

# THE DIALECTICS OF CORPORATE DETERRENCE

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*Panel data fail to support a subjective expected utility model of corporate deterrence. There is partial confirmation, however, that chief executives of small organizations who perceive the certainty of detection as high have better regulatory compliance in their organizations. Perceived sanction threats do not work significantly more effectively for chief executives (a) of for-profit versus nonprofit organizations; (b) who are owners as well as managers; (c) who say they think about sanctions more (sanction salience); and (d) who have a weaker belief in the law. Nor does the effectiveness of corporate deterrents depend on compliance costs. There is, however, a significant deterrent effect for managers who are low on emotionality, but an opposite counter-deterrent effect for actors high on emotionality. This supports the critique of those who condemn rational actor models from a sociology of the emotions perspective. Emotions of guilt among managers predict the subsequent compliance of their organizations. The results are consistent with perceptual deterrent studies of individuals that find little effect of formal sanctions and social disapproval as deterrents, but stronger support for an effect of self-disapproval (guilt or shame) on law observance. Qualitative data are used to show why it would be folly to interpret these results as showing that business regulation can work without sanction threats and social disapproval. Rather, the data evince the need for a complete reconceptualization of the way policy analysts think about the deterrence of law breaking.*

When business organizations violate environmental or antitrust laws, it is normally assumed that a legal sanctioning strategy is needed to respond to the problem. Yet, the perceived certainty and severity of sanctioning has been shown to have no significant effect on compliance with regulatory laws (J. Braithwaite and Makkai 1991). What had a significant effect on compliance in some contexts was the certainty of detection perceived by chief

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This project has enjoyed the funding support of the Australian Department of Health, Housing and Community Services; the Australian Research Council; the American Bar Foundation; and the Australian National University. The authors are indebted to the support of their colleagues on the Nursing Home Regulation in Action Project, Valerie Braithwaite, David Ermann, Diane Gibson, and Anne Jenkins. Our thanks to four anonymous reviewers.

JOURNAL OF RESEARCH IN CRIME AND DELINQUENCY, Vol. 31 No. 4, November 1994 347-373  
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executives. That study relied on cross-sectional data. The criticism of cross-sectional tests is that an association between noncompliance and low perceived certainty of punishment could mean that managers learn from the experience of noncompliance that punishment is unlikely.

To address that issue, this article uses a second wave of compliance data to examine the effect of perceived probabilities of sanctioning at Time 1 on compliance at Time 2, eliminating interpretations that compliance (at Time 2) affects perceived deterrence (at Time 1). Both cross-sectional (Lundman 1986; Klepper and Nagin 1989; Grasmick and Bursik 1990) and panel studies (Paternoster et al. 1983a, 1983b; Piliavin et al. 1986) have their defenders, and a different set of methodological strengths and weaknesses are associated with each (see Paternoster and Simpson [1993] for a critique of Braithwaite and Makkai [1991] on this issue). A similar result using the two designs, which will be shown to be the case here, provides confidence that the results are robust.

This article will also suggest that there is a dialectical relationship between sanctions and compliance. The data show that under certain circumstances, sanction threats can be worse than a failure: Increases in perceived sanctions produce a reduction in compliance. This leads us to conceptualize the regulatory encounter as a dynamic interchange in which a variety of strategies to induce compliance are available and can result in conflicting outcomes. If the dialectical nature of the relationship between punishment and compliance is not understood by regulators, then the success of any regulatory enterprise is jeopardized.

#### *A SUBJECTIVE EXPECTED UTILITY MODEL OF CORPORATE DETERRENCE*

A subjective expected utility model (Edwards 1961) posits that compliance is a multiplicative function of the perceived probability that noncompliance will be detected, of punishment given detection, and of the cost of punishment:<sup>1</sup>

$$\text{compliance} = \alpha + \beta_1(D_1 \times P_1 \times S_1) + \epsilon,$$

where  $\alpha$  is the constant,  $\beta_1$  is the coefficient,  $D_1$  is the perceived probability of detection,  $P_1$  is the perceived probability of punishment,  $S_1$  is the perceived severity of punishment, and  $\epsilon$  is the disturbance.

