a negotiation setting in which the costs and benefits to the parties were held constant, the parties’ decision to disclose private information to the opposing side was influenced by what they term the “elasticity” of the private information, that is, its level of uncertainty. In one study, they examined the willingness of parties to disclose harmful, privately-held information when negotiating the sale of a car. Sellers were informed that the odometer of the car being sold had been disconnected but that buyers would believe them if told that the actual mileage was 60,000. Sellers were then divided into two groups: the low-elasticity group was told that the actual number of miles that the car had been driven was between 74,000 and 76,000, and the high-elasticity group was told that the number was between 60,000 and 90,000 (with equal probabilities within the range for each group). According to a rational choice model of pure self-interest, sellers from both control groups are expected to tell the other party that the mileage is only 60,000. Yet Schweitzer and Hsee reported that the parties tended to disclose values higher than 60,000, and, more importantly for our purposes, that the average mileage claimed by the low-elasticity group was significantly higher than that claimed by the high-elasticity group. These results demonstrate the importance of motivated reasoning and self-serving justifications: members of the low-elasticity group could not represent to buyers a mileage figure below 74,000 without knowing for certain that they were deceiving them; members of the high-elasticity group, on the other hand, could claim that the mileage was only 60,000 by convincing themselves that stating this figure was not a misrepresentation. Therefore, in this setting, higher uncertainty regarding the actual mileage of the car allowed sellers to claim a lower mileage that would better serve their own self-interest.

The bias towards interpreting one’s own behavior as moral suggests a distinction between the effects of enforcement uncertainty and those of contractual uncertainty. We hypothesize that contractual uncertainty allows people to deceive themselves and discount their internal fear of behaving inappropriately because such behavior can be justified as an honest mistake (i.e. misinterpretation of the contract)

33 Id. at 623.


35 Id. at 189–92.

36 Id. at 190.

37 Id.

38 Id.

39 Id. Specifically, the average mileage claimed in the low-elasticity group was 70,764, while the average mileage claimed in the high-elasticity group was only 68,354. Id.
and not be seen as the result of an inappropriate or immoral rational decision-making process. By contrast, the threat of enforcement does not appeal to such a bias, so we can expect enforcement uncertainty to have less effect on people’s behavior than contractual uncertainty. Thus, we are again drawn to the hypothesis that people will be more likely to behave selfishly when the source of uncertainty is the content of the contract rather than the mechanisms of its enforcement.

3. Social Norms

Social norms may be another factor that could lead contracting parties to behave differently from the predections of the traditional economic model. Since the seminal work of Macaulay, legal scholars and social scientists have demonstrated the central role social norms play with respect to contractual behavior. These studies have shown that contracting parties routinely disregard the incentives set forth by the legal system and adhere to the dictates of the applicable social norm.

A central social norm that governs contractual relations is the norm of performance. According to this norm, parties are prohibited from viewing the relationship in purely instrumental terms. Rather, they are expected to perform their duties under the contract even if breach is a more profitable option. Irlenbusch recently demonstrated the strength of this norm in a quantitative fashion. In his study of sales contracts, participants were randomly assigned into two groups. The contracts of the first group were binding and the contracts of the second group were non-binding (i.e. there was no penalty for breach under the experiment). Interestingly, the two groups did not differ significantly with respect to performance. Irlenbusch argues that these findings provide strong evidence that “the norm to keep promises, play[s] a decisive role in contract exchange relationships.” Taking a qualitative approach, Bernstein documented the dominance of the performance norm in discrete contracting communities.


For some more recent examples of this line of literature, see supra note 8.

See Macaulay, supra note 40 at 61 (noting that “[d]isputes are frequently settled without reference to the contract or potential or actual legal sanctions”).


Id. at 308-10 (describing the composition of the experiment).

Id.

Id. at 316.

Id. at 300.

See Bernstein, Diamond Industry, supra note 8; Bernstein, Cotton Industry, supra note 8.
free to exercise the breach option. 49 As one of the market players she interviewed noted: “[Y]ou do not just breach and pay. This is not done.” 50

The existence of a performance norm is important to our study because of the enforcement mechanisms associated with such a norm. Generally, the literature distinguishes between two types of motivations to comply with a social norm. First, norms are enforced by a set of nonlegal sanctions that are applied to violators. 51 Such sanctions are usually calibrated to the type of violation and can range from mild gossip to severe violence. 52 Second, norms are often internalized by members of the community. 53 In this regard, norm violators are expected to feel guilt and remorse notwithstanding the detection of the violation by others. 54

In light of the possibility that people have internalized a performance norm, we expect that contractual uncertainty will generate more noncompliance than would enforcement uncertainty. While contractual uncertainty may undermine the performance norm as it raises doubts regarding whether the norm was actually breached, enforcement uncertainty leaves the full force of the norm intact. Furthermore, we suspect that the internalization of the compliance norm may differ between distinct types of contractual obligations. Thus, all things being equal, we expect to observe different levels of noncompliance when legal uncertainty is introduced with respect to various types of contractual obligations.

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In conclusion, there are two competing perceptions of contractual behavior. On the one hand, rational-choice theory suggests that promisors behave in a purely selfish manner in order to further their own goals. On the other hand, an array of alternative theories argue that the motivation for performance is far richer and more complex and is driven by a range of internal and external forces. With these two hypotheses in hand, we now turn to describe our experiments.

49 See Bernstein, *Diamond Industry* at 145-48 (describing the performance norm in the diamond industry); Bernstein, *Cotton Industry* at 1754-56 (describing the performance norm in the cotton industry).

50 Bernstein, *Cotton Industry* at 1755.


52 See ROBERT C. ELLICKSON, ORDER WITHOUT LAW 56-59 (1991) (describing the different types of non-legal sanctions used in Shasta county).


II. THE EXPERIMENTS

A. Participants and Design

To test our propositions, we conducted an experimental survey study, using situational vignettes in a between-subject design on a student population. A total of 484 law students at Bar-Ilan University, The Hebrew University of Jerusalem, The College of Management, and Tel-Aviv University were sampled.

Participants were randomly assigned to one of several equally-sized groups and given a questionnaire structured around one of several variations on the following legal dilemma: Acting as a promisor who is obligated to paint a house, would you or would you not decide to use a new generic paint that will increase your profits by 2,000 Shekels given that you know it is of inferior quality? Participants were asked questions regarding their personal evaluations of the dilemma, how they would behave in the depicted scenario, how they perceived social norms regarding such decisions, and their willingness to forgo profits in order to abstain from using the low quality paint. These questions were used to construct independent variables — uncertainty type (in all three studies), source of obligation (in the second study), and the existence of negotiations (in the third study) — and to analyze their effect on the dependent variables.

B. Variables

1. The Independent Variables

In all three studies, we examined the effects of two different types of uncertainty: contractual uncertainty and enforcement uncertainty. Participants in the Contractual Uncertainty subgroup were told that the questionable action (using a low quality paint) may or may not be deemed a breach of a contractual obligation to use “reasonable” materials; if the action is considered a breach, however, enforcement is certain because the promisor will be able to detect the quality of the paint used.

55 Specifically, Study I was conducted at the Hebrew University and included 100 students, (40.6% male); Study II was conducted at Bar Ilan University and Tel-Aviv University and included 187 students (39.5% male); Study III was conducted at Bar-Ilan University and The College of Management and included 197 students (36.6% male).

56 Aside from focusing on people’s intention to behave, we also measured factors such as morality and perceived social norms. These factors were measured in order to broaden our understanding of people’s attitudes towards breach, rather than focusing merely on intention to behave. This approach is based on the widely used paradigm of planned behavior, common in attitude studies. See Icek Ajzen, From Intentions to Actions: A Theory of Planned Behavior, in ACTION CONTROL: FROM COGNITION TO BEHAVIOR 11, 29–35 (Julius Kuhl & Jürgen Beckmann eds., 1985) (suggesting that performance of intended behavior depends on certain factors “only partly under volitional control,” including willpower, ability to control factors that may prevent performance, attitudes, subjective norms, and influence of past behavior). A possible limitation of measuring all these items at once is multicollinearity — correlations among the factors may make it difficult to determine their separate effects and the ordering of the variables may affect the results.

57 The questionnaire used in study I can be found in the methodological appendix of the paper. All other questionnaires are available upon request from the authors.
Participants in the Enforcement Uncertainty subgroup were told that using the low quality paint clearly constituted a breach but successful enforcement was unlikely, as there is only a small chance that the promisor will be able to detect the quality of the paint used. Participants in both subgroups were told that the overall likelihood of contractual liability (the probability of determination of breach multiplied by the probability of successful prosecution) was ten percent. In order to avoid considerations regarding reputation, participants were asked to assume that the contract reflected a one-shot-summer job, and that they had no intention to ever paint a house again.

The second and third studies, unlike the first, examined two independent variables, each of which had two levels. The second study compared contractual terms created by the parties and default rules that were incorporated into the contract, along with the effects of different types of uncertainty. Participants in the Contract Term group were told that they agreed to the contract term in question. Participants in the Default Rule group were told that the contract was silent on the point of paint quality and therefore the reasonable quality requirement set forth in the local contract law will apply.

For the third and final study, we examined the effect of negotiations in addition to the effects of the different types of uncertainty described above. In order to fully control for the effect of negotiations, both groups read a term which was presented as part of the contract. While participants in the Negotiation subgroup were told that they negotiated various obligations in the contract with the other party, participants in the Standard Form subgroup were told that the other party presented them with a standard form contract and demanded that they sign it on a take-it-or-leave-it basis.

2. The Dependent Variables

The dependent variables in these studies were self-reported and measured on a Likert scale (1 to 10). The first two variables related to the social and moral desirability of compliance and noncompliance. Perceived Morality was measured by asking participants whether using the cheap paint in the legal situation described above would be morally unacceptable (1 = acceptable and 10 = unacceptable). Perceived Social Desirability was measured by asking participants whether using the cheap paint in the legal situation described above would be socially desirable (1 = desirable and 10 = undesirable).

The next two variables related to participants’ perceptions regarding the prevalence of compliance, that is, their expectations of how others would behave in the same situation. Percentage of Noncompliance was measured by asking participants about the percentage of people in the country, under the same circumstances, who would choose to use the cheaper paint (1 = 10% and 10 =

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58 That is, the second and third studies employed a 2x2 design.

59 “Dependent variable” refers to the variables that are explained by the model. The Likert scale is one of the most common summative scales used in social sciences to rate evaluations or judgments on one dimension. There are a variety of possible response scales; we used scales from 1 to 10.
Likelihood of Noncompliance was measured by asking participants how strongly they agreed with the statement that “most people would decide to use the cheaper paint in the given legal situation” (1 = agree and 10 = disagree). Based upon the internal consistency (Cronbach’s $\alpha=0.61$), we computed a measure of Prevalence, by averaging the grading of the two aforementioned items, with higher values indicating lower perceived prevalence of using the cheaper paint.

The last three variables related to the participants’ intended future behavior. Attempt to Comply was measured by asking participants whether they agreed that “[i]f possible I will try not to use the cheap paint in the given legal situation” (1 = disagree and 10 = agree). Willingness to Forgo Profits (for compliance) was measured by asking participants whether they agreed that “[e]ven if I save a large amount of money, I will not use the cheap paint in the given legal situation” (1 = disagree and 10 = agree). Finally, participants were asked a yes/no question to gauge their Intention to Breach: “At the end of the day, would you use the cheap paint?” (0, yes; 1, no).

