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Sanction Threats and Appeals to Morality: Testing a Rational Choice Model of Corporate Crime

Raymond Paternoster

Sally Simpson

We specify and test a rational choice model of corporate crime. This model includes measures of the perceived costs and benefits of corporate crime (for both the firm and the individual), perceptions of shame, persons' assessment of the opprobrium of the act, and contextual characteristics of the organization. Consistent with this model, we find that intentions to commit four types of corporate crime are affected by sanction threats (formal and informal), moral evaluations, and organizational factors. Net of the various incentives and disincentives for corporate crime, persons' personal moral code was found to be a very important source of inhibition. In fact, when moral inhibitions were high, considerations of the cost and benefit of corporate crime were virtually superfluous. When moral inhibitions were weak, however, persons were deterred by threats of formal and informal sanctions and by organizational context. We contend that theoretical models of corporate crime and public policy efforts must contain both instrumental (threats of punishment) and deontological (appeals to morality) factors.

Historically, the area of corporate or business crime did not immediately capture the attention of those studying criminal behavior. Criminologists and those investigating crime within biological, psychological, or sociological traditions were more interested in studying street crime and delinquency than the crimes of those in business organizations. An exception to this general lack of interest was the work of Edwin Sutherland. In 1949, Sutherland published what was to become a classic in sociology and criminology, *White Collar Crime*, a study of the criminal activities of 70 major United States corporations.¹ While Sutherland's own work was hailed as an important contribution, it did not lead to widespread interest in corporate offending among

Address correspondence to Raymond Paternoster, Department of Criminology & Criminal Justice, University of Maryland-College Park, 2220 LeFrak Hall, College Park, MD 20742-8235. E-mail rpaternoster@bss2.umd.edu.

¹ The publication of *White Collar Crime* was the culmination of a long period of work for Sutherland in this area. Ten years earlier, at the annual meeting of the American Sociological Society, Sutherland, who was then president of the society, gave a talk entitled "The White Collar Criminal," and an article with the same title was published in the *American Sociological Review* one year later, in 1940.

those studying crime. With the exception of Donald Cressey's (1953) study of embezzlers, Clinard's (1952) research on violations of price regulations during World War II, and Hartung's (1950) work with regulatory violations in the meat industry in Detroit during the same period, very little theorizing or empirical work after Sutherland's was conducted in the area of whitecollar or corporate criminality.

This inattention changed dramatically after the mid-1970s, when there was a virtual explosion of interest in corporate crime among scholars.² This interest was fueled by both intellectual trends within the discipline of criminology itself, such as the development of a conflict or radical movement among crime scholars, and extra-scientific events, such as journalistic accounts of particularly egregious instances of corporate illegality, a more receptive ear for corporate crime research by funding sources, a post-Vietnam/civil rights/Watergate era distrust of major U.S. institutions, and an emerging consumer movement (Clinard & Yeager 1980; Coleman 1992). This newfound academic interest in corporate crime yielded detailed case studies of particular instances of corporate crime (Kramer 1992; Cullen, Maakestad, & Cavender 1987), more quantitative examinations of the sanctions levied against corporations and their managers and executives (Hagan, Nagel, & Albonetti 1980; Wheeler, Weisburd, & Bode 1982; Weisburd et al. 1991), and the expansion, beyond Sutherland's own differential association framework, of theories of corporate crime.

In recent years, among the theoretical models that have been used to explain corporate offending are neutralization theory (Cressey 1989; Bensen 1985), opportunity theory (Makkai & Braithwaite 1991; Braithwaite 1992), anomie theory (Passas 1990; Waring, Weisburd, & Chayet 1995), labeling theory (Swigert & Farrell 1988), organization theory (Ermann & Lundman 1978; Braithwaite 1989), and control theory (Lasley 1988; Makkai & Braithwaite 1991). One of the most promising theoretical developments in the area of corporate crime is the attempt to explain corporate offending within a deterrence/rational choice framework.

It has long been thought that a deterrence/rational choice theory would be especially useful in understanding corporate crime, because both corporate crime and corporate offenders were thought to be particularly amenable to sanction threats. In 1967, Chambliss argued that corporate managers would be sensitive to formal punishment threats because they were not highly committed to a criminal lifestyle and the calculated nature of

² The work of Gilbert Geis (1962, 1967, 1968) presaged the subsequent interest of other scholars in corporate crime. In 1967, when interest in corporate crime had already waned among criminologists, he published an article on the electrical equipment antitrust cases of 1961, and in 1968 he published a reader on white-collar crime.

their offending would increase the salience of any perceived cost and benefits. Kadish (1977:304) claimed that would-be corporate offenders would be more easily deterred because their crimes are "calculated and deliberative and directed to economic gain." Braithwaite and Geis (1982) joined this chorus in suggesting that sanction threats will be particularly salient for corporate offenders because they have a greater stake in a conventional life and, therefore, have more to lose should their illegal actions be discovered. Perhaps one of the corporate executives' most prized possessions placed at risk by engaging in illegal activities is their "good name and reputation." Hence, Stotland et al. (1980), Fisse and Braithwaite (1983), and Scott (1989) have all argued that would-be corporate criminals should be singularly responsive to the social censure and embarrassment that often accompanies formal legal sanctions.

The observation that corporate crime and corporate offenders may be particularly amenable to a rational choice explanation does not at all mean that a special theory of corporate crime is required. Our position is that, like other kinds of offenders, persons in business organizations are sensitive to variations in the perceived cost and benefits of their actions and in other, more normative influences. In fact, though for reasons already suggested, corporate offenders may be particularly responsive to sanction threats, they are not alone in the criminal world in responding to the perceived utility of their actions. With some variations, rational choice-based models of the kind examined here have been successfully used to explain such diverse crimes as income tax evasion (Klepper & Nagin 1989a, 1989b), common forms of juvenile delinquency (Paternoster 1989), theft and drunk driving (Grasmick & Bursik 1990; Nagin & Paternoster 1993), and sexual assault (Bachman, Paternoster, & Ward 1992; Nagin & Paternoster 1993). Rational choice models of street crime, therefore, have received considerable support in the criminological literature. In this article, we simply extend the rational choice modeling of "street crime" to the study of "suite crime."

The confidence that has been placed in deterrence theory by those studying corporate crime has, however, been somewhat misplaced. With few exceptions, most empirical studies have found either no or very weak and conditional support for the deterrence of corporate crime. Block, Nold, & Sidak (1981) found that the certainty and severity of civil sanctions (more than criminal sanctions) were an effective general and specific deterrent to antitrust violations within the bread industry. In a study of 38 U.S. corporations, Simpson and Koper (1992) found that formal sanction severity (but not certainty or celerity) inhibited corporate offending, but only among a small group of prior offending companies.

In one of the most detailed and comprehensive empirical tests of the effect of sanction threats on corporate crime, Braithwaite and Makkai (1991; Makkai & Braithwaite 1994) also found only limited and conditional support for a deterrence hypothesis. In a cross-sectional study of 410 managers of nursing homes in Australia, they reported that of several indicators of perceived sanction threats, only one (the probability of state detection) had the expected deterrent effect on compliance with nursing home regulations. Braithwaite and Makkai (1991:29) concluded that there is a "stark failure of deterrence to explain compliance with regulatory law." In a second study with panel data from the same group of nursing home administrators, Makkai and Braithwaite (1994) reported that the probability of state detection was the only measure of sanction threat (of several) that had the expected deterrent effect on regulatory compliance. Even the risk of state detection did not uniformly inhibit rule breaking. A deterrent effect was only observed for those nursing home managers low on emotionality (ibid., pp. 361-62).

It should be clear from this that a striking anomaly exists between the theoretical expectation offered by a deterrence/rational choice explanation of corporate crime and the empirical evidence to date. How can we account for the generally null findings in the literature between sanction threats and corporate offending? Our answer attributes these null findings to the limited scope of previous empirical tests. Although a variety of sanction threats are theoretically relevant, past research has generally been restricted to a consideration of the deterrent effect of formal sanction threats. That is, while the relevance of other potential costs of offending such as loss of occupational position, social censure, personal embarrassment, and shame are recognized, they have not explicitly been included in a comprehensive test of a rational choice theory of corporate crime. Even Makkai and Braithwaite's (1994) comprehensive test of their deterrence model, while including the full range of formal punishments, does not consider the effect of other, informal kinds of sanctions, nor does it include the role of perceived benefits or persons' moral sentiments.³

What is needed is a more comprehensive empirical test of corporate crime that explicitly considers the complete range of

³ Makkai & Braithwaite (1994:348–50) constructed a measure of formal sanction threats for nursing home regulatory violations that included a wide range of criminal and regulatory sanctions: indicators of the probability of detection, the probability of punishment, and the severity of punishment for sanctions at two distinct political levels (commonwealth and state). There were five possible sanction threats. There were, however, no measures of informal sanctions that may affect nursing home managers' decisions to comply with nursing home regulations, such as the loss of a nursing home's reputation, a manager's personal reputation, any social censure from other managers, business associates, friends, or family. While exhaustive in its measures of *formal sanction threats*, Makkai and Braithwaite's deterrence model did not consider other possible costs of regulatory violations.

available sanctions and rewards of corporate offending, as well as notions of self-censure and morality. In the next section, we offer a brief outline of a rational choice theory of corporate crime we developed (Paternoster & Simpson 1993) based in part on neoclassical economic theories of crime (Becker 1968). Those interested in a more detailed discussion of the theory should review that article. After discussing the model specification suggested there, we then present the results of a study specifically designed to test that theory. The implications of our empirical test for theories of corporate crime and for public policy are then discussed.