Many deterrence theorists would find this an unsatisfactory model because it implies that when the perceived probability of punishment is zero, the effect of the deterrence variables on compliance will be zero even if the

perceived probability of detection is high. It can be argued that being caught has a deterrent effect, even if there are no sanctions in prospect. In other words, there may be additive effects above and beyond their multiplicative effects for the first two components of the expected utility model (Carroll 1982). There is no theoretical reason why the expected severity of a sanction should have an effect on compliance when there is no expected probability of that sanction being applied.<sup>2</sup> This motivates the following addendum to the basic model:

$$\text{compliance} = \alpha + \beta_1(D_1 \times P_1 \times S_1) + \beta_2D_1 + \beta_3P_1 + \epsilon.$$

A limitation of existing perceptual deterrence studies has been the failure to measure perceptions for all potential sanctions. The basic expected utility model in a world of multiple sanctions is that

$$\text{compliance} = \alpha + \beta_1\Sigma[(D_1 \times P_1 \times S_1) + \dots + (D_k \times P_k \times S_k)] + \epsilon,$$

where  $\alpha$  is the constant,  $\beta_1$  is the coefficient,  $D_1$  is the perceived probability of detection,  $P_1$  is the perceived probability of punishment,  $S_1$  is the perceived severity of punishment,  $k$  is the full range of sanctions, and  $\epsilon$  is the disturbance.

With respect to Australian nursing home regulation, there were at the time of the study only three sanctions the Commonwealth government could impose:

1. withdrawal of Commonwealth funding for new admissions to the nursing home
2. withholding an annual Commonwealth funding increase to compensate for inflation
3. cutting off all Commonwealth funding.

The specificity and limited range of these sanctions means that an expected utility model for Commonwealth enforcement, which is exhaustive, can be operationalized. The sanction threats included in this model are shown in Figure 1 (as sanction threats 1, 2, and 3). However, an important complication arises in a federal system like Australia. In recent years, nursing home inspection has been mostly taken over by the Commonwealth government from the state governments, but residual state government enforcement powers remain, are occasionally used in all states, and are quite often used in one state (Victoria). It is not uncommon for the Commonwealth government and a state government to work together using state powers against a nursing home when that seems the most strategic way to go.

<i>Probability of detection</i>	<i>Probability of sanction</i>	<i>Severity of sanction</i>
<p>Commonwealth Models</p> <p>Model 1: Let's say the nursing home continually fails to meet six standards. What are the chances then that the Department of Community Services and Health will find out?</p> <p>Model 2: Let's say the nursing home continually fails to meet six standards. What are the chances then that the Department of Community Services and Health will find out?</p> <p>Model 3: Let's say the nursing home continually fails to meet six standards. What are the chances then that the Department of Community Services and Health will find out?</p>	<p>In the same situation—six "not mets" which are not fixed in the next year—what do you think are the chances that the Commonwealth would cut off funding for new admissions (while continuing to pay the subsidy for existing residents)?</p> <p>Again, in the same situation, what do you think are the changes that it would withhold the annual increase in the level of funding for the home?</p> <p>A team finds a nursing home with six "not mets." The home does not fix up these "not mets" over the next 12 months. What do you think are the chances that the Commonwealth will then totally cut off its funding for the home?</p>	<p>Withdrawal of Commonwealth funding for new admissions.</p> <p>Withholding annual Commonwealth funding increase.</p> <p>Cutting off all Commonwealth funding.</p>
<p>State Government Models</p> <p>Model 4: When a nursing home continually breaches six important state government regulations, what are the chances that the state government will find out?</p> <p>Model 5: When a nursing home continually breaches six important state government regulations, what are the chances that the state government will find out?</p>	<p>A state government inspector finds breaches of six important state government regulations. The home does not fix up these breaches over the next 12 months. What are the chances that they will prosecute and convict the nursing home?</p> <p>In the same situation what are the chances that they will withdraw the nursing home's license (or force the licensee to sell to a more acceptable proprietor)?</p>	<p>Prosecution and \$2000 fine.</p> <p>Withdrawal of home's license to operate.</p>

**Figure 1: Deterrence Models**

A worthy question thus becomes whether the fear of state government sanctions could affect compliance with Commonwealth government standards. That is, the expected utility model is not fully specified until the effect of state government sanctions is added. Figure 1 also summarizes two state government enforcement possibilities (sanction threats 4 and 5). Unfortunately, these are not as cut and dried as the Commonwealth sanction threats because a criminal conviction could result in a range of sanctions, theoretically up to lengthy imprisonment (of a proprietor rather than a director of nursing), although a prison sentence has never been imposed for noncompliance with quality of care standards.<sup>3</sup> In specifying the expected utility for state criminal conviction, two severity of sentence options—state criminal conviction and a \$2,000 fine, and state withdrawal of the home's license—are tested.