C. Study I: Contractual Uncertainty vs. Enforcement Uncertainty

We begin with a simple benchmark case in which we compare uncertainty created by probabilistic enforcement with uncertainty created by ambiguity in the language of the contract. To examine the effect of the type of legal situation on participants’ attitudes toward the misconduct, a one-way multivariate analysis of variance (MANOVA) was conducted, and the subgroups were compared with respect to the dependent variables of the study (e.g. attitudes toward the misconduct, intention to breach). Following a significant effect, a series of one-way univariate analyses of variance (ANOVA) were conducted in order to examine the source of the variance. In Table 1, we report the mean scores and standard deviations for

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60 For this variable, a recode transformation was later conducted so that higher grading indicated lower percentage.

61 MANOVA is a procedure that examines the explained variance in a series of dependent variables, by a series of independent variables. The advantage of this procedure is that it enables to identify both an interaction between the independent variables as well as other associations between the dependent variables.

62 A significant effect in a statistical measurement refers to the odds that a certain result was created by chance. In the context of this paper, every time a difference or a result is presented as “significant” it means that there is less than a 5% likelihood that this difference was coincidental. The 5% level of significance is a common threshold used in statistical analysis. In some cases where the result was stronger, we added $p < .01$ to imply that the likelihood of a chance driven result was lower than 1%.

63 ANOVA is a very common statistical technique, which aims to identify the sources of variance among participants. In ANOVA, in contrast to MANOVA, there is only one dependent variable. In our design, the purpose of the statistical analysis is to examine whether the experimental groups are different from each other. The procedure allows us to tell how much of the difference between participants could be attributed to the assignment to the different subgroups. In plain words, the statistical analyses tell us how much of the differences in the participants’ responses can be explained by the type of contractual uncertainty. For the last item — intention to breach — which was dichotomous (0,1), an additional set of non-parametric tests were conducted. Given that the results were identical in terms of significance in all three studies, the results and associated tables are kept on separate file with the authors.
perceived attitudes and reactions toward the misconduct as a function of the legal situation.\textsuperscript{64}

### Table 1: Mean Scores and Standard Deviations (in Parentheses) for Attitudes Toward the Breach as a Function of Uncertainty Type (n=100)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Contractual Uncertainty</th>
<th>Enforcement Uncertainty</th>
<th>Difference Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Morality</td>
<td>6.88 (2.60)</td>
<td>8.08 (1.97)</td>
<td>p &lt; 0.05</td>
</tr>
<tr>
<td>Perceived Desirability</td>
<td>6.80 (2.46)</td>
<td>8.18 (2.04)</td>
<td>p &lt; 0.01</td>
</tr>
<tr>
<td>Prevalence</td>
<td>3.80 (1.78)</td>
<td>4.59 (2.11)</td>
<td>p &lt; 0.05</td>
</tr>
<tr>
<td>Attempt to Comply</td>
<td>6.90 (2.45)</td>
<td>8.40 (2.00)</td>
<td>p &lt; 0.001</td>
</tr>
<tr>
<td>Willingness to Forgo Profits</td>
<td>6.42 (2.60)</td>
<td>7.88 (2.25)</td>
<td>p &lt; 0.01</td>
</tr>
<tr>
<td>Intention to Breach</td>
<td>0.76 (0.43)</td>
<td>0.88 (0.33)</td>
<td>NS</td>
</tr>
</tbody>
</table>

**Note:** The first five items were rated on a ten-point Likert scale. Higher values indicate more negative attitudes toward the use of cheaper paint, lower perceived prevalence of use of cheaper paint, and lower inclination to use cheaper paint. The sixth variable, *Intention to Breach*, was rated on a binary scale: 0 (yes) or 1 (no). NS=Not Significant.

Multivariate analysis of variance for the attitudes and reactions toward breach indicated that overall, the subgroups differed significantly.\textsuperscript{65} Participants were more likely to view the use of the cheaper paint more positively under situations of legal uncertainty as opposed to enforcement uncertainty. Univariate analysis of variance indicated that a significant difference was detected for five of the six dependent variables: *Perceived Morality*,\textsuperscript{66} *Perceived Desirability*,\textsuperscript{67} *Prevalence*,\textsuperscript{68} *Attempt to Comply*,\textsuperscript{69} and *Willingness to Forgo Profits*.\textsuperscript{70} The tests reveal that for all of these

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\textsuperscript{64} Standard Deviation (SD) is a common concept used to measure the distribution of a variable around the average.

\textsuperscript{65} Multivariate $F(7,61)=3.18$, p<0.01, $\eta^2=0.27$

\textsuperscript{66} $F(1, 98) = 6.77$, p < 0.05, $\eta^2 = 0.06$.

\textsuperscript{67} $F(1, 98) = 9.34$, p < 0.01, $\eta^2 = 0.09$.

\textsuperscript{68} $F(1, 98) = 4.08$, p < 0.05, $\eta^2 = 0.04$.

\textsuperscript{69} $F(1, 98) = 11.24$, p < 0.001, $\eta^2 = 0.10$.

\textsuperscript{70} $F(1, 98) = 9.01$, p < 0.01, $\eta^2 = 0.08$. 
measures, means were higher in the Enforcement Uncertainty subgroup than in the Contractual Uncertainty subgroup. Therefore, in accordance with the hypothesis, the inclination to breach the contract and use the cheaper paint was found to be higher for the group faced with contractual uncertainty than in the group faced with uncertainty in enforcement.

D. Study II: The Source of the Contractual Obligation

In the first experiment, we largely confirmed our basic hypothesis that contractual obligations carry a non-instrumental value and demonstrated the difference between uncertainty associated with enforcement and uncertainty associated with the language of the contract. This led us to examine the boundaries of this effect and the extent to which it would be repeated in other settings. Identifying the circumstances that influence the expressive power of contracts can serve two purposes. First, from a theoretical perspective, mapping these circumstances could help understand the mechanism that underlies non-consequential incentives for performance. Second, from a practical perspective, to the extent that such incentives differ between distinct situations, distinguishing between these situations can assist policymakers to devise more tailored contract rules and contracting parties to design superior contracts.

Contract scholarship has long since acknowledged that contracts are inherently incomplete. A variety of reasons such as transaction costs, asymmetric information, and bounded rationality routinely lead parties to draft contracts that do not specify the allocation of risks in different contingencies. In fact, despite our concept of contracts as a tool that reflects mutual assent, contracts “usually mention relatively few contingencies explicitly out of the multitude of events of possible relevance.” Contract law employs a set of default rules that help deal with contractual incompleteness. These rules govern the relationship between the parties in situations where the contract between them is silent. Issues such as time and place of performance, quality of goods, and even price can all be determined by the content of a default rule rather than by the explicit or implicit agreement of the parties.

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71 See, e.g., Scott Baker & Kimberly D. Krawiec, Incomplete Contracts in a Complete Contract World, 33 Fl.A. St. U. L. Rev. 725, 725 (2006) (noting that “contracts are never fully complete, because some contractual incompleteness is inevitable, given the costs of thinking about, bargaining over, and drafting for future contingencies”).


73 See Shavell, supra note 13 at 446.

74 U.C.C. § 2-308 (delivery to be conducted at seller’s place of business); U.C.C. § 2-309 (performance within reasonable time).

75 U.C.C. § 2-308 (fair-average quality requirement).

76 U.C.C. § 2-305 (reasonable price provision).
In light of the centrality of default rules to the practice of contracting, in our second experiment we turned to measure the expressive power of such rules, and to compare it with the power of obligations created by the contracting parties themselves. Exploring this question is a challenging task because one can present two competing hypotheses regarding the power carried by default rules.

On one hand, when contractual risks are allocated by default rules, the ability to view the parties as actually agreeing to such rules is limited. Thus, people may not view them as a promise that they made to the opposing party and that they are morally obligated to keep. As Fried noted, cases involving unallocated risks “cannot be resolved … on the basis of the agreement—that is, of contract as promise.” Furthermore, in many cases, policy considerations suggest that the legal system adopt default rules that serve one group of contracting parties and therefore systematically run against the interests of other groups of contracting parties. This, in turn, may limit the commitment the later group of people feel towards respecting the allocation of risks set by the default rule.

On the other hand, default rules are set by agents of the states, namely courts and legislatures. State actions are often perceived as fair, reflecting commonly held values of justice, and promoting aggregate efficiency. Similarly, default rules are likely to be perceived as more balanced with regard to the respective interests of the contracting parties. This perception can bolster parties’ respect towards default rules and cause them to adhere to the allocation of risks determined by them. In other words, the expressive power of law, usually alluded to in the context of prohibitions, may also be present in the context of dispositive contract rules.

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77 To be sure, we do not claim that there is no moral argument in favor of fulfilling contractual commitments created by default rules. All that we argue is that people may view this as a weaker commitment.

78 See Fried, supra note 16 at 60.


80 See Richard H. McAdams, An Attitudinal Theory of Expressive Law, 79 OR. L. REV. 339 (2000) (arguing that state law has the power to signal what are the shared beliefs of members of society regarding a certain act); Yuval Feldman, Five Models of Regulatory Compliance, in HANDBOOK OF REGULATION, (David Levi-Fur ed., forthcoming 2011) (reviewing the literature on regulatory compliance and suggesting state laws enjoy some assumed legitimacy so that they operate within societal expectation).

To examine the effects of the source of the contractual obligation and the type of legal uncertainty on the dependant variables, two-way multivariate analyses of covariance (MANCOVA), source of obligation (Contract Term / Default Rule) and uncertainty type (Contractual Uncertainty / Enforcement Uncertainty) were conducted. Separate one-way ANCOVA analyses for each source of obligation comparing the means of the uncertainty type subgroups were also conducted.  

In Table 2, we report the mean scores for perceived attitudes and reactions toward the misconduct as a function of the source of the obligation and the type of uncertainty. In addition, the table presents the results of the ANOVA conducted separately for the two sources of obligations.