A Rational Choice Theory of Corporate Crime

The Paternoster-Simpson rational choice model of corporate crime is essentially a *subjective expected utility* theory. As such, it is premised on two assumptions: (1) that decisions to offend are made on a balancing of both the costs and benefits of offending and (2) that what are important are the decisionmaker's *perceived* or subjective expectations of reward and cost. The first assumption is the straightforward one that human beings are at least minimally rational (Cherniak 1986) agents whose conduct is guided in part by the expected consequences of their behavior. An implication of the second assumption is that the critical agent in this theory of corporate crime is the individual.

While not denying the fact that corporations do at times take on the characteristics of acting agents responsible for their conduct, we hold that the decision to break the law is made by *individuals*. Importantly, however, these individuals are affected by the *context* within which they are employed and commit their crimes. That is, those who would commit corporate crime are affected by the characteristics and imperatives of their business organization. This means that the decisions of would-be corporate offenders are influenced by (1) the risks and benefits they perceive *for themselves*, (2) the risks and benefits they perceive *for their firm or company*, and (3) the presence or absence of offending inducements or restrictions within the specific context of the organization.

The precise form that the costs and benefits of corporate crime may take is quite diverse. The costs to the firm could include a regulatory, civil, and/or criminal sanction; a reduction in revenue; slippage in fighting foreign competitors; or the diminished prestige of the firm. Available benefits would include increased revenues and prestige, as well as the opportunity to challenge in court what is perceived to be an unnecessary regulation or law. The cost of corporate crime for the individual would also include the possibility of a formal legal sanction (civil or criminal), a reduction in the prestige of the organization for which one works, a loss of self-respect, and social censure from friends, family, and colleagues. The benefits would include such things as career advancement and an increase in personal income. Moreover, since the individual is the critical decisionmaker, it is presumed that firm-level costs and benefits impact the individual's decision to offend by affecting that individual's cost and benefit assessment. In other words, what is beneficial and costly to the firm is beneficial and costly to the individual, either through some incentive system or as such processes involve the reflected prestige of the firm.

In addition to instrumental concerns, however, the decision to commit corporate crime is also likely to be affected by normative factors, such as one's moral evaluation of the act. Persons may therefore be restrained by moral inhibitions; that is, some acts of crime, including corporate crime, are not committed simply because it is believed to be wrong to commit them. The question arises, however, of exactly how normative restraint fits into the neoclassical rational choice model. First of all, in our view, norms act as constraints on individual decisionmakers, restricting the range of available choices. Second, we view this restraint as noninstrumental; it is, therefore, decidedly deontological. As a deontological source of constraint, moral inhibitions are not based on the consequences of one's behavior. One does not behave a certain way because of the expected outcomes or because it is expected by others. Rather, moral rules are internalized: certain acts are not committed because it is believed to be morally correct not to commit them.

We draw two implications from this for the role of moral evaluations in conduct. The first is that one's moral beliefs restrain conduct deemed to be impermissible independent of considerations of cost and benefit. That is, net of any perceived cost or benefit, moral considerations play an important independent role in maintaining conforming conduct. As McPherson (1984:77) put it, "there are too many subtle opportunities to cheat, and too few police officers, to make it plausible that the only effective motives supporting moral behavior are the prospects of financial or criminal penalties for immorality." The second implication is that moral considerations should condition the impact of instrumental ones. More specifically, we expect that considerations of cost and benefit do not affect those acts already strongly inhibited by notions of morality. Our reasoning is that persons' moral sentiments expressly set some behaviors off limits, in the sense that they are taboo. These taboos are observed out of a sense of moral duty and are not, therefore, subject to calculations of utility. In the words of Etzioni (1988:77), moral rules create nonmarket areas for certain behaviors: "when moral commitments are prominent they in effect create non-markets in some areas, and rather poor ones in others." In these nonmarket areas, notions of cost and benefit play a minimal role: once moral rules have been internalized, "individuals pursue what they consider to be a moral line of behavior even in the absence of external sanctions" (ibid., p. 46). The flip side of this is that there are other areas of conduct that are "market areas" wherein persons are affected by considerations of cost and benefit. Once an act is defined to be feasible, in the sense that the commission of it has not been precluded on moral grounds, persons are attuned to its incentives and disincentives: "[t]he reverse is true when moral commitments slacken; additional incentives or sanctions need to be introduced if the same level of compliance behavior is to be sustained" (ibid.).

We also note that an employee's decision to commit corporate crime may be affected as well by the context or circumstances of the organization. For example, organizational actors may be more inclined to commit corporate crime if they perceive that the firm is losing its competitive edge, if they suspect the overall economic health of the firm, or if the moral climate of the organization tolerates or encourages such misconduct (Jackall 1988). They may be dissuaded from offending if the organization or someone within it has recently been sanctioned for similar conduct or if the firm has organizational restraints such as an ethics hotline. Some of these contextual features of the organization may have an effect on decisions to commit corporate crime because they are cost relevant for the individual (if the firm is in poor economic health); others, however, may operate independently (the moral climate of the firm).⁴

For an empirical test of the proposed rational choice model of corporate crime specified here, therefore, one would need to calibrate several components. One would be the subjective rewards and costs of corporate criminal conduct as perceived by individual decisionmakers. In our model, we note (Paternoster & Simpson 1993:47) that such rewards and costs include:

- Formal sanction threats (directed against the firm and individual)
- Informal sanction threats (directed against the firm and individual)
- Self-imposed punishment (shame)

⁴ It may be difficult to disentangle individual- and firm-level effects. Let us suppose, for example, that the moral climate in a given firm is such that it tolerates or even encourages some type of criminal conduct. An individual employed by that organization may be inclined to commit such an act for one or both of two very different reasons. One reason is because he/she feels that morally tolerated, though criminal conduct is unlikely to result in any substantial penalty because the firm will hinder any attempt at enforcement or, in case of discovery, protect them against or absorb any cost. In this event, the moral climate of the firm leads to corporate criminality by reducing the perceived certainty and severity of punishment for the individual. Another reason is that the person may suppress his or her own moral reservations about committing the act (supposing they exist), act like a "good team player," and be guided by "workplace rules" that encourage criminal activity.

• The perceived benefits of noncompliance (for the firm and individual)

One would also need to assess each actor's personal stock of moral beliefs about specific forms of corporate crime. Finally, one would also need to consider the context of the organization, its competitive status, its moral climate, and its previous experience with corporate or individual sanctions for misconduct. In sum, we argue that intention to commit corporate crime is a function of the following factors:

- Perceived benefits of the action for oneself
- Perceived formal sanctions directed against oneself
- Perceived informal sanctions directed against oneself
- Feelings of shame or self-imposed punishment
- Moral inhibitions against committing the act
- Perceived benefits of the action for the firm
- Perceived formal sanctions directed against the firm
- Perceived informal sanctions directed against the firm
- Perceived loss of prestige for the firm
- The organizational context of the firm
- Characteristics of the firm

From the preceding theoretical discussion we can make a number of predictions about the sign of these presumed effects. In a reduced equation that contains only individual-level effects. the effect of perceived benefits for self will be positive, while the effects for perceived formal sanctions, informal sanctions, shame, and moral inhibitions will be negative. In a reduced equation that contains only firm-level effects, the effect for perceived benefits for the firm will be positive, while the effects for perceived formal sanctions against the firm, informal sanctions against the firm, and loss of prestige for the firm will be negative. When both individual- and firm-level characteristics are included in a full model, we would expect the structural coefficients for firm-level effects to be substantially reduced, with little or no change for the individual-level structural effects. This is because firm-level costs and benefits are presumed to affect decisions to commit corporate crime because they are cost relevant to the individual. Effects for organizational context and characteristics are diverse, some factors are presumed to be positively related to intentions (if the firm is losing ground to foreign competition), while others are presumed to be negatively related (if the moral climate of the firm is not tolerant of a specific act of corporate crime).5

⁵ In addition, we cannot with certainty state a priori whether these effects (if they exist) will disappear once individual effects are controlled. For example, suppose we find a significant inverse effect for the moral climate of the firm on intentions. This inverse effect may reflect two processes: (1) individuals may think that a firm that tolerates corporate crime does not take the offense seriously, thereby reducing their personal risk and severity of punishment, (2) individuals may normatively comply with what they think are "workplace rules" regardless of their personal moral beliefs. If both processes are opera-

Methods

Sample

The data for this study were collected from four groups, classes of first- and second-year graduate students in M.B.A. programs at two public and one private university and a group of corporate executives attending a business school executive education program at a fourth university. Our sample, then, combines a group of business students potentially at risk for committing corporate crime and a group of executives currently at risk for such crime. The students were all aspiring to corporate and business careers and would thus be likely to soon find themselves in a position where they would have the opportunity to commit corporate crime. In fact, 89% of the students in the sample had been employed in business for at least one year, and they averaged over three years of business experience. For such persons, a hypothetical scenario describing a business situation that involves a corporate crime is likely to be highly relevant. A detailed comparison of the responses to the research instrument indicated very few differences between the graduate student and the executive groups, justifying our decision to pool them into a single sample. The major difference was that the group of executives viewed formal sanction threats as more costly to them personally than did the group of students. This is not surprising, given that the executives had far more to lose by committing corporate crime than did the students.

A total of 96 persons completed the research instrument, 84 students and 12 executives. About 50% of the respondents were male, 84% were white, and the average age was nearly 29. Although we have 96 respondents, the total sample size we start with is 384, because each person read and responded to four different scenarios describing the commission of corporate crime (96 \times 4 = 384). The total number of observations (n = 384), therefore, is more than sufficient for statistical power. Since, of course, each individual observation is not independent but is based on repeated measurements (4) of the same individual, we will have to model this stable individual effect in our estimated regression equations. We describe this modeling procedure in a subsequent section.

tive, any observed inverse effect between the moral climate of the firm and expressed intentions to commit corporate crime may be reduced but will not disappear once perceived sanction threats for self are controlled.