The full model adds the three Commonwealth sanction threats to the state criminal conviction sanction threat (threat 4) and the state license revocation sanction threat (threat 5). This (Commonwealth and state) multiplicative and additive expected utility model thus becomes

$$\text{compliance} = \alpha + \beta_1 M + \beta_2 P_{CD} + \beta_3 P_{CA} + \beta_4 P_{CI} + \beta_5 P_{CF} + \beta_6 P_{SD} + \beta_7 P_{SC} + \beta_8 P_{SL} + g'CV + \epsilon,$$

where

$\alpha$  = constant,

$\beta_1$  through  $\beta_8$  are coefficients,

$g'$  = a vector of coefficients for the control variables,

$\epsilon$  = the disturbance,

$M$  = the sum of the expected disutilities of all sanctions which, using the terms defined below, may be expressed as  $(P_{CD} \times P_{CA} \times S_{CA}) + (P_{CD} \times P_{CI} \times S_{CI}) + (P_{CD} \times P_{CF} \times S_{CF}) + (P_{SD} \times P_{SC} \times S_{SC}) + (P_{SD} \times P_{SL} \times S_{SL})$ ,

$P_{CD}$  = probability that the Commonwealth will detect the breaches,

$P_{CA}$  = probability of the Commonwealth cutting off funding for new admissions,

$S_{CA}$  = cost of withdrawal of funding of new admissions,

$P_{CI}$  = probability of the Commonwealth withholding the annual increase,

$S_{CI}$  = cost of withholding the annual increase,

$P_{CF}$  = probability of the Commonwealth cutting off all funding,

$S_{CF}$  = cost of withdrawal of all funding,

$P_{SD}$  = probability that the state will detect the breaches,

$P_{SC}$  = probability of the state convicting,

$S_{SC}$  = cost of the state convicting,

$P_{SL}$  = probability of the state withdrawing the license,

$S_{SL}$  = cost of the state withdrawing the license.

The vector of variables *CV* are the control variables listed in Table 1.

Incorporating the effect of state sanction threats on compliance with Commonwealth standards results in a comprehensively, rather than selectively, specified expected utility model. What the model does not specify is the benefits of noncompliance to weigh against the costs of sanctions. Satisfactory data of this sort are extremely difficult to obtain. To address this deficiency, the standards are later grouped into whether they have high, low, or intermediate compliance costs and the effect of the expected utility model is assessed separately for each group.

## *DATA AND METHOD*

### *Sample*

As argued previously (Braithwaite and Makkai 1991), the model of top management as a rational fiduciary of the interests of the organization in making decisions to comply with or break the law is a crudely simple one. Most critically, top management often will not know about decisions to break the law when effective control over such decisions is in the hands of middle managers over whom chief executives have limited control. What can be done, however, to facilitate a test of the corporate perceptual deterrent model is to locate a context where sanctions, based on top management as a rational fiduciary, are maximally applicable. Such a context would be an organization with a flat management structure, ideally without any middle management at all, where top management can exert total control over the organization. Australian nursing homes approximate such a context, with an average workforce of 40 employees. The chief executive is the director of nursing who operates within a set of regulatory expectations that requires absolute control. This differs from the situation in American nursing homes, which are larger and which have a regulatory mandate and a management tradition that require the director of nursing to answer to an administrator above and to have a middle-management structure below. With rare exceptions, the Australian homes in this study have flat management structures without department heads. This is confirmed with only 13% of directors of nursing indicating that they did not have the final say on decisions that mattered (Makkai and Braithwaite 1991). Later, this assumption will be tested by eliminating those cases from the analysis where the director of nursing is less than fully in control.