**Table 2: Mean Scores and Standard Deviations (in parentheses) for Attitudes Toward the Breach as a Function of Source of the Obligation and Uncertainty Type (n=197)**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Source of the Obligation</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contract Term</td>
<td>Default Rule</td>
<td>Contractual Uncertainty</td>
<td>Enforcement Uncertainty</td>
<td>Contractual Uncertainty</td>
<td>Enforcement Uncertainty</td>
<td>Difference Test</td>
</tr>
<tr>
<td>Perceived Morality</td>
<td>7.35 (2.24)</td>
<td>9.20 (1.19)</td>
<td>p &lt; 0.001</td>
<td>6.37 (2.77)</td>
<td>8.00 (2.05)</td>
<td>p &lt; 0.001</td>
<td></td>
</tr>
<tr>
<td>Perceived Desirability</td>
<td>7.49 (2.01)</td>
<td>9.12 (1.17)</td>
<td>p &lt; 0.001</td>
<td>6.37 (2.32)</td>
<td>8.18 (1.80)</td>
<td>p &lt; 0.001</td>
<td></td>
</tr>
<tr>
<td>Prevalence</td>
<td>3.97 (1.87)</td>
<td>4.10 (1.99)</td>
<td>NS</td>
<td>3.46 (1.83)</td>
<td>4.09 (1.71)</td>
<td>p &lt; 0.05</td>
<td></td>
</tr>
<tr>
<td>Attempt to Comply</td>
<td>7.72 (1.89)</td>
<td>9.08 (1.19)</td>
<td>p &lt; 0.01</td>
<td>6.72 (2.32)</td>
<td>7.75 (2.50)</td>
<td>p &lt; 0.05</td>
<td></td>
</tr>
<tr>
<td>Willingness to Forgo Profits</td>
<td>7.11 (2.15)</td>
<td>8.88 (1.61)</td>
<td>p &lt; 0.001</td>
<td>6.02 (2.39)</td>
<td>7.65 (2.53)</td>
<td>p &lt; 0.001</td>
<td></td>
</tr>
<tr>
<td>Intention to Breach</td>
<td>0.81 (0.40)</td>
<td>1.00 (0.00)</td>
<td>p &lt; 0.05</td>
<td>0.67 (0.48)</td>
<td>0.84 (0.37)</td>
<td>p &lt; 0.05</td>
<td></td>
</tr>
</tbody>
</table>

*Note: The first five items were rated on a ten-point Likert scale. Higher values indicate more negative attitudes toward the use of cheaper paint, lower perceived prevalence of use of cheaper paint.*

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82 In this study, the size of the subgroup of contractual uncertainty was substantially larger than that of members of the enforcement uncertainty (72 to 25). This gap proved irrelevant for both the differences between the two uncertainty conditions as well as for two sources of the norm (given the direction to the effect).
A two-way MANOVA indicated that overall, there was a significant main effect for the uncertainty type, indicating that participants were more likely to use the cheaper paint under situations of contractual uncertainty than under enforcement uncertainty. In addition, the MANOVA indicated that there was a significant main effect for the source of the obligation, revealing a higher tendency to use the cheaper paint in situations involving a default rule rather than in situations involving a contract term. Finally, the MANOVA showed that there was no significant interaction effect between the source of the obligation and the uncertainty type.

The univariate tests show a significant difference between the uncertainty subgroups in five of the six dependent variables: Perceived Morality, Perceived Desirability, Attempt to Comply, Willingness to Forgo Profits, and Intention to Breach. For each of these variables, the means were higher — indicating a smaller inclination to use the cheaper paint — in the Enforcement Uncertainty subgroup than in the Contractual Uncertainty subgroup.

In addition, a significant difference was found between the source of the obligation subgroups with respect to the same five dependent variables: Perceived Morality, Perceived Desirability, Attempt to Comply, Willingness to Forgo Profits, and Intention to Breach. For each of these variables, the means were higher (i.e. less likely to use the cheaper paint) in situations where a contract term was the source of the obligation rather than a default rule.

E. Study III: Negotiated Contracts vs. Standard Form Contracts

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\(^{83}\) Multivariate \(F(6, 188) = 6.32, p < 0.001, \eta^2 = 0.17\).

\(^{84}\) Multivariate \(F(6, 188) = 2.62, p < 0.05, \eta^2 = 0.08\).

\(^{85}\) \(F(1, 193) = 25.50, p < 0.001, \eta^2 = 0.12\).

\(^{86}\) \(F(1, 193) = 32.70, p < 0.001, \eta^2 = 0.14\).

\(^{87}\) \(F(1, 193) = 13.66, p < 0.001, \eta^2 = 0.07\).

\(^{88}\) \(F(1, 193) = 24.23, p < 0.001, \eta^2 = 0.11\).

\(^{89}\) \(F(1, 193) = 9.32, p < 0.01, \eta^2 = 0.05\).

\(^{90}\) \(F(1, 193) = 9.96, p < 0.001, \eta^2 = 0.05\).

\(^{91}\) \(F(1, 193) = 11.58, p < 0.001, \eta^2 = 0.06\).

\(^{92}\) \(F(1, 193) = 12.92, p < 0.001, \eta^2 = 0.06\).

\(^{93}\) \(F(1, 193) = 11.25, p < 0.001, \eta^2 = 0.05\).

\(^{94}\) \(F(1, 193) = 6.40, p < 0.05, \eta^2 = 0.03\).
Study II demonstrated the difference between explicit agreements and default rules. These two sources of obligations, however, differ with respect to two main dimensions. First, agreements involve negotiations whereas default rules normally are characterized by a lack of negotiation. Second, agreements are private creations, whereas default rules are creations of the state. In order to further our understanding of the role played by the presence of negotiations, we designed a third experiment in which we compared contractual uncertainty with respect to negotiated and standard form contracts.

A voluminous body of legal literature has dealt with the distinctions between standard form contracts and negotiated contracts.\(^{95}\) Whereas, it is a settled matter that contract law differentiates between the two types of contracts,\(^{96}\) it is unclear whether contracting parties do so as well.\(^{97}\) We hypothesize that contracting parties treat standard form contracts and negotiated contracts distinctly. More specifically, we presume that they assign less weight to the non-instrumental motivations for performance in the context of standard form contracts. This hypothesis stems from several characteristics of standard form contracts that we now turn to review.

First, standard form contracts routinely involve asymmetric information regarding their content.\(^{98}\) In a typical setting, a consumer is offered a lengthy contract written in impenetrable language which alludes in great detail to highly unlikely contingencies.\(^{99}\) Furthermore, the consumer usually knows that even if she reads the contract, she will be unable to alter its content. As a result, the consumer rationally chooses to sign the contract without reading it.\(^{100}\) The fact that consumers are not aware of the content of the contract may lead them to discount their obligation with respect to the contract. They may, for example, convince themselves that breaching

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\(^{96}\) *Id.* at 1264.

\(^{97}\) In a recent working paper, Zev Eigen used an online experiment in order to study the unique aspects of performance in standard form settings. Eigen measured whether the willingness of participants to continue with a tedious questionnaire was affected by the type of obligation they took on themselves initially. One of the main findings of the study was that when participants selected the contract term themselves, they were significantly more likely to complete the online survey. See Zev Eigen, *When and Why do Individuals Obey Form-Adhesive Contracts?: Experimental Evidence of Consent Compliance, Promise and Performance* (unpublished manuscript on file with authors).


\(^{99}\) *Id.*

the contract does not violate the prohibition against breaking promises, as they never truly agreed to the relevant provisions of the contract.\footnote{101 See Randy E. Barnett, Consenting to Form Contracts, 71 FORDHAM L. REV. 627, 628-30 (2002) (reviewing the tension between promise-based theories of contract and standard form contracts). To be sure, we make no claim as to the normative validity of this point of view. All that we conjecture is that some subjects may rationalize their actions in this fashion. For a discussion on the normative implications of asymmetric information in standard form contracts see Alan Schwartz & Louis Wilde, Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis, 127 U. PA. L. REV. 630, 638 (1979) (arguing that an informed minority of marginal consumers can overcome information gaps); Todd D. Rakoff, Contracts of Adhesion, An Essay in Reconstruction, 96 HARV. L. REV. 1173, 1250-55 (1983) (arguing that courts should distinguish between visible and invisible terms).}

Second, the procedure of signing a standard form contract may be seen by some as unfair. Standard form contracts are usually offered on a take-it-or-leave-it basis. This unilateral process does not allow parties to incorporate their preferences into the contract. Negotiated contracts, by contrast, involve a joint effort to reach an agreement. As a result, they can be adjusted in order to address the needs of both parties. The literature on procedural justice shows that compliance is driven by the nature of the process through which authorities attempt to achieve it.\footnote{102 See, e.g., TOM R. TYLER, WHY PEOPLE OBEY THE LAW 5-7 (2006)} As people view the process as more fair and just, their willingness to accept its outcome increases.\footnote{103 Id.} Two factors that may increase the sense of procedural justice are having one’s voice heard and having perceived control over the process.\footnote{104 For research on the relevancy of control and voice to a process associated with increasing a sense of procedural fairness associated with it see, for example, K. Leung & W. K. Li, Psychological Mechanism of Process Control Effects, 75 J. APPLIED PSYCHOL. 613 (1990); Jerald Greenberg & Robert Folger, Procedural Justice, Participation, and the Fair Process Effect in Groups and Organizations, in BASIC GROUP PROCESS 235 (P. Paulus ed., 1983); Christopher Earley & E. Allan Lind, Procedural Justice and Participation in Task Selection: The Role of Control in Mediating Justice Judgments, 52 J. PERSONALITY & SOC. PSYCH. 1148 (1987).} Arguably, personal involvement in contractual negotiations is likely to increase both perceived control and the level of voice. This is especially so in the context of standard form contracts in which one party holds complete control over the terms of the contract.\footnote{105 The case of default rules studied in the previous experiment also entails a situation in which rights are allocated without negotiations. Nevertheless, we assume that the lack of control in the standard form setting is more extreme because in this case, control is shifted to the opposing party whereas, in a default rule setting, control is shifted away from both parties to a third entity. Furthermore, unlike the case of default rules, there is no practical way to contract around a term in a standard form contract.} Consequently, it is quite plausible that negotiations will raise the sense of procedural justice and thus elevate the tendency of people to respect the allocation of risks agreed to in the contract.

Third, the importance of personal involvement in the contracting process can be accounted for in the social cognition literature. According to this literature, the ability to form a mental representation of one’s goals has a positive influence on the ability to cope with difficulties while working toward those objectives. As Rivkin and Taylor noted, “[t]he simple act of forming an intention to implement an action
facilitates the detection of action-related opportunities, intensifies commitment to the action sequence, and leads to a high likelihood of actions."^{106}

An additional psychological mechanism which is likely to support greater adherence to negotiated contract terms, is the phenomenon of cognitive dissonance. This theory suggests that when people actively choose to behave in a certain way, they are more likely to adapt their attitudes to their choice.^{107} In other words, the mere fact that people freely chose to participate in a certain activity when no external justification is present causes them to feel more committed to that activity.^{108} Presumably, the process of contracting, so long as it is the outcome of free choice, could lead to a deeper commitment to the contracts’ terms. Thus, the active choices that people make during negotiations are expected to decrease the likelihood that they will interpret the ambiguity in their own self-interest. In contrast, because in standard form contracts people lack free choice with regard to the contract terms, no dissonance is expected to be created.^{109}

Finally, standard form contracts are often perceived as reflecting an unbalanced division of power that has even been described as “authoritarian.”^{110} In this regard, the suppliers of the contract are viewed as powerful and sophisticated, whereas the consumers are viewed as weak and vulnerable.^{111} Recent studies in the

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^{108} In the original study by Festinger, participants who receive little compensation for engaging in a boring activity, were more likely to think that the activity was interesting and rewarding in comparison to those who were highly compensated for the activity and hence didn’t need to justify to themselves their choice to engage in that activity. For extensions of the theory to other domains of decision-making see, for example, William M. Goetzman and Nadav Peles, *Cognitive Dissonance and Mutual Fund Investors*, 20 J. Finan. Res. 145, 148 (1997) (demonstrating how investors shape their views of the performance of the funds they chose in the past to prevent the cost associated with making bad investment choices).


area of social psychology have identified a so-called Robin Hood effect, according to which, individuals are inclined to transfer wealth from the rich to the poor.\textsuperscript{112} This behavior is driven by both envy towards the affluent and empathy towards the disadvantaged.\textsuperscript{113} These findings suggest that parties may be more willing to behave selfishly in the context of standard form contracts because they might view this behavior as a means to transfer wealth from the powerful to the powerless.\textsuperscript{114}

To examine the effects of the negotiation and contractual uncertainty on the dependent variables, we conducted a two-way multivariate analysis of variance (MANOVA) between the contract type (\textit{Negotiated / Standard Form}) and the uncertainty type (\textit{Contractual Uncertainty / Enforcement Uncertainty}). We also conducted a separate one-way ANOVA for each of the negotiation subgroups, comparing the means of the uncertainty type subgroups.