Research Design and Instrument

As part of the study, each respondent was asked to read and respond to a survey instrument that contained four hypothetical scenarios. Each scenario described a situation wherein the scenario character committed one of four corporate offenses: (1) price fixing, (2) bribery, (3) manipulation of sales statistics, and (4) violation of Environmental Protection Agency (EPA) emission standards (an example of each scenario type is given in the Appendix). Persons read and responded to each scenario under the instruction that they were to imagine themselves the manager described in the scenario and employed by the business depicted.

Specific features about the scenario were experimentally manipulated. Drawing on the extant corporate crime literature, we developed a set of ten dimensions that were thought to influence the decision to commit corporate crime. These dimensions include such things as economic pressures on the firm, the manager's location in the firm, firm characteristics such as its size and economic health, the presence of an internal compliance structure, and the benefits to the firm and manager for noncompliance. For example, the literature has indicated that the probability of corporate crime will be higher for those managers affirmatively instructed to break a given rule. A dimension that varied in the scenarios, then, was whether or not the employee was ordered by a superior to commit the offense. This dimension had two levels: For example, in one scenario the manager is described as ordering another to commit an illegal act; under the second level the manager is described as having been ordered by a supervisor to commit the offense. Another scenario dimension was the economic health of the hypothetical firm. Acts of corporate crime may be more likely if the firm is facing a profit squeeze than if it is in good economic health. There were three levels under this dimension: (1) the industry is economically healthy, (2) the industry is economically deteriorating, and (3) the industry is losing ground to foreign competition. Each scenario dimension, the levels under each dimension, and its predicted effect on intentions to commit corporate crime are shown in Table 1A. Each scenario contained one level from each of the ten dimensions, and the particular level included in a given scenario was randomly assigned. In this way, the levels for all dimensions are orthogonal to one another. For purposes of data analysis, each level was coded 1 if it was present in the scenario and 0 if that level was excluded.

After reading each scenario, respondents were asked a battery of questions including their perceptions of the benefits and costs of the crime, any feelings of shame, and their moral evaluation of the act. The costs included perceived formal (criminal,

Dimension & Level	Abbreviation	Predicted Effect
Benefits of noncompliance for the firm		<u> </u>
The act will save the company a small amount of money	SAVESM	a
The act will save the company a large amount of money	SAVELG	+
The act will produce increased firm revenues	REVENUE	+
The act will increase the positive reputation of the firm	POSREP	+
The act will improve employee morale	MORALE	+
The act gives the firm the chance to challenge a law Benefits of noncompliance for the manager	Law	+
The act increases the likelihood of promotion/salary bonus	PROMOTE	+
The act increases the likelihood of peer admiration	Peer	а
The act increases the likelihood that J. will be positively noticed by top management	Manage	+
Internal compliance	Emeran	а
The firm has mandatory ethics training	ETHICS	
The firm has a hotline in which such acts can be anonymously reported to management The form has interported in and	HOTLINE	_
The firm has internally implemented audits and inspections at random intervals	AUDITS	_
An employee was recently fired after being caught for a similar act	EMFIRED	-
The act is a common practice within the firm	Comfirm	+
The act is a common practice within the industry External compliance	Industry	+
An employee was recently caught and criminally sanctioned for a similar act	Emcrim	-
An employee was recently sued and fined for a similar act	Emsued	-
The firm was recently criminally sanctioned for a similar act	Firmcrim	-
The firm was recently inspected and cited for a similar act	Firmcite	а
The firm was recently sued and fined for a similar act	Firmsued	-
An employee recently was acquitted of any wrongdoing for a similar act	Empacq	+
The firm recently was acquitted of any wrongdoing for a similar act	Firmacq	+
Managerial location	_	
Low-level manager	Low	a
Middle-level manager	Middle	a
Upper-level manager	Upper	-
Tenure at firm	P	
Recently hired	RECENT	a
Been with Steelcorp for years	YEARS	
Managerial position	0	а
Decides to order employees	Order	
Is ordered by a supervisor Firm size	Ordered	+
a	S	
Small company Madium company	SMALL MEDUNA	a
Medium company	Medium Large	4
Large company Economic pressures on firm	LARUE	+
Currently experiencing growing sales and revenues	GRSALES	a
Currently experiencing declining sales and revenues Environmental constraints	DECSALES	+
In an industry that is economically healthy	FOUEAUTH	a
In an industry that is economically deteriorating	Echealth Ecdet	+
In an industry that is losing ground to foreign	Foreign	+
competitors	• ORLIGH	

Table 1A. Dimensions, Levels, and Predicted Effects for Scenarios

^a Denotes the suppressed category in subsequent analyses. The predicted effects are relative to this suppressed category.

civil, and regulatory sanctions) and informal (social censure, shame, loss of self-respect) costs both to themselves personally and the firm. In response to each scenario, respondents were also asked to estimate the likelihood that they would commit the described offense.

The unit of analysis in this research is the scenario and not the person. As stated above, since there were 96 persons responding to 4 separate scenarios, there were a total of 384 possible observations. Of the 384 observations, 14% (54) were eliminated because the respondent thought that the described scenario was "unrealistic."⁶ In eliminating these cases, we thought that unrealistic scenarios would not be thoughtfully and candidly responded to. Because of missing data on other variables, another 26 cases were eliminated.⁷ The final number of observations was therefore 304, or about 80% of the original data set.

Dependent Variable

The dependent variable in this analysis is the respondent's self-reported intention to commit the act of corporate crime described in the scenario. After reading a scenario in which a hypothetical corporate manager engages in one of four illegal acts (price fixing, bribery, manipulation of sales data, and violation of environmental standards), respondents were asked to estimate the chance that they would do what the hypothetical manager did under the same conditions. The response options ranged on a scale from 0 (no chance at all) to 10 (100% chance). There was no substantial censoring of the responses at zero. For each scenario, more than 70% of the respondents estimated that there was a nonzero probability that they would do what the described manager did.⁸ We presumed that the underlying response scale

⁶ There were no differences in the reported findings when these observations were retained in the sample.

⁷ These missing data were randomly distributed across persons. In only 3 cases were the data on the dependent variable missing. A number of sensitivity analyses were conducted, included substituting mean and modal values for the missing data. All results were virtually identical to those reported.

⁸ About one-fourth of the respondents reported a zero probability of committing the described act for all four scenarios. When these persons were excluded from the sample, the results were substantively comparable to those reported. We view these respondents as "chronic conformists," who were strongly inhibited from committing corporate crime. We were interested in the sources of their obedience and retained them in the sample.

We did, however, estimate a multivariate probit model where the outcome variable was binary coded 0, 1 and the independent variables were those discussed in the text. Those coded 0 were those respondents who reported a zero probability for all four scenarios; all others were coded 1. This is essentially a participation or prevalence analysis with the dependent variable interpreted as the probability that someone would intend to commit one act of corporate crime. The significant determinants of this probability were virtually identical to the results of the generalized least squares analysis reported in the findings section: perceived sanctions (formal and informal) for self and the perceived immorality of the act were significant factors that inhibited participation in corporate

represented a reasonably linear continuum reflecting the intention to commit the act. We view expressed intentions to commit corporate crime not as a direct proxy for actual behavior but as an indicator of a motivational state that exists just prior to the commission of an act. We think of it as a measured reflection of a predisposition to commit corporate crime.

Independent Variables

Testing the proposed rational choice model of corporate crime requires measures of respondents' estimates of the benefits and costs of offending, their moral evaluations of the acts in question, and some understanding of the opportunities and situational pressures and inhibitions to corporate offending. We obtained measures of each of these theoretical constructs. Some measures were derived from responses to survey questions; others were based on scenario dimensions that were manipulated.

Perceived Costs of Offending

Several measures of the perceived costs of committing corporate crime were constructed based on survey questions answered after each scenario. One measure is an indicator of the certainty and severity of formal punishment targeting oneself. After each scenario, respondents were asked to estimate: (1) the probability that they would be arrested if they committed the described act (P_{as}) , (2) the severity of arrest for themselves (S_{as}) , (3) the severity of a criminal conviction (S_{α}) , (4) the probability that they would be subject to a civil suit if they were to commit the act (P_{cs}) , (5) the severity of being the defendant in a civil law suit (S_{cs}) , and (6) the severity of losing a civil law suit (S_{ls}) . These individual indicators capture a wide range of possible formal sanctions that could be levied against a corporate offender. The subscript s indicates that these are estimates of the certainty and severity of formal punishment for self. A composite summated scale that measures Formal Sanctions for Self was constructed by multiplying the estimated certainty of each sanction (criminal, civil) by its corresponding severity estimate:

Formal Sanctions for Self = $(P_{as} * S_{as}) + (P_{as} * S_{cc}) + (P_{cs} * S_{cs}) + (P_{cs} * S_{ls}).$

In addition to estimates of the certainty and severity of the formal punishments that might be imposed, respondents were also asked to estimate the likelihood and the certainty of a wide variety of informal sanctions. After each scenario, respondents estimated the probability that the action would become known to

crime, while the perceived thrill of the crime and a corporate climate that approved of illegal acts were significant factors that increased self-reported intentions to participate.

others if they were to commit the described act. This estimate constitutes the probability of detection or discovery without arrest (P_{ds}) . Again, the subscript *s* reflects the fact that this is the respondent's estimate of the discovery for self. Assuming that they committed the act, respondents were also asked to estimate the probability that they would be dismissed from their job (P_{js}) , that they would lose the respect of their close friends (P_{frs}) , that they would lose the respect of their business associates (P_{bs}) , that they would lose the respect of their family (P_{fas}) , and that they would jeopardize any future job prospects (P_{jps}) . They were also asked to estimate the severity should each of these sanctions be imposed $(S_{js}, S_{frs}, S_{bs}, S_{fas}, S_{jps})$. A summated composite scale of *Informal Sanctions for Self* was constructed by multiplying the probability of discovery by the product of the probability of each informal sanction times its respective severity component:

Informal Sanctions for Self =
$$(P_{ds} * P_{js} * S_{js}) + (P_{ds} * P_{frs} * S_{frs}) + (P_{ds} * P_{bs} * S_{bs}) + (P_{ds} * P_{fas} * S_{fas}) + (P_{ds} * P_{fas} * S_{fas}) + (P_{ds} * P_{jps} * S_{jps}).$$

Since the literature has suggested that embarrassment or shame may be a particularly effective deterrent for the corporate offender, a measure of the probability and severity of self-imposed sanctions was also constructed based on survey items. As a measure of the certainty of shame for oneself (P_{ss}) , respondents were asked if they thought they would feel any sense of guilt or shame if they were to commit the act described in the scenario. Since we presumed that shame or guilt imposed by oneself was not truly probabilistic but "either-or," this variable was coded 0 for those who answered no to the shame question and 1 for those who answered yes (Grasmick & Bursik 1990). A measure of the severity of shame for self (S_{s}) was based on respondent estimates of "how much of a problem" it would be for them to feel shame or guilt for committing the act in question. A composite measure of Shame for Self was constructed by taking the product of these two terms:

Shame for Self = $P_{ss} * S_{ss}$.