The data are compiled from 410 nursing homes that were inspected between 1988 and 1990. The homes were drawn from four large metropolitan

**TABLE 1: Assessing the Effect of Commonwealth and State Deterrence Models on Government-Assessed Compliance**

	<i>Model</i> 1	<i>Model</i> 2	<i>Model</i> 3	<i>Model</i> 4	<i>Model</i> 5
Controls					
Nonprofit home	.19**	.19**	.19**	.20**	.21**
Number of beds	-.09	-.05	-.09	-.10	-.10
Age of home	-.11	-.09	-.11	-.13*	-.11*
Mean disability of residents	.03	.05	.08	.03	.05
Queensland home	.37**	.36**	.37**	.35**	.30**
Victorian home	.16*	.11	.14	.17**	.14
New South Wales home	.57**	.51**	.57**	.55**	.52**
Sample home	-.07	-.03	-.07	-.12*	-.12*
Change in director of nursing	-.09	-.13*	-.09	-.04	-.07
Components of deterrence model 1					
Probability of Commonwealth detection	.00				
Probability of cut funding for new admissions	.14				
Deterrence model 1					
Detection*sanction	-.16				
Components of deterrence model 2					
Probability of Commonwealth detection		-.03			
Probability of withholding annual funding increase		-.05			
Deterrence model 2					
Detection*sanction*severity		-.08			
Components of deterrence model 3					
Probability of Commonwealth detection			-.01		
Probability of cutting all funding			-.01		
Deterrence model 3					
Detection*sanction*severity			-.18**		
Components of deterrence model 4					
Probability of state detection				.04	
Probability prosecutes and \$2,000 fine				-.06	
Deterrence model 4					
Detection*sanction*severity				-.01	
Components of deterrence model 5					
Probability of state detection					.03
Probability withdrawal of license					-.01
Deterrence model 5					
Detection*sanction*severity					-.12*
Adjusted $R^2$	.23	.22	.26	.25	.25
<i>N</i>	293	268	295	273	285

\* Significant at the .05 level; \*\* significant at the .01 level.

centers of the states of New South Wales, Queensland, South Australia, and Victoria.<sup>4</sup>

Following an initial inspection and the finalization of the report and procedures for implementing action plans to remedy noncompliance, the director of nursing in each home was interviewed. These interviews were extensive, lasting more than 3 hours in some cases (in others, including follow-up interviews) and provide the data for estimating the expected utility model. A second inspection was undertaken of 341 of the initial 410 homes, mostly 18 and 20 months later.<sup>5</sup>

### *Dependent Variable*

The compliance measure is drawn from this second inspection.<sup>6</sup> The major regulator is the Australian government. Prior to 1987, inspection was primarily the preserve of the eight states and territories. Diverse regulatory standards and practices across jurisdictions and inadequate quality of care provided to the aged resulted in intense public and consumer scrutiny of the industry. As a result, in 1987, the Australian government introduced 31 standards that covered seven main objectives: health care, social independence, freedom of choice, privacy and dignity enjoyed by residents, the environment of the nursing home, the variety of experience available to residents, and safety (including risks from fire, violence, infection, and the use of restraints).<sup>7</sup> On each standard, the home is given either a *met* (1), *action required* (.5), or *urgent action required* (0). These standards are summed to form a total measure of compliance ranging from 0 (*no compliance*) to 31 (*absolute compliance*)<sup>8</sup> with a mean of 25.82 and a standard deviation of 4.56.

### *Probability and Severity Estimates*

Directors of nursing were asked by interviewers to give estimates ranging from 0% to 100% certain for the range of detection and sanctions listed in Figure 1. For the severity estimates (also shown in Figure 1), the director of nursing was asked to rate how severe a consequence the sanction would be for "a nursing home like yours." Withdrawal of Commonwealth funding for new admissions was given an anchoring score of 10 for all respondents. Respondents were then told to give any other sanctions a score of 5 if they were only half as severe, 20 if they were twice as severe, and so on. The three interviewers were instructed to intervene to clarify the meaning of ratio scaling if respondents were clearly following interval scaling principles in rating the other sanctions (for example, giving scores of 11 and 13). They were also trained to confirm the meaning of scores. For example, in response



to a score of 11 “You mean that it is 10% more severe than withdrawing funding for new admissions?” Means and standard deviations are shown in Table 1.