In Table 3, we report the mean scores for perceived attitudes and reactions toward the misconduct as a function of the existence of negotiations and of the type of uncertainty. In addition, the table presents the results of the ANOVA conducted separately for the \textit{Negotiation} subgroups.


\textsuperscript{113} \textit{Id.}

\textsuperscript{114} Nonetheless, it should be acknowledged that in our own study we were careful not to give parties any information on the wealth of the other party. As described below, in future studies of compliance to form contracts we hope to discern between the identity of the contracting parties and the nature of the contract. \textit{See infra} Part III C.
The findings of this study show a significant main effect with respect to the type of uncertainty, indicating that participants were more likely to use the cheaper paint in situations of contractual uncertainty than in situations of enforcement uncertainty. The negotiation variable, on the other hand, did not have a statistically significant main effect on the dependent variables. Finally, the MANOVA showed a significant interaction effect between negotiation and uncertainty, indicating that the difference in behavior under both legal and enforcement uncertainty is more prominent in the standard form context than in the negotiation context.

Looking at the variables individually presents a more nuanced picture. The univariate tests show a significant difference between the uncertainty subgroups

315 Multivariate $F(6, 178) = 10.73, p < 0.001, \eta^2 = 0.27$.

316 Multivariate $F(6, 178) = 2.81, p < 0.05, \eta^2 = 0.09$. 

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**Table 3: Mean Scores and Standard Deviations (in Parentheses) for Attitudes Toward the Breach as a Function of Negotiation and Uncertainty Type (n=187)**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Negotiation</th>
<th></th>
<th></th>
<th>Standard Form</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contractual Uncertainty</td>
<td>Enforcement Uncertainty</td>
<td>Difference Test</td>
<td>Contractual Uncertainty</td>
<td>Enforcement Uncertainty</td>
<td>Difference Test</td>
<td></td>
</tr>
<tr>
<td>Perceived Morality</td>
<td>7.09 (2.46)</td>
<td>8.37 (2.06)</td>
<td>p &lt; 0.01</td>
<td>5.47 (2.83)</td>
<td>8.65 (1.58)</td>
<td>p &lt; 0.001</td>
<td></td>
</tr>
<tr>
<td>Perceived Desirability</td>
<td>7.10 (2.41)</td>
<td>8.15 (2.00)</td>
<td>p &lt; 0.05</td>
<td>5.32 (2.91)</td>
<td>8.63 (1.52)</td>
<td>p &lt; 0.001</td>
<td></td>
</tr>
<tr>
<td>Prevalence</td>
<td>3.70 (1.64)</td>
<td>4.53 (1.98)</td>
<td>p &lt; 0.05</td>
<td>3.60 (2.12)</td>
<td>4.14 (1.72)</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Attempt to Comply</td>
<td>7.60 (2.57)</td>
<td>8.24 (2.06)</td>
<td>NS</td>
<td>6.45 (2.90)</td>
<td>7.91 (1.96)</td>
<td>p &lt; 0.01</td>
<td></td>
</tr>
<tr>
<td>Willingness to Forgo Profits</td>
<td>7.07 (2.52)</td>
<td>7.96 (2.30)</td>
<td>NS</td>
<td>5.21 (3.19)</td>
<td>7.80 (1.90)</td>
<td>p &lt; 0.001</td>
<td></td>
</tr>
<tr>
<td>Intention to Breach</td>
<td>0.75 (0.43)</td>
<td>0.93 (0.25)</td>
<td>p &lt; 0.05</td>
<td>0.63 (0.49)</td>
<td>0.89 (0.31)</td>
<td>p &lt; 0.01</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The first five items were rated on a ten-point Likert scale. Higher values indicate more negative attitudes toward the use of cheaper paint, lower perceived prevalence of use of cheaper paint, and lower inclination to use cheaper paint. The sixth variable, Intention to Breach, was rated on a binary scale: 0 (yes) or 1 (no). NS = Not Significant.
across all of the dependent variables: Perceived Morality, Perceived Desirability, Prevalence, Attempt to Comply, Willingness to Forgo Profits, and Intention to Breach. For each of these variables, the means were higher (indicating lesser inclination to use the cheaper paint) in the Enforcement Uncertainty subgroup than in the Contractual Uncertainty subgroup.

In addition, a significant difference was found between the negotiation subgroups with respect to four of the six dependent variables: Perceived Morality, Perceived Desirability, Attempt to Comply, and Willingness to Forgo Profits. For each of these variables, the means were higher (indicating lesser inclination to use the cheaper paint) in the Negotiation subgroup than in the Standard Form subgroup.

Importantly, the univariate tests also indicated a significant interaction effect for three of the six variables: Perceived Morality, Perceived Desirability, and Willingness to Forgo Profits. That is, the differences found between the uncertainty subgroups were moderated by whether negotiations took place. The direction of the interaction was in accordance with our initial hypothesis, where the more pronounced differences were found in the non-negotiation context. Figure 1 illustrates this effect with respect to perceived morality. As is evident from the graph, there is almost no difference between standard form contracts and negotiated contracts when their contents are unambiguous, but there exists a large gap between the two types of contracts once contractual uncertainty is present.

\[ F(1, 183) = 44.48, p < 0.001, \eta^2 = 0.20. \]
\[ F(1, 183) = 43.13, p < 0.001, \eta^2 = 0.19. \]
\[ F(1, 183) = 6.24, p < 0.05, \eta^2 = 0.03. \]
\[ F(1, 183) = 9.71, p < 0.01, \eta^2 = 0.05. \]
\[ F(1, 183) = 22.39, p < 0.001, \eta^2 = 0.11. \]
\[ F(1, 183) = 15.22, p < 0.001, \eta^2 = 0.08. \]
\[ F(1, 183) = 3.96, p < 0.05, \eta^2 = 0.02. \]
\[ F(1, 183) = 3.90, p < 0.05, \eta^2 = 0.02. \]
\[ F(1, 183) = 4.75, p < 0.05, \eta^2 = 0.02. \]
\[ F(1, 183) = 7.48, p < 0.01, \eta^2 = 0.04. \]
\[ F(1, 183) = 8.04, p < 0.01, \eta^2 = 0.04. \]
\[ F(1, 183) = 11.66, p < 0.001, \eta^2 = 0.06. \]
\[ F(1, 183) = 5.39, p < 0.05, \eta^2 = 0.03. \]
To understand the source of the variance, we conducted a separate MANOVA for each negotiation subgroup. The analysis indicated that in the Standard Form subgroup, there were significant differences between the uncertainty subgroups conditions in five of the six variables: Perceived Morality, Perceived Desirability, Prevalence, Attempt to Comply, Willingness to Forgo Profits, and Intention to Breach. In the Negotiation subgroup, on the other hand, there were significant but moderated differences between the uncertainty conditions in four of the six variables: Perceived Morality, Perceived Desirability, Prevalence, and Intention Breach.

III. **Discussion and Policy Implications**

After presenting our findings regarding the different factors that affect the motivation of people to adhere to contractual obligations, we now turn to analyze these results. We begin by reviewing the contribution of our study to contract theory in general. Then we examine several concrete policy debates and demonstrate that our findings can shed new light on them. Finally, we address the limitations of the study and offer several avenues in which these limitations can be dealt with in future research.

A. *General Discussion*

The most salient and consistent finding stemming from all three studies is that contracts do not function merely as a price-setting device for non-cooperative
behavior. Participants in each experiment demonstrated that they treat enforcement uncertainty and contractual uncertainty distinctively and were relatively more willing to use the cheap paint when the former type of uncertainty was involved. This result suggests that, whereas enforcement uncertainty functions merely as a discount for the monetary cost of breach, contractual uncertainty carries moral weight and discounts both the monetary cost of breach and the non-instrumental implications of breach. Thus, one can view our findings as a documentation of the expressive power of contracts. The content of contracts, notwithstanding the legal price of breach, induces compliance.

The second and third experiments highlight the more intricate nuances associated with the expressive power of contracts and show that not all contractual obligations are created equal. The results of Study II suggest that people view contract terms and default rules as different types of obligations, carrying a distinctive non-instrumental power. Furthermore, the results of Study III demonstrate that the existence of negotiations may affect the way in which people treat contractual obligations. Generally, the picture arising from the results is of a continuum of contractual obligations. At one end of this continuum lie settings that are close to the paradigmatic case of a promise. In such cases, people feel a strong commitment to fulfill their obligations and thus tend to behave cooperatively irrespective of the monetary consequences. As we shift away from this setting and dilute the level of consent, people tend to assign a lower value to their contractual obligations. In such contexts, the gap between promise and contract widens and people are more willing to further their own goals and interpret their contractual obligations in a selfish manner.

Analyzing the data from the second and third studies along the dimensions of both of the independent variables reveals more insights regarding the interaction between these variables. In Study III, participants did not view standard form contracts and negotiated contracts differently when there was no contractual uncertainty. In these settings, it seems like the complete certainty associated with breach dominated participants’ choices. Once contractual uncertainty was introduced, however, the difference between standard form contracts and negotiated contracts emerged. Participants viewed breaching the ambiguous standard form contract as less immoral than breaching the equally ambiguous negotiated contract and were more willing to exploit this ambiguity in order to behave selfishly and use the cheaper paint.

Interestingly, participants in Study II did not behave in a symmetric fashion with respect to default rules. While the results revealed a clear difference between default rules and contract terms, there was no interaction between the two variables. This result can be accounted for by two alternative explanations. First, as we acknowledged while presenting our hypothesis, the expressive power of default rules is arguably stronger than that of standard form contracts because of the fairness associated with former and the unfairness associated with latter. Thus, the gap between enforcement uncertainty and contractual uncertainty with respect to default rules was expected to be smaller and more difficult to measure. Second, participants may have been sensitive to the question of responsibility for uncertainty. In the standard form setting, participants could view the drafting party as responsible for the

130 See supra notes 77-81 and accompanying text.
contractual uncertainty. This responsibility, in turn, could justify interpreting the
contract in a self-serving manner. In the context of default rules, however,
participants could not assign responsibility to the uncertainty because it was created
by an external party. As a result, the importance of uncertainty was diminished in this
context.

Finally, it is worth noting that the differences in the dependent variable
Prevalence were statistically insignificant in most experiments. In other words, while
participants’ attitudes toward breach reflected sensitivity to the non-instrumental
dimensions of performance, they assumed that others would not show similar
sensitivity. This finding is consistent with a number of theoretical paradigms, the
most recent of which is the holier-than-thou effect, which suggests that people
perceive themselves as being fairer, more altruistic, and more self-sacrificing than
others.\footnote{\textsuperscript{131}}

\textbf{B. Policy Implications}

Thus far, we have focused on the theoretical and abstract interpretations of our
findings. We now turn to explore their implications for concrete policy issues. First,
we analyze the way in which our results may affect judicial policies regarding
contract interpretation. Second, we evaluate the literature dealing with default rules in
light of our findings and argue that some of its current conclusions ought to be
revisited. Lastly, we discuss the lessons contracting parties can draw from our
studies.