In addition to the perceived costs of corporate crime, intentions to offend are also presumed to be affected by respondents' perception of the expected rewards or benefits that they might personally reap. We have conceptualized two somewhat distinct components of the perceived rewards to be gained by committing corporate crime, one intrinsic and the other extrinsic. After each scenario, respondents were asked to estimate how much of a thrill or how exciting it would be to commit the described act (THRILL). We conceive this as an intrinsic reward of crime since it reflects the pleasure one would derive from committing the act itself. It is similar to what Katz (1988:52–79) would refer to as the sensual allure of committing crime—a "sneaky thrill." In response to each scenario, respondents were also asked how likely such an act would be to advance their career (CAREER). We conceive this as a more extrinsic reward of crime. Although these two items are positively correlated (r = .49), we decided to retain them as separate measures because of their conceptual difference.

Finally, a measure of the individual's own personal *Moral Beliefs* (MORAL) about the type of corporate crime described in each scenario was ascertained. Respondents were asked to rate on a scale from 0 to 10 how "morally wrong" the act described in the scenario was. High scores correspond to a belief that the particular act of corporate crime was morally offensive.

The independent variables described above each have to do with the possible costs and benefits of offending for the individual. It is hypothesized that those who perceive that *they will personally* gain or avoid punishment by committing the described act will express a greater intention to commit the act than those perceiving fewer personal benefits and more personal costs. As we have suggested earlier in this article, intentions to commit corporate crime may also be a function of the perceived costs and benefits *to the firm*. In view of the unique nature of corporate crime, then, we need to calibrate the risks and benefits of corporate crime to the firm itself. Since corporations also have "moral climates" that may provide a normative incentive or disincentive to commit illegal acts (Jackall 1988), and the corporation may be subject to a loss of its reputation and good name (corporate shame), we will also need to assess these dimensions.

A composite measure of Formal Sanctions for the Firm was based on a number of survey items that tapped a variety of possible sanctions that the company could be subject to. In response to each scenario, respondents were asked to estimate the probability that the described company would be subject to criminal prosecution (P_{crf}) , the severity of that prosecution to the firm (S_{cref}) , and the severity of a criminal conviction for the firm (S_{cref}) . In the subscript, the "cr" refers to the type of sanction (criminal) while the "f" refers to the fact that the referent is the firm rather than the person. Similarly, respondents were asked to estimate the probability that the described company would be subject to civil prosecution (P_{rif}) , the severity of that civil prosecution to the firm (S_{cipf}) , and the severity of losing a civil lawsuit for the firm (S_{cisf}) . Since corporations can also be subject to regulatory sanctions, respondents were asked to estimate the probability that the described firm would be investigated by a regulatory agency (P_{nf}) and the severity of any regulatory investigation (S_{nnf}) . The composite scale of perceived sanction for the firm was constructed by multiplying each certainty estimate by its respective severity estimate and summing across punishment types:

Formal Sanction for Firm =
$$(P_{crf} * S_{cref}) + (P_{crf} * S_{cref}) + (P_{cif} + S_{cipf}) + (P_{cif} * S_{cisf}) + (P_{rgf} * S_{rinf}).$$

Measures of the perceived benefits of corporate crime for the firm, any perceived damage to the firm's reputation, and the company's moral climate were also constructed. These are firmlevel analogs to perceived rewards, shame/guilt, and moral beliefs that were measured at the level of the individual and discussed previously. Instead of being operationalized in terms of responses to survey questions, however, indicators for these constructs were obtained from the scenario dimensions themselves. Table 1A above lists all the scenario dimensions and the levels under each dimension. Under the dimension Benefits of noncompliance for the firm are firm-level analogs to the perceived benefits of crime to the person. These benefits to the firm include financial gains such as saving money and increasing revenues and nonfinancial benefits such as providing the opportunity to legally challenge a suspect law. Table 1A also includes an analog to perceived shame and guilt in terms of enhancing the positive reputation of the firm. Under the dimension Benefits of noncompliance for the manager are perceived financial and nonfinancial benefits for the firm's manager. Under the dimension Internal compliance are indicators of the firm's "moral climate" which constitute a firmlevel analog to an individual's moral beliefs.

Control Variables

In addition to perceptions of the incentives and costs of offending and prevailing moral sentiments, it was thought that intentions to commit corporate crime would be influenced by other factors and personal characteristics. Such factors as the location and tenure of the manager in the firm's organization, the size of the firm, and the economic health of the firm may all affect decisions to commit corporate crime. As can be seen from Table 1A, several of the scenario dimensions reflect these contextual characteristics of corporate crime, and will be included in the specification of the model. In addition, we anticipate that intentions to commit corporate crime would be influenced by respondent's personal characteristics such as age, gender, race, years of business experience, and the particular university attended. A description of the individual- and firm-level survey items is shown in Table 1B.

Finally, since self-reported intentions to commit corporate crime may be a function of the type of act, we entered three dummy variables into the model to correspond to three of the four scenario types. The violation of environmental regulations was the omitted reference category, and a dummy variable was created for price fixing (PRICEFIX), inflating sales data (INFSALES), and making a cash payment to bribe another (CASHPAYM).

Abbreviation	Description	Predicted Mean	Standard Deviation	Effect
FORMALIND	Formal sanctions for the individual	154.46	100.22	_
INFORMAL	Informal sanctions for the individual	1.737.40	229.60	_
SHAMEIND	Experienced shame for the individual	7.29	3.51	_
Moral	Moral inhibitions for the individual	7.38	2.52	_
CAREER	Advancement of career	3.22	2.92	+
THRILL	How thrilling the act would be	1.36	2.40	+
Formalfm	Formal sanctions for the firm	250.30	144.02	-
School1	Dummy variable for school 1	0.20	0.40	?
SCHOOL2	Dummy variable for school 2	0.20	0.40	?
School3	Dummy variable for school 3	0.13	0.33	?
Gender	Respondent's sex	0.43	0.50	-
Age	Respondent's age	28.73	5.91	_
YRSBEXP	Years of job experience	7.96	15.11	+
RACE	Respondent's race	0.16	0.37	+

 Table 1B. Abbreviations, Descriptions, Characteristics, and Predicted Effects for Individual- and Firm-Level Survey Items

Model Estimation

Since we have treated expressed intentions to commit corporate crime as arrayed along a linear continuum that ranges from 0 to 10, it would seem that a straightforward ordinary least squares estimation strategy would be appropriate for the specified rational choice model of corporate crime. There is an important statistical complication to this, however. As suggested above, the unit of analysis for this research is the scenario and not the individual respondent. There were a total of 304 observations. Since, however, individuals responded to more than one scenario, these observations are not independent events. An implication of this is that even with controls for individual characteristics from responses to survey questions, unobserved individual differences will remain in the model. This unobserved difference across individuals can be considered a "fixed individual effect," since it reflects the unmeasured tendency for respondents to respond to different scenarios in the same way. As such, then, it is an unmeasured individual response set characteristic.

As an alternative to an ordinary least squares model, we estimated a "random effects" model that estimates all of the structural parameters in the model and partitions the disturbance term into two components. The model takes the following form:

 $y_{ij} = Z_i \gamma + W_j \alpha + x_{ij} \theta + \varepsilon_{ij} , \qquad (1)$

where $\varepsilon_{ij} = \tau_i + v_{ij}$. In equation (1), the subscript *i* denotes the *i*th individual in the sample (n = 94), the subscript *j* denotes the *j*th scenario (n = 4), z_i is a vector measuring characteristics of individuals (*i*) that are invariant across scenarios (e.g., age), w_j is a vector measuring characteristics of scenarios (*j*) that are invariant across persons (e.g., the scenario character was ordered by a superior to commit the offense), x_{ij} is a vector of variables which

vary across both respondents and scenarios (e.g., person *i*'s perception of the probability that person *i* would get arrested if committing the offense described in scenario *j*), γ , α , and θ are parameters to be estimated by the model, and y_{ij} is person *i*'s estimate that he or she would commit the offense described in scenario *j*.

In the model, y_{ii} is a function of measured individual characteristics (e.g., age, years of business experience, etc.) reflected in z_i , characteristics of the scenario reflected in w_i , the interaction between the former two reflected in x_{ij} , and an error term reflected in ε_{ii} . As can be seen in equation (1), this error term is divided into two components. One of these components is τ_i , which is an individual-specific effect for person i that does not vary across scenarios. It is a fixed individual effect that is presumed to be normally distributed in the population with a mean of 0 and standard deviation of σ_{τ} . This component of the error term is intended, therefore, to capture unmeasured fixed individual effects commonly affecting the response of person *i* to all jscenarios. The second component of the error term is v_{ij} , which is assumed to be independently and normally distributed across both persons and scenarios with a mean of 0 and a standard deviation of σ_{ν} . The magnitude of the fixed individual effect can be captured by the parameter ρ , which is equal to $\sigma_{\tau}^2/(\sigma_{\tau}^2 + \sigma_{\nu}^2)$. All parameters in equation (1) are estimated by a generalized least squares procedure (Greene 1990) with LIMDEP software (Greene 1992).⁹

Findings

As a first step in our analysis, we regressed the ten scenario dimensions and three types of scenario dummy variables on the dependent variable, the self-reported intention to commit the scenario act. To conduct this preliminary analysis, each level within each dimension was binary coded, except for one level that served as the reference category (see Table 1A). Some of these dimensions were combined into theoretically meaningful blocks and separate regressions run for each block of variables. Also included in each model is the rho coefficient (ρ), which measures the correlation between the disturbance terms for the same individual across different scenarios. Think of this term as reflecting a stable individual propensity to offend across different contexts. The results are reported in Table 2.¹⁰

⁹ Ordinary least squares models were also estimated for comparison. In each case, the substantive results of the ordinary (OLS) and generalized least squares (GLS) models were very comparable. The parameter estimates from the GLS models were, however, slightly more efficient.

¹⁰ Although not reported, we also estimated a model that contained only the demographic/control variables. In this model, gender, age, and race all had significant effects (p < .10), but years of business experience did not. The results indicated that males,

	Benefits	Benefits to Firm		Benefits to Manager		Internal Compliance	
Levels	b	(<i>t</i>)	b	(<i>t</i>)	b	(1)	
Infsales Pricefix Cashpaym Epa	0.5143 0.7911 0.7764	(1.441) (2.129) (2.166)					
Savesm Savelg Law Posrep Morale	a 1.1744 1.3205 0.9174 0.4776	(2.462) (2.375) (1.769) (0.934)					
Revenue p	0.8511 0.19	(1.711) (3.36)					
Infsales Pricefix Cashpaym Epa Peer			0.5277 0.8011 0.7927	(1.470) (2.144) (2.206)			
peer Promote Manage ρ			0.0420 0.1961 0.18	(0.128) (0.596) (3.18)			
Infsales Pricefix Cashpaym Epa					0.4287 0.7279 0.6332	(1.269) (2.054) (1.848)	
Ethics Audits Industry Hotline Emfired Comfirm ρ					a -0.2637 0.4257 -0.3964 -0.5323 1.0918 0.23	(-0.584) (0.865) (-0.870) (-1.166) (2.357) (4.11)	
Infsales Pricefix Cashpaym Epa	0.4607 0.7780 0.7603 a	(1.297) (2.121) (2.114)					
Firmcite Firmcrim Firmacq Emcrim Empacq Emsued Firmsued p	$\begin{array}{c} -0.3869\\ 0.4796\\ -0.2594\\ 0.7172\\ -0.1623\\ -0.1347\\ 0.20\end{array}$	$\begin{array}{c} (-0.779) \\ (0.778) \\ (-0.461) \\ (1.361) \\ (-0.329) \\ (-0.282) \\ (3.55) \end{array}$					
Infsales Pricefix Cashpaym			0.6086 1.0008 0.8876	(1.656) (2.598) (2.389)			
Epa Low			0.1811	(0.552)			
Middle Upper			0.2099	(0.618)			
YEARS RECENT			0.1389	(0.505)			
Order Ordered Small Medium			0.8991 -0.3841	(2.213) (-1.098)			
MEDIUM Large P			$-0.2488 \\ 0.13$	(-0.758) (2.28)			
Infsales Pricefix Cashpaym Epa					0.5243 0.7932 0.7491	(1.475) (2.154) (2.107)	
Grsales Descales					-0.1041	(-0.380)	
Echealth Ecdet Foreign ρ					-0.0494 0.8754 0.18	(-0.149) (2.314) (3.18)	

 Table 2. Generalized Least Squares Estimates of Scenario Conditions on Selfreported Intentions to Commit Corporate Crime

^a Denotes the suppressed category.

The results confirm many of the hypotheses about the rational choice model, in that decisions whether to commit corporate crime are significantly affected by the perceived incentives and disincentives of the act, the organizational context, and the moral climate of the firm. With regard to the benefits to the firm, intentions to commit corporate crime are more likely if it is perceived that the act will save the firm a large sum of money (SAVELG), if it will give the firm the opportunity to challenge a suspect law (LAW), if it will enhance the positive reputation of the firm (POSREP), and if it will result in higher revenues for the firm (REVENUE). These results indicate that our respondents were more likely to report that they would commit an illegal act if the act had direct financial benefits for the company or if it enhanced a sense of organizational pride or esteem.

The moral climate of the organization also had an effect on expressed intentions. Respondents were more likely to report an intention to commit the act when it was described as being a common practice within the firm (COMFIRM). The firm's proximate "moral beliefs," then, did affect intentions, while a more distal moral climate, that in the industry (INDUSTRY), had no effect. Two of the scenario dummy variables were also significantly related to intentions. Independent of scenario dimensions, respondents were significantly more likely to state that they would engage in price fixing and bribery than they were to violate an EPA regulation (the suppressed category).

Interestingly, neither of the scenario dimensions reflecting perceptions of benefit to the manager him/herself had any effect on expressed intentions to commit crime. Neither the prospect of a promotion for the manager (PROMOTE) nor the fact that the manager's action would gain the good favor of superiors (MAN-AGE) increased respondents' intentions to commit the act, relative to the suppressed category. In terms of compliance mechanisms internal to the firm, intentions to commit corporate crime were not inhibited by the possibility of periodic audits (AUDITS), the presence of a hotline for whistleblowers (HOTLINE), nor the fact that an employee was recently fired for recently committing a similar act (EMFIRED).

None of the scenario dimensions that dealt with mechanisms of external compliance had an effect on intentions. The fact that an employee or the firm had recently been criminally sanctioned for a similar act (EMCRIM, FIRMCRIM), the fact that an employee or the firm had recently been acquitted for committing a similar act (EMACQ, FIRMACQ), and the fact that an employee or the firm had recently been successfully sued and fined (EMSUED, FIRMSUED) had no significant effect on respondents' intentions. Neither the

younger respondents, and nonwhites were more likely to report that they would commit the act of corporate crime described in the scenario.

hypothetical manager's position (a LOW- or UPPER-level manager), the fact that he/she was recently hired by the firm (RE-CENT), nor the size of the firm (SMALL or LARGE) had any effect on intentions. Respondents were more likely to report that they would commit the offense, however, if they thought that the manager described in the scenario was ordered to do so by a supervisor (ORDERED). Finally, while declining firm sales (DECSALES) and operating in an industry that is economically deteriorating (ECDET) had no effect on intentions, respondents were more likely to commit the act if they thought the industry was losing ground to foreign competition (FOREIGN).

To summarize our findings with respect to the effect of scenario dimensions on expressed intentions to commit corporate crime, we found that the perceived benefits for the firm were important considerations (SAVELG, LAW, REVENUE), as was the possibility of negative firm publicity (POSREP) and the immediate moral climate of the firm (COMFIRM). Some components of the organizational context of the firm also influenced respondents' decisions to offend. The ability of managers to control their own actions (if they were ORDERED to commit the act) and the threat of losing out to foreign competition (FOREIGN) positively affected the decision to commit an act of corporate crime.

In each of the estimated models reported in Table 2, the rho coefficient (p) is significant, indicating that after considering scenario characteristics there exists an unexplained fixed individual effect across scenarios. This effect implies individual stability across scenarios in responding to the questions about one's intention to commit corporate crime. As such, it may reflect some unmeasured individual propensity to commit crime, what Nagin and Paternoster (1991) have referred to as "persistent heterogeneity." The significant rho coefficient may also reflect measured but as yet unconsidered characteristics of individuals, such as their subjective estimates of the personal costs and benefits of offending, perceptions of cost for the firm, any anticipated feelings of shame or guilt, and their own moral evaluations of the act. In the analysis that follows, we will combine the significant scenario-level effects we have just identified with firm- and individual-level measures of the perceived costs and benefits of offending, the potential loss of self-respect, and the individual's own stock of moral inhibitions.¹¹ We estimated three separate models. In the first model we included type of scenario, demographic/control variables, and the perceived costs and benefits to the individual of committing the crime. In the second model

¹¹ We estimated a model that contained the three dummy variables reflecting the type of scenario and only those seven scenario dimensions that were significantly related to intentions to commit corporate crime (reported in Table 2). The rho coefficient for this model was .20 and was significant, indicating the presence of a stable individual effect. The R^2 for this model was .13.

we replaced individual-level costs and benefits with those for the firm. In the third model we combined both individual- and firm-level variables.¹²