\textit{1. Contract Interpretation}

The most common contract disputes are those that involve issues of
interpretation.\footnote{\textsuperscript{132}} Both the limitations of the language and transaction costs often lead
parties to define their obligations in a vague manner.\footnote{\textsuperscript{133}} This in turn, requires an
adjudicator to interpret the contract in order to determine the parties’ obligations.
Contractual vagueness can result from terms that are inherently unclear, such as terms
that require parties to engage in a “best effort” or terms that excuse performance in
cases of a “material” change of circumstances. Nevertheless, even apparently clear
terms may raise interpretative questions. A court may, for example, have to

\footnotesize{\textsuperscript{131} See Nicholas Epley & David Dunning, \textit{Feeling “Holier Than Thou”: Are Self-Serving Assessments Produced by Errors in Self- or Social Prediction?}, 79 J. PERSONALITY & SOC. PSYCHOL. 861 (2000). To some extent, the fact that participants differed systematically with respect to variables that measured self-related attitudes and did not with respect to measures of others, reassures us as to the internal validity of our questionnaires, and the careful reading of our respondents. For a discussion of the possible effects of this perception gap in legal contexts, see Robert Cooter, Michal Feldman & Yuval Feldman, \textit{The Misperception of Norms: The Psychology of Bias and the Economics of Equilibrium}, 4 REV. L. & ECON. 889 (2008).}

\footnotesize{\textsuperscript{132} See Alan Schwartz & Robert E. Scott, \textit{Contract Interpretation Redux}, 119 YALE L. J. 926, 928 n.3 (2010) (reviewing the evidence on the prevalence of contract disputes that stem from interpretation).}

\footnotesize{\textsuperscript{133} For a review of the different sources of contractual uncertainty see ALLAN E. FARNSWORTH, \textit{FARNSWORTH ON CONTRACTS} § 7.8 (3rd ed., Vol. II, 2004).}
determine whether a chicken that is only suitable for stewing and not for broiling or frying constitutes a “chicken” under a sales contract.134

The main object of contract interpretation is to identify the intent of the drafting parties.135 As Solan recently noted, the single concern of courts in interpretation cases “is to discover the intent of the parties, and reach a decision that will vindicate that intent.”136 This goal promotes efficiency because the parties’ intent arguably reflects the optimal allocation of risks.137 This goal also promotes autonomy, as it respects the parties’ will, and does not impose on them obligations that they did not intend to take.138

Deciphering the true intentions of the parties, however, is a difficult task for courts engaging in ex post adjudication. When questions of interpretation arise, each party has an incentive to claim that the parties’ intention was that which will maximize its profits. In light of this, contract interpretation is mostly an objective rather than subjective task.139 The substantive rules of contract law routinely employ objective standards according to which they construct the parties’ presumed intentions.140 These substantive doctrines are coupled with evidentiary rules, such as the rule barring parole evidence,141 which further detach contract interpretation from the subjective intentions of the parties.


135 See Schwartz & Scott, supra note 132 at 937 (noting that “it is uniformly held that a court resolving an interpretive dispute should recover the parties’ intentions, whatever those intentions were”). But see Eyal Zamir, The Inverted Hierarchy of Contract Interpretation and Supplementation, 97 COLUM. L. REV. 1710, 1724 (1997) (arguing that along with the goal of identifying intentions contract interpretation has other goals such as “promoting fairness and equivalence of considerations, fostering redistributive policies, and protecting individuals from their own shortsightedness and weakness”).


137 See Posner, supra note 81 at 1589-92 (analyzing the goals of interpretation and arguing that focusing on parties’ intentions is desirable).

138 See, e.g., William C. Whitford, Relational Contracts and the New Formalism, 2004 WIS. L. REV. 631, 641-42 (2004) (noting that failing to implement the expectations that the parties formed at the time of formation is “a legitimate autonomy concern”).

139 ALLAN E. FARNSWORTH, FARNSWORTH ON CONTRACTS § 3.6, 115 (4th ed. 2004) (“[B]y the end of the nineteenth century, the objective theory had become ascendant and courts universally accept it today”). There are, of course, situations in which the parties’ subjective state of mind does play a role in the interpretation of contracts. See RESTATEMENT (SECOND) OF CONTRACTS § 201(1) (1981) (“Where the parties have attached the same meaning to a promise or agreement or a term thereof, it is interpreted in accordance with that meaning”).


141 See U.C.C. §2-202 (noting that the terms of a contract “may not be contradicted by evidence of any prior agreement or of a contemporaneous oral agreement but may be explained or supplemented by course of performance, course of dealing, or usage of trade”).
The findings of all three of our studies support the objective trend in contract interpretation. The consistent gap between enforcement uncertainty and contractual uncertainty demonstrates the tendency of parties to interpret obligations in light of their private interests. Thus, relying on the parties’ ex post subjective perceptions of intent is expected to have little value if the goal of the court is to inquire as to the parties’ ex ante intent. Reliance on such testimonies will, at best, add little to the precision of judicial rulings, and, at worst, jeopardize the parties’ true intentions by generating costly litigation that may undermine the ability to enforce contracts.

This insight has manifested itself in the case of AM International in which Judge Posner introduced his theory of contract interpretation. As Posner notes, subjective testimony presented by the parties as to what the contract means is “invariably self-serving.” Nevertheless, Posner recognizes the need for extrinsic evidence in order to ascertain the parties’ intentions. In order to cope with this need Posner allows for objective evidence that can be supplied by disinterested third parties to be introduced even in order to challenge the text of a seemingly clear contract. This flexible approach seems to reflect a workable compromise. On one hand, it allows for a brief inquiry into the parties’ true intentions. On the other hand, it prevents prolonged trials based on evidence of questionable value.

Aside from these general insights regarding contract interpretation, our findings shed new light on a specific interpretation doctrine as well. One of the long-standing rules regarding contract interpretation is the rule of contra proferentem. According to this rule, ambiguous contract terms are interpreted against the interest of the party that drafted them. While this rule governs all types of contracts, it is mostly applied in the context of standard form contracts.

Legal scholars have presented competing rationales for this doctrine. One line of thought focuses on non-instrumental objectives. According to this argument, because the drafter caused the ambiguity, she should also bear its consequences. As Zamir noted, if the non-drafting party “could have reasonably relied on an interpretation of the ambiguous contract favorable to her, it would be unfair to...

142 For a theoretical argument along these lines see STEVEN J. BURTON, ELEMENTS OF CONTRACT INTERPRETATION 173 (2009).
143 See AM Int’l, Inc. v. Graphic Mgmt. Assocs., Inc., 44 F.3d 572 (7th Cir. 1995).
144 Id. at 575.
145 Id.
146 Id.
147 See RESTATEMENT (SECOND) OF CONTRACTS § 206. For a review of the case law see FARNSWORTH, supra note 133, § 7.11, at 300-04.
148 See FARNSWORTH, supra note 133, § 7.11, at 302-03.
149 See RESTATEMENT (SECOND) OF CONTRACTS § 206 cmt. a.
disregard this reliance.\textsuperscript{150} A second line of thought focuses on the incentives generated by the rule.\textsuperscript{151} According to these arguments, contractual ambiguity is undesirable as it creates a risk of misunderstandings regarding the parties’ rights under the contract. Such misunderstandings, in turn, may bring about inefficient contracting because parties will enter into contracts they ought not to enter. Assuming that drafters are in a better position to reduce uncertainty, assigning liability for ambiguity will incentivize them to minimize the costs created by the ambiguity.\textsuperscript{152}

While we do not aim to rebut the existing theories, one should acknowledge their relative weaknesses when dealing with the application of the rule to standard form contracts. As noted earlier, both contract theory and recent empirical studies suggest that hardly anyone actually reads standard form contracts.\textsuperscript{153} Thus, focusing the analysis on the interaction between the parties at the time of contracting requires assumptions that are not aligned with reality. Non-drafters are unlikely to rely on the text of a standard form contract, for the simple reason that they are clueless as to the contract’s content.\textsuperscript{154} Similarly, it is improbable that parties enter into inefficient contracts because of contractual uncertainty, as they are unaware of the ambiguous provision at the time of consent.\textsuperscript{155}

Our findings suggest a new explanation for the doctrine that rests on purely ex post grounds. Participants in the third experiment viewed contractual obligations that were dictated by the opposing party as obligations with a weaker non-instrumental value. They thought that their moral obligations to adhere to such contracts were relatively smaller and expressed greater willingness to utilize uncertainty within them to their benefit. These perceptions may be reflected in the doctrine of \textit{contra proferentem} that grants the non-drafting party greater freedom in interpreting the text

\textsuperscript{150} Zamir, \textit{supra} note 135 at 1724.


\textsuperscript{152} This is not to say that drafters will simply minimize ambiguity, rather, they will minimize the combined cost of ambiguity and drafting. \textit{See Carolina Care Plan Inc. v. McKenzie}, 467 F.3d 383, 390 (4th Cir. 2006) (contending that assigning liability to the drafter will cause it to reach “the most efficient balance between clarity and ambiguity”).

\textsuperscript{153} \textit{See supra} notes 98-101 and accompanying text.

\textsuperscript{154} To be sure, non-drafters may rely on the text of a standard form contract if they become aware of its content during the duration of the contract. While we do not rule out this option, it seems quite unlikely in most settings. In the context of insurance contracts, for example, it is more plausible that the insured will read the policy only after a potential claim has arisen.

\textsuperscript{155} Furthermore, the assumption that drafters will adjust the text of standard form contracts as a result of liability for ambiguity is questionable as well. As Boardman suggests, once an ambiguous term has been adjudicated, it is no longer ambiguous and therefore using it may be less risky than attempting to draft a new term. Thus, drafting parties may choose to stick with the existing term and price the contract appropriately. \textit{See} Michelle E. Boardman, \textit{Contra Proferentem: The Allure of Ambiguous Boilerplate, in} \textit{BOILERPLATE: THE FOUNDATION OF MARKET CONTRACTS} 176, 178-84 (Omri Ben-Shahar ed., 2007).
of the contract. Such a match between peoples’ moral intuitions and legal doctrine may result from the mere fact that judges share these intuitions and therefore incorporate them into their decisions (leaving the question of the desirability of the doctrine unanswered). Alternatively, it may also result from an effort to align legal doctrine with moral intuitions in order to bolster the law’s expressive power and thus enhance voluntary compliance (suggesting that the doctrine is at least potentially efficient).

Whereas contract interpretation deals with situations in which the parties addressed a certain contingency in the contract, default rules deal with situations in which the contract remains silent. As noted earlier, given the inherent incompleteness of contracts, a significant chunk of contract law is dedicated to filling in these gaps. Despite the voluminous body of literature dealing with the topic, a consensus has yet to be reached regarding the desirable structure of default rules and the underlying theory that should guide their selection. As the analysis in this subsection demonstrates, the findings of our experiments can offer new insights with regard to this ongoing debate. We begin by highlighting the implications of our study regarding the appropriate theory for the selection of default rules. That done, we turn to the question of the desirable structure of specific default rules.