Levels		el for al Effects	Model for Firm Effects		Model for Both Fir & Individual Effec	
	<i>b</i> (1)	(<i>t</i>) (2)	b (3)	(<i>t</i>) (4)	<i>b</i> (5)	(<i>t</i>) (6)
Infsales Pricefix Cashpaym	-0.0024 0.2547 0.3325	(-0.007) (0.752) (1.031)	0.0720 0.5422 0.2518	(0.203) (1.550) (0.732)	$0.2035 \\ 0.3614 \\ 0.4568$	(0.608) (1.067) (1.348)
Sch dummy1 Sch dummy2 Sch dummy3 Gender Age Yrsbexp Race	$\begin{array}{c} 1.3100\\ 0.6449\\ 0.8548\\ 0.2205\\ -0.0308\\ -0.0180\\ -0.1904\end{array}$	$\begin{array}{c} (3.574) \\ (1.944) \\ (1.481) \\ (1.834) \\ (-1.117) \\ (-2.105) \\ (-0.502) \end{array}$	$\begin{array}{c} 1.4081\\ 0.4843\\ 0.8559\\ -0.2333\\ -0.0588\\ -0.0142\\ 0.8689\end{array}$	$\begin{array}{c} (3.088) \\ (1.163) \\ (1.517) \\ (-0.787) \\ (-1.907) \\ (-1.514) \\ (2.236) \end{array}$	$\begin{array}{c} 1.3535\\ 0.5798\\ 0.6856\\ 0.2123\\ -0.0367\\ -0.0148\\ -0.1038\end{array}$	$\begin{array}{c} (3.747)\\ (1.815)\\ (1.518)\\ (0.815)\\ (-1.138)\\ (-1.768)\\ (-0.282) \end{array}$
Formalin Informal Shameind Moral Career Thrill	-0.0021 -0.0003 -0.1187 -0.1818 0.1776 0.1119	(-1.429) (-1.905) (-2.753) (-3.168) (3.671) (1.847)			$\begin{array}{c} -0.0035 \\ -0.0026 \\ -0.0980 \\ -0.1918 \\ 0.1522 \\ 0.1332 \end{array}$	$\begin{array}{c} (-1.691) \\ (-1.814) \\ (-2.295) \\ -3.376) \\ (3.150) \\ (2.240) \end{array}$
Formalfm Foreign Comfirm Savelg Revenue Law Posrep Ordered			$\begin{array}{c} -0.0045\\ 0.6495\\ 1.1102\\ 0.8465\\ 0.5412\\ 1.2219\\ 0.6125\\ 0.7018\end{array}$	$\begin{array}{c} (-4.493) \\ (2.261) \\ (3.365) \\ (2.515) \\ (1.482) \\ (2.823) \\ (1.624) \\ (2.759) \end{array}$	$\begin{array}{c} 0.0016\\ 0.4714\\ 0.9191\\ 0.6012\\ 0.2676\\ 0.8337\\ 0.4133\\ 0.5032\\ \end{array}$	$\begin{array}{c} (1.091) \\ (1.770) \\ (2.952) \\ (1.921) \\ (0.785) \\ (2.077) \\ (1.167) \\ (2.141) \end{array}$
ρ Constant R²	0.04 4.7276 .37	(0.714)	0.17 3.0713 .24	(3.08)	0.02 3.5017 .42	(0.357)

 Table 3. Generalized Least Squares Estimates for Effects of Exogenous

 Variables on Self-reported Intentions to Commit Corporate Crime

Table 3 reports the results of this model estimation. In the first model, the model for individual effects, the first thing to note is that the rho coefficient is reduced to nearly 0 and is not significant. When perceptions of the costs and benefits of corporate crime for the individual, personal shame, and one's own

¹² Since we first asked respondents to estimate the chance that they would commit the act described in the scenario and then asked them to report their perceptions of possible costs and benefits, it could be argued that respondents would first form an overall judgment about their intentions and then bring their perceptions in line with that judgment. This was not the case, however. In extensive pretesting of previous scenarios, the locations of the intention and perception questions were varied. Responses did not vary in response to the location of these questions in the instrument. Another indication that respondents were not making holistic judgments about the scenario was that items measuring the certainty and severity of various sanction threats were positively correlated, though not so substantially as to call into question the independence of the assessments made (r's < .50).

moral evaluation of the act are considered, the fixed individual effect disappears. In terms of the control and demographic factors, intentions to commit corporate crime are significantly higher for respondents from two universities, for males, and for those with fewer years of business experience.

What is more interesting is that all the measured individual effects are in the expected direction and, with one exception, all are statistically significant. The risk and cost of informal sanctions (INFORMALIN) and loss of self-respect (SHAMEIND) served as effective deterrents for individuals. Consistent with research on street crime (Bachman et al. 1992; Nagin & Paternoster 1993), intentions to commit corporate crime are inhibited by perceptions of informal sanctions and self-imposed sanctions or feelings of shame. The measure of formal sanctions directed at the individual (FORMALIN), that is, the perceived risk and cost of criminal or civil penalties, also is in the expected direction but is significant at only a .10 level. When persons perceive some risk of formal punishment, then, they are less likely to report that they would commit corporate crime. We should note here, that the measures of formal and informal sanctions for the individual (FORMALIN and INFORMAL) are collinear (r = .65). When both sanction sources are entered into a model, therefore, the magnitude of their separate effects will be attenuated. In a later model we will combine these two measures into a composite scale of perceived sanctions for the individual that includes both formal and informal sanction threats.

In addition to the perceived cost of the action, decisions to commit corporate crime are also significantly affected by its perceived benefits for the individual. Intentions to commit corporate crime were higher when the act was thought to result in personal career advancement (CAREER) and was perceived to be pleasurable in and of itself (THRILL). Corporate crime was more likely, then, when the act was both perceived to be instrumental for enhancing one's career and, independent of this, when its commission was felt to be intrinsically pleasurable.

Interestingly, even when the perceived costs and benefits of the crime have been controlled, there was a substantial inhibitory effect provided by one's moral beliefs (MORAL). Net of other sources of inhibition, reported intentions to commit corporate crime were significantly lower for those who thought the act was contrary to their personal moral code. In terms of the relative magnitude of these individual effects, the *t*-ratio for MORAL was second only to career advancement (CAREER) in its impact on intentions to commit corporate crime. An independent, and very potent, source of inhibition of corporate crime is therefore noninstrumental or deontological.

The model for firm effects is reported in columns (3) and (4) of Table 3. In terms of demographic and control variables,

reported intentions to commit corporate crime are significantly higher for those at one of the universities, for younger respondents, for those with less business experience (p < .10), and for nonwhite respondents. With respect to the firm-level effects, as predicted, perceived sanctions directed at the firm serve as an effective deterrent to corporate crime (FORMALFM). In fact, of all the firm-level effects, perceived sanctions for the firm is the most powerful explanatory variable (t = -4.93). Respondents are significantly less likely to express an intention to commit corporate crime if they believe that the firm is at risk for civil, criminal, or regulatory penalties. Contrary to Braithwaite and Makkai's findings with nursing home operators, we find that formal sanction threats do operate as an effective deterrent to the forms of corporate crime studied here.

Other firm-level variables significantly affect decisions about corporate crime. Intentions to commit corporate crime are significantly higher when the firm is thought to be losing ground to foreign competition (FOREIGN), when the act is presumed to be a common practice in the firm and perhaps thereby tolerated or supported (COMFIRM), if the act of corporate crime is believed to be able to save the firm a large amount of money (SAVELC) or enhance its revenue (REVENUE, p < .10), if the act is instrumental in challenging a questionable law (LAW), if the act is believed to enhance the positive reputation of the firm (POSREP, p < .10), and if the person is ordered to commit the act by a superior (OR-DERED). All effects were in the direction expected by the rational choice model of corporate crime entertained here. Combined, these findings for firm-level variables indicate that corporate crime is less likely when it is thought to result in formal sanctions (FORMALFM) and more likely if it is perceived to have competitive, status enhancing, or financial advantages for the firm (SAVELG, REVENUE, FOREIGN, LAW, POSREP) and if the organizational context of the firm supports or encourages corporate crime (COMFIRM, ORDERED).

In the final model of Table 3, individual- and firm-level effects are simultaneously considered. The findings for the demographic and control variables are generally consistent with the other two models. Since we have argued that choice-relevant factors for the individual are the most proximate causes of corporate crime, we would expect that the individual-level effects would continue to be significant even with firm-level effects controlled. This is precisely what the model indicates.

In this combined effects model, significant deterrents to corporate crime include perceived formal sanctions for the individual (FORMALIN), perceived informal threats directed at the individual (INFORMAL), and feelings of guilt and shame (SHAMEIND). All three of these regression coefficients are negative, as expected, and each is statistically significant. Moral inhibitions also served as a powerful independent restraint on corporate misconduct (MORAL). Even with individual-level costs and benefits controlled, when the act of corporate crime was contrary to one's personal moral code, expressed intentions to commit it were low. In fact, moral restraint was the most powerful individual level factor (t = -3.376). There was evidence that the perceived benefits from the act were also related to corporate crime. Expressed intentions were higher when the act was thought to result in career advancement (CAREER) and when it was thought to be intrinsically pleasurable (THRILL).

It will be recalled that when firm-level effects were considered in isolation from individual effects, sanction threats directed at the firm significantly inhibited intentions to commit corporate crime (b = -.0045, t = -4.493). When individual-level effects are simultaneously considered, however, perceived formal sanctions directed at the company were no longer an effective deterrent (FORMALFM b = .0016, t = 1.091). As expected, then, the certainty and severity of criminal, civil, and regulatory penalties for the corporation serve as an effective deterrent to corporate crime because they affect the assessment of cost for the individual. In other words, legal sanctions directed at the company can reduce acts of corporate crime by increasing the risk and cost of sanctions (both formal and informal) for the individual decisionmaker in the organization.

It is also noteworthy that the magnitude of all the other firmlevel effects are reduced once individual effects are considered. Two firm-level effects (REVENUE, POSREP) that were marginally significant when considered apart from individual-level effects (p < p.10) are no longer significant once these latter factors are controlled. Nonetheless, other characteristics of the business environment or the context of the organization continue to be significant predictors of intentions to commit corporate crime net of the perceived costs and benefits to the individual. Even after controlling for individual benefit, corporate misbehavior is significantly more likely if it is believed to give the organization an edge in fighting foreign competition (FOREIGN), if it is thought to result in substantial savings for the firm (SAVELG), or if it is believed to give the organization the opportunity to challenge an unwanted law (LAW). Corporate crime is more likely when control over one's own decisionmaking is constrained, as when one is believed to be ordered by a superior to violate the law (OR-DERED). Also indicative of the importance of the organizational context of corporate crime, even after controlling for one's own moral position about a given illegal act (MORAL), expressed intention to commit corporate crime is significantly more likely when the moral climate of the firm is perceived to be supportive (COMFIRM). Thus, although an act of corporate illegality may violate one's own code of moral conduct, it is more likely to be committed if the moral climate of the firm tolerates it than when it does not. Since individual perceptions of sanction threats are controlled, this effect for the moral climate of the firm is not due to the fact that persons feel personally invulnerable to legal punishment when the firm tolerates a given act of corporate crime. Instead, this variable seems to be operating as a firm-level analog to an individual's moral beliefs—"workplace rules" that define crime as necessary or acceptable (Jackall 1988).

Since formal and informal sanction threats for the individual were moderately correlated (r = .65), we estimated a final model wherein these two measures were additively combined into a composite index of sanctions for the individual (SANCTIONSIND). This model included both firm-level and individual-level effects (identical to the last model in Table 3). The results for this model are shown in Table 4. We focus attention on three matters. First, the effects for the demographic/control variables in this model are virtually the same as for the comparable model in Table 3. Second, the firm-level effects are reduced slightly more when the combined sanctions for the individual measures is used. Third, this combined measure of sanction threats directed at the individual is negative and significant. Net of other costs (SHAME, MORAL) and benefits (CAREER, THRILL), perceptions of the certainty of formal and informal punishment targeted at the individual serve as an effective deterrent to corporate crime.

Our findings thus far suggest that the perceived costs of punishment, be they formal, informal, or based on self-imposed shame, that are directed against the individual effectively deter corporate crime. We have also found compelling evidence that the perceived benefits of corporate crime, either intrinsic or extrinsic, act as successful incentives. These findings are supportive of a traditional rational choice-based model of corporate crime that holds that conforming conduct is attributable to assessments of the utilities and disutilities of one's actions. We have also, however, found evidence of a very strong deontological source of conformity. Persons' beliefs about the morality of an illegal act effectively inhibited an expressed intention to commit that act. In fact, personal moral rules that proscribed a particular act of corporate crime was the single best predictor of intentions. Independent of instrumental considerations, then, notions of morally appropriate corporate conduct are an important dimension of social control.

To complement this, we examined the hypothesis that personally held morally rules define some acts as "nonmarket areas" that are less subject to assessments of utility. In other words, strongly held moral beliefs that proscribe a given action may so effectively inhibit conduct that considerations of cost and benefit are not even brought into play. In such sacred domains, moral inhibition is enough to secure compliance. Assessments of utility

	Ь	(<i>t</i>)
INFSALES	0.2359	(0.702)
PRICEFIX	0.4209	(1.245)
Cashpaym	0.3917	(1.162)
Sch dummyl	0.2359	(3.549)
Sch dummy2	0.4209	(1.722)
Sch dummy3	0.3917	(1.405)
Gender	0.2005	(0.771)
Age	-0.0294	(-1.094)
YRSBEXP	-0.0161	(-1.929)
RACE	-0.1561	(-0.426)
Sanctionsind	-0.0003	(-2.346)
Shameind	-0.1002	(-2.345)
MORAL	-0.1939	(-3.404)
CAREER	0.1412	(2.952)
Thrill	0.1317	(2.217)
Formalfm	0.0003	(0.218)
Foreign	0.4504	(1.688)
Comfirm	0.8967	(2.872)
SAVELG	0.5718	(1.823)
Revenue	0.2446	(0.714)
Law	0.7947	(1.975)
POSREP	0.3981	(1.120)
Ordered	0.5231	(2.226)
ρ	0.02	(0.357)
Constant	3.5699	
R^2	.41	

Table 4. Estimated Model for Firm and Individual Effects

may, however, serve as a bulwark against misconduct in defined "market areas," areas of conduct where moral prohibitions are relaxed or neutralized.

To test this hypothesis, we divided the sample at the median into two groups on the basis of the strength of their moral beliefs. We then separately estimated a model with the same specification as that shown in Table 4 for those we identified as having "high" and "low" moral beliefs.¹³ If our hypothesis is correct, instrumental considerations should have no effect on the conduct of those with strong moral inhibitions. They should, however, be significantly related to intentions to commit corporate crime among those whose moral inhibitions are weaker. The results of this model are shown in Table 5.

Columns (1) and (2) of Table 5 show the regression coefficients and corresponding *t*-values for the morally restrained group. For this group, whose moral inhibitions against a given act of corporate crime are strong, considerations of the cost and benefit of corporate illegality are virtually superfluous to their

¹³ We did not estimate a model for the total sample that contained a typical interaction term involving moral beliefs (a multiplicative term xy that is the product of x and y) because we presumed that moral beliefs would interact with *all* the cost and benefit measures.

Levels		Moral $(n = 131)$	Low Moral Restraint $(n = 173)$		
	<i>b</i> (1)	(<i>t</i>) (2)	b (3)	(<i>t</i>) (4)	
INFSALES	0.0443	(0.150)	0.5551	(1.077)	
Pricefix	0.5323	(1.647)	0.6090	(1.188)	
Cashpaym	0.2132	(0.730)	0.4219	(0.824)	
SCH DUMMY1	1.3315	(2.292)	0.9670	(1.457)	
SCH DUMMY2	0.4273	(0.806)	0.5371	(0.876)	
Sch dummy3	0.9414	(1.297)	1.0796	(1.323)	
Gender	0.0539	(0.204)	0.3633	(0.831)	
Age	0.0250	(0.554)	-0.0312	(-0.643)	
YRSBEXP	-0.0660	(-1.258)	-0.0214	(-2.106)	
RACE	0.9022	(1.993)	-0.0391	(-0.071)	
SANCTIONSIND	-0.0000	(-0.011)	-0.0005	(-1.901)*	
Shameind	0.0595	(0.745)	-0.0871	(-1.593)*	
Moral	-0.7458	(-2.993)	-0.0665	(-0.772)*	
CAREER	0.0549	(1.230)	0.1888	(2.549)*	
THRILL	0.0609	(0.911)	0.0182	(0.196)	
Formalfm	0.0003	(0.316)	-0.0024	(-1.127)	
Foreign	0.7180	(2.587)	0.5396	(1.445)	
Comfirm	0.3479	(1.049)	1.0831	(2.533)*	
SAVELG	0.0332	(0.123)	0.9415	(2.054)*	
Revenue	0.3807	(1.168)	0.2502	(0.522)	
Law	1.0369	(3.093)	1.2242	(1.831)	
POSREP	0.4004	(0.3431)	0.50961	(1.012)	
Ordered	0.2841	(1.332)	0.42475	(1.158)	
ρ	0.50	(10.03)	0.25	(4.39)	
Constant	5.9392		3.3744		
R^2	.26		.32		

Table 5. Estimated Models for Those with High and Low Moral Restraints

* Difference in the slope coefficients between those "high" and "low" in moral restraint is statistically significant.

conduct. When moral restraint is high, persons are not deterred by perceived formal and informal sanction threats (SANCTION-SIND) nor by anticipated feelings of shame (SHAMEIND). Neither are they enticed by any of the perceived benefits of offending, either in terms of career advancement (CAREER) or any imagined pleasure derived from offending (THRILL). Formal legal sanctions directed against the firm (FORMALFM) also had no effect on those with strong moral inhibitions. Nor did it matter that the firm would save a large amount of money (SAVELG), would earn revenue (REVENUE), or would have its image enhanced (POSREP). Interestingly, among those whose personal moral code was strong, corporate crime was not more likely even if the act is a common occurrence in the organization (COMFIRM).

Variations in the strength of moral inhibition was, however, related to intentions to commit corporate crime even within this relatively homogeneous group (MORAL). Among the morally restrained, those whose beliefs were particularly strong were less likely to report that they would commit corporate crime. The

only other factor to affect decisions to offend in this group was the business context of the firm. When moral restraint was high, corporate crime was more likely if the firm was perceived to be losing ground to foreign competition (FOREIGN), and if it was believed that the criminal act gave the firm the opportunity to challenge a law that is perceived to be illegitimate.

What the firm context variables suggest is that if there are direct financial or status benefits for the firm (SAVELG, REVENUE, POSREP), those with strong inhibitions will not be induced to commit corporate crime. They will be induced, however, if the firm is losing to a foreign competitor or is fighting what is thought to be an illegitimate law. Although there are obvious financial benefits to vanquishing a foreign competitor and challenging a statute, there are nonetheless compelling moral components to these contexts (notions of patriotism, a belief in the notion of "fair play" that foreign competitors flout, and ideologies about the role of government in a market economy) that are clearly lacking in the others. Perhaps, the morally inhibited may be swayed into committing corporate misconduct if there is some appeal to a higher, more compelling, or more immediate moral principle.

In columns (3) and (4) of Table 5, an identical model is estimated for the group whose moral inhibitions are weaker than the first. It is clear in comparing these with the results just discussed that assessments of the costs and benefits of illegal activity are much more important in the absence of moral restraint. Those not inhibited by moral rules forbidding crime are deterred by the threat of formal and informal sanctions (SANCTION-SIND) and by feelings of shame (SHAMEIND). Those not inhibited by moral restraints are also more sensitive to the perceived benefits of crime both to themselves and the firm. They are more likely to commit corporate crime if they believe it will advance their own career (CAREER) and if it is expected to result in substantial monetary savings for the firm (SAVELG). Finally, those not firmly anchored by a personal set of moral rules are influenced by the moral climate of the organization. Corporate crime is significantly more likely if it is perceived to be a common practice within the firm (COMFIRM).