Over the years, an array of theories attempted to draw a normative criterion for the selection of default rules. These theories focused on consequential goals such as efficiency and wealth redistribution and on non-consequential goals such as the promotion of autonomy. Within this debate, the dominant approach regarding default rules has been the majoritarian one. According to this theory, default rules should be tailored in accordance with the preferences of most contracting parties.


157 Although from a doctrinal perspective, there is a crisp distinction between the interpretation of complete contracts and gap filling in incomplete contracts, the distinction between the two is quite murky, as both deal with situations in which the allocation of risks is unclear. See Eric A. Posner, There are No Penalty Default Rules in Contract Law, 33 FLA. ST. U. L. REV. 563, 579 (2006).

158 See supra notes 71-76 and accompanying text.

159 For examples of recent contributions to this debate see Symposium, Default Rules in Private and Public Law, 33 FLA. ST. U. L. REV. 557 (2006).

160 See, e.g., Ayres & Gertner, supra note 79 (presenting an efficiency-centered theory of default rules); Zamir supra note 135 at 182-84 (presenting a distributional analysis of default rules).


162 Jody S. Kraus, The Correspondence of Contract and Promise, 109 COLUM. L. REV. 1603, 1631-32 (2009) (noting that “[w]ith a few possible exceptions, contract default rules are best understood as attempts to impute into contracts terms that most similarly situated parties would have wanted to include had they considered them”).
From a consequential perspective, such rules can enhance aggregate welfare by minimizing the transaction costs associated with contracting around them. From a non-consequential perspective, such rules can promote autonomy as they are most likely to correspond with the unexpressed wishes of promisors.

Importantly, within the majoritarian framework, default rules are viewed as mere starting points from which the parties can gravitate towards the desirable allocation of risks. Whereas parties for which the default rule fits their needs will do nothing and adopt it, parties for which the rule is problematic will opt out of it, and draft provisions that better fit their preferences. This is the key feature that differentiates default rules from mandatory rules.

Legal scholars have challenged the “mere starting point” concept and demonstrated the central role default rules may play in determining the final allocation of risks. Analyzing the issue from a rational-choice perspective, Ayres and Gertner demonstrated that, given information asymmetries, parties may be reluctant to contract around a default rule if attempting to do so will reveal valuable private information. Thus, the initial default rule may end up being the governing rule even if it does not maximize the contractual surplus. Viewing the issue from a behavioral perspective, contract scholars have argued that cognitive biases, such as the endowment effect, may impede contracting around the initial default rule. This theoretical argument was later corroborated in stylized experiments that documented the stickiness of default rules.

Within this long-standing debate, there is an overlooked implicit assumption that all parties share. Both those who view default rules as mere starting points and those who view them as central to the final allocation of risks believe that, ex post, parties will behave in the same manner whether their conduct is regulated by a default rule or by a contract term. For example, parties who explicitly agreed that goods must be of “reasonable quality” in order to opt out of a default rule that requires some

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164 See Kraus, *supra* note 162 at 1631-35.


166 Ayres & Gertner *Id.* at 94.

167 See, e.g., Zamir, *supra* note 150 at 1760-62.


other quality, are assumed to perform this obligation in the same way as parties who did not agree on the issue of quality and thus, are subject to a default rule that requires "reasonable quality." Our findings, however, suggest that the legal vessel carrying the obligation will affect parties’ performance decisions. More specifically, the results of our second study demonstrate that explicit agreements carry greater expressive value than default rules and therefore bring about greater compliance. Participants viewed not complying with a default rule as less immoral and reported a greater willingness to construe it in accordance with their self-interest. Thus, setting the default rule will not only affect the allocation of rights, but will also affect the strength of those rights and the behavior of the parties.

The behavioral differences between default rules and contract terms suggest a potential drawback to the extensive use of majoritarian default rules. From a narrow perspective, the majoritarian approach promotes the welfare and autonomy of contracting parties by supplying them with the terms they want. This approach, however, causes most parties to rely extensively on default rules and thus dilutes the power of a significant part of contractual obligations. Policymakers wishing to bolster the power of contractual obligations in order to strengthen the non-consequential incentives to perform, may choose to design a legal regime that will encourage the parties to reach explicit agreements. Such a regime can be based on the concept of penalty default rules — default rules that run against the preferences of the contracting parties. By setting such default terms, or even by simply refusing to fill certain gaps in contracts, policymakers can encourage parties to reach explicit agreements, thereby assisting them in the design of their contracts.

Our findings also raise doubts regarding the desirability of a large set of specific default rules used by courts and legislatures. A primary source for an array of specific default rules in American jurisdictions is the U.C.C. A central characteristic of the default rules set forth in the U.C.C. is their vagueness. Given the fact that the rules that are tailored ex ante have to apply to an endless set of potential cases, they

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170 The term “penalty default rule” was coined by Ayres & Gertner, supra note 79. For a review of such rules, see id, at 95-107. To be sure, the normative claims of Ayers and Gertner are distinct from those we present in the text. According to the Ayres-Gertner framework, penalty default rules should be adopted in order to encourage the efficient transfer of information and not in order to encourage negotiations. For a critical analysis of the thesis presented by Ayers and Gertner, see Eric A. Posner, There Are No Penalty Default Rules in Contract Law, 33 FLA. ST. U. L. REV. 563 (2006).

171 See U.C.C. § 2-201(1) (stating that a “contract ... is not enforceable under this [provision] beyond the quantity of goods shown...”). See also Ayres & Gertner, id at 95-96.

172 To be sure, we are not in favor of a complete abandonment of the default-rule project. Clearly, in many (perhaps even most) settings, the potential benefits of strengthening the commitment of the parties to the contract is outweighed by the transaction costs created by forcing the parties to negotiate. Furthermore, leaving economic costs aside, forcing parties to negotiate is problematic from a psychological perspective as well. For one, studies in the area of cognitive psychology demonstrate that people systematically err when making choices during negotiations. Thus, there may be a paternalistic case for using default rules. See Richard H. Thaler & Cass R. Sunstein, Nudge 3-4 (2008). In addition, forcing people to deal with many contingencies may be emotionally stressful. Thus, eliminating options may actually increase the welfare of contracting parties. See Chris Guthrie, Panacea or Pandora’s Box?: The Costs of Options in Negotiation, 88 IOWA L. REV. 601, 634-38 (2003).
routinely employ ambiguous terms such as “reasonable,” “good faith,” and the like. The legislative policy was grounded in the strong belief of Llewellyn as to the ability of judges to incorporate efficient business practices into these terms ex post. The prevalence of vague terms in the U.C.C. has brought some contract scholars to argue that the Code does not really set default rules but rather sets default standards.

The vagueness of many of the provisions in the U.C.C. has generated a lively debate regarding the desirability of this drafting policy. On one side of this debate lie those who view the Code’s policy as an effective way to promote efficient contracting. Using flexible standards allows the courts to tailor specific rules that fit the needs of contracting parties. The use of rigid rules, conversely, would either impose inefficient terms on many contracting parties or raise the transaction costs for those parties by forcing them to negotiate an alternative provision. Furthermore, flexible standards can be adjusted over time by the courts. Given changing economic circumstances, flexible standards thus allow for relatively swift and easy adjustments to the way in which contractual risks are allocated.

On the other side of this debate lie those who view clear bright-line rules as the desirable way of assisting contracting parties to achieve their goals. According to this line of thought, rules offer a precise allocation of rights and thus enhance predictability. This clear allocation of rights, so the argument goes, assists markets to function and thus facilitates productive behavior. Furthermore, whereas relying on standards may reduce transaction costs for the parties, it also imposes a cost on courts that are constantly required to tailor new rules for highly specific circumstances.

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173 See U.C.C. §§ 1-204-1-205, 2-305, 2-309.
174 Posner, supra note 157 at 582.
175 Schwartz & Scott, supra note 169 at 598-601.
176 The discussion over the use of standards in the U.C.C. follows to a great degree the more general debate regarding the use of standards as a means to regulate behavior. For a comprehensive analysis of the issue see, for example, Louis Kaplow, Rules versus Standards: An Economic Analysis, 42 DUKE L.J. 557 (1992).
178 Id. at 555.
179 Id. at 556.
180 See, e.g., Schwartz & Scott, supra note 169 at 594-609.
181 See Ian Ayres & Robert Gertner, Majoritarian vs. Minoritarian Defaults, 51 STAN. L. REV. 1591, 1597 n. 21 (alluding to the possibility that contracting parties might free ride on courts’ ex post efforts).
Our aim is not to end this ongoing debate in the legal literature.\footnote{For examples of some of the main contributions to this debate see Kennedy, supra note 111 at 576-584 (discussing the ideal scope of ex-post court intervention); and Kaplow, supra note 176 at 568-86 (analyzing when the legal system should use rule and when it should use standards).} We do, however, wish to highlight the way in which our findings may add to it. The results of our experiments suggest an overlooked drawback created by vague default rules. Participants in all three studies demonstrated a tendency to exploit contractual ambiguity in order to further their own self-interest. Thus, when a contracting party needs to decide whether a certain type of behavior is “reasonable,” she is unlikely to do this in a balanced fashion. Rather, she is expected to engage in a self-serving deliberative process that will draw the line of reasonableness according to her private interests. Thus, vague standards are expected to bring about more contractual conflicts and may undermine the relationship between the parties, whereas clear rules could help foster cooperation.

Arguably, legal advice may alleviate the risk described above. To the extent lawyers can offer parties objective advice regarding the meaning of vague standards, this may remove their bias and help them to sustain their relationship. Such a solution, however, seems unattainable on both economic and behavioral grounds.

From an economic perspective, parties are expected to seek legal advice only if the expected benefit of such advice exceeds its costs.\footnote{See Steven Shavell, Legal Advice About Contemplated Acts: The Decision to Obtain Advice, its Social Desirability, and Protection of Confidentiality, 17 J. LEGAL STUD. 123 (1988).} The expected benefit of legal advice is calculated by multiplying the (subjective) probability that the advice will lead a party to alter her behavior by the benefit gained from the altered behavior.\footnote{\textit{Id.} at 127.} Contracting parties who are driven to believe that their behavior is worthy, expect that the legal advice they acquire will vindicate this belief. As a result, such parties will assign a low value to legal advice because they do not think it will alter their behavior. If, for instance, a contractor has convinced himself that using cheap paint must be “reasonable,” he will not waste money just to hear the same advice from a lawyer. Thus, given contracting parties’ subjective valuations of legality, their rational response is to avoid paying for legal advice.\footnote{In the analysis in the text, we focus on the issue of the incentives to purchase legal advice as this point arises from our results. This does not imply that if the parties manage to pay for legal advice in order to eliminate ex post uncertainty, then vague standards are efficient. Ex post expenditures on legal advice should be viewed as a type of transaction cost that is imposed on the parties ex post by the legal rule. To the extent these costs are high, they could render the rule inefficient.} From a behavioral perspective, recent studies suggest that parties may strategically avoid legal advice so that they can continue to engage in motivated reasoning. Dana, Weber and Kuang demonstrated this point by altering the design of the traditional dictator game.\footnote{For a description of such games see \textit{supra} notes 27-33 and accompanying text.} In their experiment, the dictator had to choose between a personal payoff of 6 and a personal payoff of 5.\footnote{Dana et al., \textit{supra} note 27 at 71-72 (describing the design of the experiment).} Each of these payoffs
was matched with an uncertain payoff of 1 or 5 to the opposing player that was determined exogenously by a lottery and was unknown to the dictator. Thus, the dictator could choose the selfish payoff (6) while convincing herself that the opposing party would receive the high payoff (5 rather than 1) as well. Nevertheless, before choosing between the payoffs, dictators were offered a chance to reveal (at no cost) the results of the lottery so that they could be privy to the implications for the opposing player. Interestingly, about half of the dictators chose to remain uninformed. This, in turn, allowed them to choose the option that maximized their personal welfare yet was undesirable from a joint perspective. This type of behavior suggests that parties are expected to be reluctant to purchase legal advice that would remove the moral uncertainty surrounding their choices. Instead, they are expected to prefer to sustain a type of blissful ignorance that allows them to further their personal welfare.