Our findings thus far suggest that decisions to commit corporate crime are primarily and directly influenced by the individual decisionmaker's assessment of the costs and benefits of the act, feelings of shame, and their moral sentiments. It would appear, then, that efforts to control corporate crime might best be directed at the individual. We would add, however, that the certainty and severity of sanctions that targeted the firm also deterred the individual decisionmaker (see Tables 3 and 4). Moreover, it is likely that formal sanction threats are necessary to maintain both individual deterrence and the moral legitimacy of the law. To test this hypothesis, we estimated three models. In the first model the outcome variable is the composite scale of perceived sanctions for the individual (SANCTIONSIND), in the second it was the individual's moral beliefs (MORAL), and in the third it was the individual's assessment of shame (SHAME). In each of these models, the independent variables included scenario dimensions, control/demographic variables, perceptions of benefit (CAREER, THRILL), and formal sanctions directed at the firm (FORMALFM). The results are reported in Table 6.

	Mode Individual		Model for Moral Beliefs Mod		Model fo	odel for Shame	
Levels	<i>b</i> (1)	(<i>t</i>) (2)	b (3)	(<i>t</i>) (4)	<i>b</i> (5)	(<i>t</i>) (6)	
Infsales Pricefix Cashpaym	467.87 283.72 526.68	(3.296) (1.960) (3.732)	0.1584 -0.3395 -0.2438	(0.441) (-0.929) (-0.683)	0.6943 0.0786 -0.1252	(1.444) (0.161) (-0.262)	
Sch dummy1 Sch dummy2 Sch dummy3 Gender Age Yrsbexp Race	$\begin{array}{r} 9.3831 \\ 100.05 \\ -112.23 \\ 194.10 \\ 42.295 \\ -6.0122 \\ 418.35 \end{array}$	$\begin{array}{c} (0.051) \\ (0.593) \\ (-0.486) \\ (1.591) \\ (3.357) \\ (-1.557) \\ (2.405) \end{array}$	$\begin{array}{c} -0.4025 \\ -0.0508 \\ -1.5448 \\ 0.4070 \\ 0.1011 \\ -0.0057 \\ -0.0521 \end{array}$	$\begin{array}{c} (-0.952) \\ (-0.133) \\ (-2.929) \\ (1.392) \\ (3.358) \\ (-0.608) \\ (-0.473) \end{array}$	-0.0864 0.4257 0.0573 1.5047 0.371 -0.0423 -0.2081	$\begin{array}{c} (-0.147) \\ (0.800) \\ (0.078) \\ (3.769) \\ (0.902) \\ (-3.327) \\ (-0.351) \end{array}$	
Career Thrill	$-27.665 \\ -0.45303$	(–1.287) (–0.017)	-0.0673 -0.1166	(-1.264) (-1.745)	-0.0394 -0.1803	(-0.548) (-1.987)	
Formalem Foreign Comfirm Savelg Revenue Law Posrep Ordered	5.8491 -12.938 -16.100 -38.545 71.141 -134.44 -251.71 -172.61	$\begin{array}{c} (14.232) \\ (-0.109) \\ (-0.118) \\ (-0.279) \\ (0.477) \\ (-0.757) \\ (-1.6321 \\ (-1.661) \end{array}$	$\begin{array}{c} 0.0070 \\ -0.1397 \\ -0.0911 \\ -0.0883 \\ -0.5166 \\ -0.3709 \\ -0.6993 \\ 0.1062 \end{array}$	$\begin{array}{c} (6.905) \\ (-0.473) \\ (-0.265) \\ (-0.255) \\ (-1.378) \\ (-0.834) \\ (-1.808) \\ (0.410) \end{array}$	$\begin{array}{c} 0.0090 \\ -0.3987 \\ -0.3112 \\ -0.5075 \\ -0.1784 \\ -0.3380 \\ 0.5900 \\ -0.4571 \end{array}$	$\begin{array}{c} (6.599) \\ (-1.003) \\ (-0.674) \\ (-1.092) \\ (-0.354) \\ (-0.566) \\ (1.135) \\ (-1.311) \end{array}$	
ρ Constant R ²	.16 -972.58 .55	(2.82)	.08 3.6383 .29	(1.39)	.11 4.3296 .33	(1.75)	

Table 6. Generalized Least Squares Estimates for Effects of ExogenousVariables on Perceived Sanctions for the Individual, Moral Beliefs,and Shame

We call attention to the effect in each model for formal sanctions for the firm (FORMALFM).¹⁴ In each case the effect is positive and highly significant. In fact, in each model it is the single best predictor. Perceived sanctions for the individual are significantly higher when the firm is also perceived to be the target of sanction threats (b = 5.8491, t = 14.232). In other words, when the firm is perceived to be the target of formal sanctions, the individ-

¹⁴ The generally null findings for the scenario characteristics may reflect the fact that they were deliberately constructed on the basis of their relevance for intentions to commit corporate crime and not how well they would explain sanction threats or moral beliefs.

ual too feels the risk and cost of formal and informal punishment. Persons are significantly more likely to view corporate crime as morally wrong when the firm is perceived to be at risk for formal sanctions (b = .0070, t = 6.905). Finally, the individual is significantly more likely to feel personal shame when the firm for which they work is the target of formal sanctions (b = .0090, t = 6.599). Collectively, these findings indicate that formal sanctions directed against the firm are a critical part of an extensive informal system of social control. Formal firm-level sanctions maintain the credibility of informal sanctions (individual-level sanctions and shame) and a belief in the moral legitimacy of the law, all of which are effective deterrents to corporate crime.

Summary

In this article, we have reported considerable support for a rational choice model of corporate crime, a rational choice theory, however, that includes both an appeal to rationality and an appeal to morality. Decisions to commit particular acts of corporal illegality are affected by decisionmakers' assessments of the costs and benefits of such actions. In addition, our findings suggest that not only are moral considerations a powerful and independent source of social control, they also condition the impact of more rational factors. As Etzioni (1988) hypothesized, moral rules narrow the range of behavioral preferences by prescribing some as sacred. Conformity has an imperative quality for these actions, one behaves because it is one's duty to behave, and social control is deontological. In other contexts, however, one's moral rules are relaxed or at least ambiguous. In these contexts, other, more instrumental calculations enter the picture. When moral obligations weaken, compliance is based on perceived incentives and costs. Some of these incentives and costs are those that directly benefit the individual. We also found evidence that even when costs directed at the individual are controlled, costs and benefits accrued by the firm may affect individuals' decisions to commit corporate crime.

Our findings suggest a number of alternative but compatible strategies for dealing with corporate crime. First, we have found that enforcement efforts directed at the business organization itself act as a powerful deterrent for those who make decisions within the organization. That is, legal sanctions (regulatory, civil, criminal) applied to the firm can effectively deter those who act on its behalf. Second, we have found that enforcement efforts targeted directly at the individual decisionmaker also serve as an effective deterrent to corporate crime. Threats of criminal and civil sanctions directed against the individual inhibited the intention to commit corporate crime, as did the fear of informal sanctions. Finally, we have evidence to suggest that moral appeals may be an especially powerful source of corporate social control. Strengthening the business ethics of corporate managers may prove to be a very effective crime-control strategy since moral inhibitions appear to be a particularly strong bulwark against corporate crime.

We would argue, therefore, for a multifaceted approach to corporate crime control. One prong of this strategy would be based on a deliberate attempt at the moral education of those engaged in business. We would also, however, argue for a legalistic approach to corporate crime control via the enforcement of business laws and regulations. An appeal to legal sanctions is necessary for two reasons. First, our data suggest that an appeal to morality does not work for everyone. When morality weakens, compliance must be secured by legal threats. Second, the threat of legal sanctions is probably necessary to maintain the legitimacy of an extensive network of informal and normative controls. We have found that legal sanctions directed at the firm are a significant factor in supporting one's moral beliefs that corporate crime is wrong, a sense of shame if one were to commit it, and in strengthening the credibility of legal sanctions for the individual.

Appendix. Examples of Scenarios

Price Fixing

J. Jones, a low-level manager who has been with Steelcorp for years, is ordered by a supervisor to meet with competitors to discuss product pricing for the next year. It has been suggested to J. that the act will save the company a large amount of money. Steelcorp is a mediumsized company, currently experiencing growing sales and revenues in an industry that is losing ground to foreign competitors. J. thinks that the act increases the likelihood that J. will be positively noticed by top management, but also knows that an employee was recently fired after being caught for a similar act, and that the firm was recently sued and fined for a similar act. J. decides to meet with competitors to discuss product pricing for the next year.

Manipulation of Sales Data

J. Smith, a low-level manager who has been with Steelcorp for years, decides to order employees to inflate sales statistics in the firm's financial accounts that can be accounted for in anticipated sales in the following quarter. It has been suggested to J. that the act will save the company a large amount of money. Steelcorp is a small company, currently experiencing growing sales and revenues in an industry that is economically healthy. J. thinks that the act increases the likelihood of peer admiration, but also knows that the firm has a hotline in which such acts can be anonymously reported to management, and that an employee was recently sued and fined for a similar act.

Violation of Environmental Standards

J. Johnson, an upper-level manager who has been with Steelcorp for years, decides to order employees to release into the air emissions that fail to meet EPA standards. It has been suggested to J. that this action gives the firm an opportunity to legally challenge the application or substance of the law. Steelcorp is a medium-sized company, currently experiencing growing sales and revenues in an industry that is economically deteriorating. J. thinks that the act increases the likelihood that J. will be positively noticed by top management, but also knows that the firm has internally implemented audits and inspections at random intervals, and that the firm was recently inspected and cited for a similar act.

Bribery

J. Bradley, a middle-level manager recently hired by Steelcorp, is ordered by a supervisor to comply with a supplier's request to make a cash payment for the supplier's personal use. It has been suggested to J. that the act will produce increased firm revenues. Steelcorp is a large company, currently experiencing growing sales and revenue in an industry that is economically healthy. J. thinks that the act increases the likelihood of peer admiration, but also knows that the act is a common practice within the firm, and that an employee was recently sued and fined for a similar act. J. decides to comply with a supplier's request to make a cash payment for the supplier's personal use.

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