The problems associated with vague standards raise the obvious question: If such provisions are so problematic, what can contracting parties do in order to deal with them? Unlike commanding vague standards (e.g. the negligence standard in torts, the fair use standard in copyright), contracting parties can always opt out of vague standards if they find them to be undesirable. In the next subsection, we turn to deal with this question in greater detail.

2. Drafting Contracts

The results of our experiments carry practical lessons not only for policymakers engaged in the regulation of contracts, but for drafting parties as well. The results of all three experiments demonstrate that contractual ambiguity is expected to bring about an increased amount of selfish behavior. This type of behavior may, in turn, reduce the surplus the parties can expect to gain from their relationship. In order to avoid this welfare loss, parties are expected to prefer clear rather than ambiguous provisions. While clear provisions may backfire at times and lead to undesirable outcomes in specific cases, they could also foster cooperative behavior in the vast majority of cases, as they clarify the obligations of the parties and prevent opportunistic interpretations.

Scholars researching actual contract provisions have in fact documented this type of behavior. Lisa Bernstein, for instance, has observed that contracts in the cotton industry include extremely specific provisions and do not include terms such as “reasonable.” Recently, Schwartz and Scott have reviewed the systematic tendency of parties to business contracts to opt out of the ambiguous standards set by the

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188 Id.
189 Id.
190 Id. at 74-76 (describing the results of the experiment).
191 Id.
192 Bernstein, Cotton Industry, supra note 8 at 1731-34.
U.C.C. and to adopt alternative provisions that are more specific. This type of contract design can be viewed as an attempt by parties to deal with the behavioral patterns documented in this paper.

Aside for explaining why parties might opt out of default rules, our findings also explain why parties choose to explicitly opt into the allocation of risks created by default rules. Frequently, parties incorporate into their contracts terms that are identical to the governing default rule. For instance, it has been reported that sales contracts routinely state the rule set forth in section 2-312 of the UCC regarding the obligation of the seller to deliver to the buyer a clean title. On its face, this pattern of behavior is puzzling as there is no need to incorporate into the contract a term that will apply even if not incorporated.

Existing explanations for this phenomenon have focused on the informational role of incorporation. According to this line of thought “restating the content of legal rules … may provide the parties with information about their rights and obligations, thus saving them the trouble of finding out what the law [is]”. While the informational argument certainly holds ground, one should acknowledge its limitation in the context of ongoing contractual relationships between sophisticated parties. Arguably, the informational gap in such settings is relatively small and therefore there is no reason to “waste ink” and copy-and-paste the default rule.

Our findings suggest a complimenting explanation which focuses on the ex post performance incentives of the parties. As the findings of the second study show, people tend to pay greater respect to terms included in the contract. Given this pattern of behavior incorporation seems like a plausible strategy in order to enhance contractual compliance. Once a term is part of the contract, the motivation to adhere to it is elevated, and both parties are expected to exhibit more cooperation with respect to it.

Along with these general lessons, our findings offer specific insights with respect to the drafting of standard form contracts. As the results of our third experiment demonstrate, parties face a greater challenge when they attempt to design standard form contracts that will foster cooperation, as the tendency to interpret contracts in a self-serving manner is elevated in this setting. Drafters of standard form contracts can deal with this by employing three somewhat contradicting strategies.

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193 Schwartz & Scott, supra note 169 at 603.

194 We make no claim that this is the exclusive explanation for this behavior. Other considerations, such as the problems associated with litigating contract disputes, could also affect the contractual design chosen by the parties.

195 See Zamir, supra note 135 at 1774 (noting that often “parties include in their agreement provisions comparable or even identical to default rules”).

196 Id.

197 Id.
The first strategy takes parties’ tendency to downplay their obligations under a standard form contract as a given and attempts to preempt it. When drafters choose to use standard form contracts they also anticipate that the opposing party will utilize any vagueness in the contract to further its own goals. Drafters can counter this behavior by designing clear one-sided provisions that strengthen their rights. The combined effect of the one-sided provisions designed by drafters ex ante with the one-sided interpretation of the contract employed by opposing parties ex post could help foster efficient performance.\textsuperscript{198}

Take, for example, the case of a hotel that needs to design a contract that will govern the issue of check-out time.\textsuperscript{199} Assume that the surplus-maximizing provision is that all patrons check-out by noon. Nevertheless, the hotel knows that if it states that the check-out time is noon, some patrons will interpret “noon” to mean “approximately noon” and will check-out later. Anticipating this behavior, the hotel specifies a one-sided inefficiently early check-out time, say 11:00AM, knowing that it can expect all rooms to be vacated by noon.

The second strategy attempts to alter parties’ behavior by framing the situation as a negotiation rather than as a standard form setting. Tailoring the provisions of the contract jointly may cause the parties to increase their commitment to the contract. In cases in which the benefits of using standard form contracts are marginal, this could imply forgoing this type of contracting and opting for negotiated contracts. Alternatively, if standardization is critical, the parties could still attempt to strengthen their commitment to the contract by creating contractual “menus” that will grant parties control over some parts of the contract.

Take again the case of the hotel-checkout contract. The hotel may choose to offer patrons their choice of preferred check-out times (e.g., 10:00 AM, 11:00 AM, or 12:00 AM) while charging a nominal fee for later checkouts. Our findings suggest that such a scheme may change the way patrons view their commitment to leaving the hotel on time. Since the checkout time was bargained for, rather than offered on a

\textsuperscript{198} Legal economists have struggled to explain the efficiency of such one-sided provisions in standard form contracts. According to economic theory, the mere fact that one of the parties controls the language of the contract is not expected to cause her to draft a one-sided suboptimal contract, since given the pricing mechanism such a contract will reduce the welfare of both parties. Recently, Bebchuk and Posner presented a theory of one-sided contracts that focuses on the ex post position of the parties at the time of breach. See Lucian A. Bebchuk & Richard A. Posner, \textit{One-Sided Contracts in Competitive Consumer Markets}, 104 MICH. L. REV. 827, 831-33 (2006). According to Bebchuk and Posner, there is an asymmetry between the parties because drafters are routinely subject to reputational penalties whereas non-drafters (usually consumers) are not. In light of this situation, consumers agree to seemingly inefficient provisions, knowing that they will not be enforced due to reputational concerns unless they behave in an egregious fashion. While the Bebchuk-Posner framework certainly captures a unique aspect of standard form contracts, one should acknowledge its inability to explain large sections of one-sided contracts. On one hand, in many cases, non-drafting parties are subject to significant reputational sanctions. For example, the effect of breach on a party’s credit rating may create significant performance incentives. On the other hand, drafters are often not subject to reputational sanctions. For instance, “fly-by-night” firms are not likely to suffer from such sanctions. Thus, their theory cannot explain the observed behavior in a comprehensive fashion. Our findings offer a more general explanation for the phenomenon, as they relate to all types of standard form contracts.

\textsuperscript{199} This example stems from the check-out example presented by Bebchuk & Posner, \textit{id} at 834.
take-it-or-leave-it basis, it comes closer to a promise. Thus, holding the cost of breach constant, more compliance is expected under this regime.

To be sure, we do not suggest that a general shift away from standard form contracts is desirable. In many cases, the transaction and agency costs associated with using non-standardized contracts may be prohibitive. It is quite possible that even moderate changes such as the introduction of menus could add additional costs to contracting that both parties would rather avoid. Additionally, there is no true need to foster cooperation between the parties in various settings because the obligation of the non-drafting party is rather straight-forward and simple: to pay the specified price on time. The user of a cell-phone, for instance, does not have many opportunities to interpret the contract with her service provider strategically and therefore there is little need to reinforce her commitment to the contract. The importance of cooperation rises as the contract reflects mutual performance obligations. In the context of employment contracts, for example, employers do not merely want their employees to show up to work on time. Rather, they want them to be “innovative, hard-working, and loyal to their projects and their coworkers.”

It is in such settings that parties not only expect mutual compliance but also hope to foster cooperative behavior that goes “beyond compliance.”

The final strategy drafters can utilize falls back to the basic framework of economic analysis. To the extent contractual ambiguity in the standard form setting elicits incompliance, this tendency can be countered by elevating the “penalty” for breach. By setting damages at an appropriately high level drafters can dissuade their contracting partners from behaving opportunistically. Adopting such a regime will be beneficial for both parties, since ex ante they share the common interest of fostering cooperation.

This insight sheds new light on the ongoing debate regarding the regulation of liquidated damages. Legal doctrine has traditionally limited the freedom of parties to stipulate the amount of damages in the contract. The Restatement of Contracts caps the level of liquidated damages “at an amount that is reasonable in the light of the anticipated or actual loss caused by the breach and the difficulties of proof of loss.” This rule has been both rationalized and criticized by scholars writing from an economic perspective. Our findings, however, suggest that there is an additional


201 The term “beyond compliance” is often used to describe the tendency of actors to behave in a more constrained way than that required by the law. For some examples of this line of literature, see, e.g., Neil Gummingham, Robert A. Kagan & Dorothy Thornton, Social License and Environmental Protection: Why Businesses Go Beyond Compliance, 29 LAW & SOC. INQUIRY 307 (2004) (documenting the phenomenon in the area of environmental regulation); Orly Lobel, Interlocking Regulatory and Industrial Relations: The Governance of Workplace Safety, 57 ADMIN. L. REV. 1071, (2005) (analyzing workplace safety regulations and arguing that policies should encourage employers to go beyond compliance).

behavioral dimension to liquidated damages. To the extent drafters add such terms to contracts in order to discourage their partners from behaving selfishly, this would imply that courts should demonstrate greater caution before striking them down.

C. Limitations and Future Research

In this final subsection, we acknowledge potential criticisms to this project. We outline the limitations of our results as they relate to the methodology we employed, the variables we studied, and the sample of subjects we utilized. Additionally, we suggest potential avenues of future research that could help address these limitations and further our understanding of the expressive power of contracts.

First, one should recognize the general limitations of the methodology we used in this study. Measured items were self-reported attitude scales. Given the extensive literature on the complexity of the attitude-behavior relationship, one ought to be careful not to overstate these findings, especially in the context of the expressive aspects of participants’ behavior. Thus, because participants in our study did not face real monetary incentives, their answers may be biased towards overstating the non-instrumental incentive to respect contracts. Future research should attempt to overcome this problem by incorporating monetary incentives into the experimental design.

That said, it should also be recognized that numerous studies have documented the validity of using attitudes as a proxy for behavior. These studies show that there exists a correlation between how parties intend to behave and how they actually behave. As Crano and Prislin recently noted in a review of the literature, “[b]ecause

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205 Nonetheless, it should be noted that with respect to variables such as moral judgment, desirability and perceived social norm, which were showing similar results to the self reported intention to breach, incentive compatible methodology is rarely seen as a valid methodological alternative.

206 See, e.g., Icek Ajzen, From Intentions to Actions: A Theory of Planned Behavior, in ACTION-CONTROL: FROM COGNITION TO BEHAVIOR 11, 15-18 (Julius Kuhl & Jürgen Beckman eds., 1985) (discussing empirical research on “theory of reasoned action” that demonstrates ability to predict behavior based on intention); Icek Ajzen & Martin Fishbein, The Influence of Attitudes on Behavior, in THE HANDBOOK OF ATTITUDES 173, 187–96 (Dolores Albarracín et al. eds., 2005) (providing a detailed overview of research substantiating predictive validity of behavioral intentions, including theory of reasoned action and theory of planned behavior); Icek Ajzen & Nicole Gilbert Cote, Attitudes and the Prediction of Behavior, in ATTITUDES AND ATTITUDE CHANGE 289, 303 (William D. Crano & Radmila Prislin eds., 2008) (reviewing various empirical studies showing that specific behaviors can be predicted based on corresponding intentions).
attitudes predict behavior, they are considered the crown jewel of social psychology.”

Second, even if one accepts the methodological framework of attitude studies, one may still question the practical importance of the numeric results we obtained. After all, what is the meaning of a finding that the perceived immorality of breaching an uncertain contract is 6.88? This criticism, however, misses the mark as it does not acknowledge the characteristics of the experimental design we employed. While it is true that the numeric results carry little value in absolute terms, their relative size is of importance as it allows us to compare between different subgroups that were randomly assigned to the distinct legal settings. Although we cannot ascertain the size of the non-instrumental incentive to perform, we can nonetheless identify it and the variables that affect it. Clearly, future research using both field and lab-based approaches could and should be used to further our understanding of the phenomena described in this Article.

Third, our study clearly did not capture the complete range of relevant variables needed to fully understand the non-consequential aspects of contract performance. It is quite possible, for example, that distinct types of contracts will generate different results. The universe of contracts includes an endless set of potential variations. These variations include dimensions, such as the kind of commodity being exchanged (e.g., goods, services, labor, etc.), the type of contracting parties (business-to-business, business-to-consumer, private parties, etc.) and the medium of contracting (e.g. oral, written, web-based, etc.). The selection of the fact pattern for this study was constrained by our need to design a story that our participants would be able to relate to and that could reasonably be construed to fit the settings we examined (e.g. explicit contract, standard form contract, default rule). Future studies could explore different fact patterns such as contracts for the sales of goods rather than services and contracts in which private parties interact with corporations.

Fourth, the subjects used in our experiments may reflect a sampling problem. Participants in all studies consisted exclusively of law students whose reactions to contractual performance may not represent those of the general population. For example, law students may be more willing to view contracts in instrumental terms as they are taught about the distinctions between contracts and promises. From this perspective, we expect to see a greater willingness to use contractual uncertainty among law students. On the other hand, the law in general and contracts in particular may hold greater expressive power in the eyes of law students because they tend to care more about their own image as law-abiding people. From this perspective, we expect to see a lower willingness to act not in accordance with an uncertain contractual norm among law students.

While we recognize this concern, it should not be overstated. The existing experimental literature on both contractual behavior and other legal topics has routinely relied on law students as subjects. Notwithstanding this long-standing

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208 For examples in the experimental-contract literature see Korobkin, *supra* note 9 at 634; Sunstein, *supra* note 9 at 113. For examples in other legal experimental areas see Jeffrey J. Rachlinski, *Gains,*
practice, we certainly acknowledge that it would be both interesting and useful to rerun our experiments on subjects without a legal education in order to examine whether they perceive contractual obligations differently from our sample.

Fifth, future research should explore other degrees of contractual ambiguity. In this study, participants in the contractual uncertainty groups were informed of a relatively high likelihood (90%) that the selfish behavior would not be viewed as a breach. Such a high probability could arguably suggest that the governing norm allows promisors to opt for the cheaper performance. In addition, participants in this group were informed that enforcement was certain (100%). Complete enforcement might be a unique situation because it might signal a complete lack of trust, which could have affected some of our respondents. Replicating this study using a wider range of probabilities could provide us with a deeper understanding of peoples’ evaluations of legal ambiguity in general and in the context of contracts in particular.

Finally, extensions of this study could examine other factors that may interact with peoples’ behavior when facing contractual ambiguity. For example, promisors’ behavior may differ depending on the type of harm they cause the opposing party. Whereas people may be inclined to behave selfishly when monetary interests are at stake, they may exhibit different patterns of behavior with respect to issues such as pain and suffering. Similarly, promisors may be sensitive as to whether monetary incentives are framed as a gain or a loss. In our experiments, the decision to breach was related to an unexpected gain created by the new cheap paint. If, however, the decision to breach was related to an unexpected negative contingency that caused the contract to become a potentially losing prospect, they may have behaved in a different fashion. Additionally, there is probably some type of tradeoff between consequential and non-consequential incentives to perform. It might be the case, for instance, that as the monetary stakes grow the role of the expressive function of contracts diminishes, since people engage in more careful cost benefit analysis. In order to simplify our questionnaires we intentionally omitted from them any reference to the cost of breach (i.e. the amount of damages to be paid). Future studies can

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*Losses, and the Psychology of Litigation, 70 S. Cal. L. Rev. 113, 140 (1996); Chris Guthrie, Framing Frivolous Litigation: A Psychological Theory, 67 U. Chi. L. Rev. 163, 188 (2000).*


*This hypothesis stems from the basic findings of prospect theory according to which people tend to be risk averse with respect to gains and risk seeking with respect to losses. For an early exposition of the theory see Amos Tversky & Daniel Kahneman, Judgment under Uncertainty: Heuristics and Biases, 185 Science 1124 (1974). For a later description of the theory and the findings upon which it is grounded see Chris Guthrie, Prospect Theory, Risk Preference and the Law, 97 NW. U. L. Rev. 1115, 1117-19 (2003).*
control for this point by introducing information regarding the cost of breach, and varying it.

**CONCLUSION**

In this paper, we explored the motivations associated with contract performance. At the end of the day, combining the wealth of behavioral research reviewed in this paper with our own findings allows us to reject the contracts-as-mere-options hypothesis associated with traditional economic reasoning and introduce the concept of the expressive power of contracts. As our results show, contract performance decisions are not driven solely by monetary incentives set by the legal system. Rather, they reflect a far more complex decision-making process. Forces such as moral obligations, motivated reasoning, and social norms affect peoples’ perception of their contractual obligations and the way in which they are expected to behave. Deciphering this complicated web of forces could help build a more accurate (alas, less elegant) model of contractual behavior and thus help design superior policies and more efficient contracts.
APPENDIX – METHODOLOGY

1. Contractual Uncertainty Questionnaire

Assume that, during the summer months, you decided to paint a house as a one-time job in order to earn money (i.e., you are not a professional painter and do not intend to offer further painting services in the foreseeable future). Prior to commencing work you signed an orderly agreement with the person living in the house you are to paint, defining your obligations, on the one hand, and the payment you would receive, on the other hand. The contract provided, among other things, as follows:

The promisee [in other words, you] undertakes to use paint bearing an Israel Standards Mark and which is of reasonable quality.

Recently, one of the Do-It-Yourself (DIY) store chains has begun marketing paint under its store brand. This paint bears an Israel Standards Mark but you read in the newspaper that the quality of such brand is significantly inferior (the paint fades much faster) to that of paint manufactured by the well-known paint companies. Purchasing the generic brand paint would save you NIS 2,000 off the cost of materials (in other words, this amount will go into your pocket).

You know that the person who commissioned the work will be aware of the type of paint you use. Nevertheless, based on legal advice you received from an attorney friend, there is only a 10% chance of it being determined that use of the cheaper paint does not meet the reasonable quality requirement, and, therefore, would constitute a breach of the contract.

- Use of the cheaper paint in the legal scenario depicted above is morally unacceptable.

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<td>Morally unacceptable</td>
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- Use of the cheaper paint in the legal scenario depicted above is undesirable.

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<td>Desirable behavior</td>
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<td>Undesirable behavior</td>
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- What percentage of the population in Israel would use the cheaper paint in the legal scenario depicted above?

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<th>%10</th>
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<th>%70</th>
<th>%80</th>
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<th>%100</th>
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- Do you agree with the statement, "most people would use the cheaper paint in the legal scenario depicted above"?

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<tr>
<td>Strongly agree</td>
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<td></td>
<td>Strongly disagree</td>
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</tbody>
</table>
To the extent possible, I will attempt to refrain from using the cheaper paint in the legal scenario depicted above.

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<th>1</th>
<th>I will use the cheaper paint.</th>
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<th>10</th>
<th>I will not use the cheaper paint.</th>
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</table>

Even if I save a lot of money, I will not use the cheaper paint in the legal scenario depicted above.

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<th>I will use the cheaper paint.</th>
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<th>I will not use the cheaper paint.</th>
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</table>

In your estimation, would you ultimately use the cheaper paint in the legal scenario depicted above?

Yes  
No

2. Enforcement Uncertainty Questionnaire

Assume that, during the summer months, you decided to paint a house as a one-time job in order to earn money (i.e., you are not a professional painter and do not intend to offer further painting services in the foreseeable future). Prior to commencing work, you signed an orderly agreement with the person living in the house you are to paint which defined your obligations, on the one hand, and the payment you would receive, on the other hand. The contract provided, among other things, as follows:

The promisee [in other words, you] undertakes to use paint bearing an Israel Standards Mark and which is of reasonable quality.

Recently, one of the Do-It-Yourself (DIY) store chains has begun marketing paint under its store brand. This paint bears an Israel Standards Mark, but you read in the newspaper that the quality of such brand is significantly inferior (the paint fades much faster) to that of paint manufactured by the well-known paint companies. Purchasing the generic brand paint would save you NIS 2,000 off the cost of materials (in other words, this amount will go into your pocket).

Based on legal advice you received from an attorney friend, there is no doubt that use of the cheap paint does not meet the reasonable quality requirement provided in the contract, and, therefore, would constitute a breach of the contract. At the same time, you know that there is only a 10% chance that the person who commissioned the work will discover that you used the cheap paint.

Use of the cheaper paint in the legal scenario depicted above is morally unacceptable.

<table>
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<tr>
<th>1</th>
<th>Not unacceptable</th>
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- Use of the cheaper paint in the legal scenario depicted above is undesirable.

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<th>Desirable behavior</th>
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- What percentage of the population in Israel would use the cheaper paint in the legal scenario depicted above?

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</table>

- Do you agree with the statement, "most people would use the cheaper paint in the legal scenario depicted above"?

<table>
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<tr>
<th>1</th>
<th>Strongly agree</th>
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<th>9</th>
<th>10</th>
<th>Strongly disagree</th>
</tr>
</thead>
</table>

- To the extent possible, I will attempt to refrain from using the cheaper paint in the legal scenario depicted above.

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- In your estimation, would you ultimately use the cheaper paint in the legal scenario depicted above?

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