### *Controls*

A variety of factors can affect a nursing home’s compliance with the law. In particular, the type of ownership of the home has been shown to be an important factor (Makkai and Braithwaite 1993a), as well as the size of the home, the age of the home, and the level of resident disability in the home. All of these factors are controlled for in the deterrence models and their scoring; means and standard deviations are shown in Table 1.<sup>9</sup>

There are three additional factors that are also controlled—geographic location, whether or not the home was a randomly sampled or supplementary home, and whether there had been a change in the director of nursing between the first and second inspections.

### *RESULTS*

In Table 1, the effects of each of the separate Commonwealth- and state-expected utility models are assessed, whereas Table 2 examines the full multiplicative and additive expected utility model. Table 1 indicates that there is a significant effect for two of the five separate models. Both, however, signify a negative association. Contrary to the hypothesis of deterrence theory, as the severity of punishment increases, compliance actually declines with these two models. This finding is replicated with the fully specified model in Table 2 where the sum of the multiplicative factors has a significant negative impact on compliance. The adjusted  $R^2$  for this model is more than respectable for regulatory compliance research (Roth, Scholz, and Witte 1989).

When the multivariate outliers using Mahalanobis distance ( $p < .001$ ) are excluded from the models in Tables 1 and 2, the effects become nonsignificant. It will become clear later why these cases should not be deleted from the analysis; a theoretical model needs to be developed that takes the extremes into account. In fact, regulation, like criminal law, is mostly about how to effect enforcement against extreme cases. We are concerned with understanding the motivations of both deviant and nondeviant cases to comprehend how deviance works. If a more radical cutoff point is used ( $p < .05$ ), one fifth of the sample is identified as multivariate outliers ( $n = 44$ ). Excluding these cases, the significant effects for the deterrence models become positive but nonsignificant. More important, however, the correlation between the ex-

**TABLE 2: Assessing the Effect of the Full Commonwealth/State Deterrence Model on Compliance**

	<i>Compliance</i>
<b>Controls</b>	
Nonprofit home	.21**
Number of beds	-.13*
Age of home	-.06
Mean disability of residents	-.06
Queensland home	.35**
Victorian home	.21*
New South Wales home	.55**
Sample home	-.13*
Change in director of nursing	-.06
<b>Deterrence measures</b>	
Probability of Commonwealth detection ( $P_{CD}$ )	-.11
Probability of cut funding for new admissions ( $P_{CA}$ )	.04
Probability of withholding annual funding increase ( $P_{CI}$ )	.00
Probability of cutting all funding ( $P_{CF}$ )	-.07
Probability of state detection ( $P_{SD}$ )	.14*
Probability prosecutes and \$2,000 fine ( $P_{SC}$ )	-.02
Probability withdrawal of license ( $P_{SL}$ )	.10
<b>Sum of multiplicative factors:</b>	
$(P_{CD} \times P_{CA}) + (P_{CD} \times P_{CI} \times S_{CI}) + (P_{CD} \times P_{CF} \times S_{CF}) +$ $(P_{SD} \times P_{SC} \times S_{SC}) + (P_{SD} \times P_{SL} \times S_{SL})$	-.16**
Adjusted $R^2$	.26
<i>N</i>	229

\* Significant at the .05 level; \*\* significant at the .01 level.

pected utility model and compliance is both significant and negative for the subsample of 44 excluded cases. This suggests that there are indeed contexts in which sanctions can adversely affect compliance with the law.

At first, these might seem bizarre and incomprehensible findings. In the final section of the article, however, results from qualitative fieldwork in nursing homes will reveal that there are dialectics of deterrence. There are contexts where the perception of control and coercion can trigger counter-control and resistance to the law. Expected utility equations combine the effects of sanctions that work in certain contexts, counterdeterrent effects elicited in other contexts, and noneffects in still others.

Consistent with the findings from the cross-sectional model (Braithwaite and Makkai 1991), there is a significant positive effect for the probability of state detection in Table 2. As the estimated probability of state detection increases from 0 to 1, compliance increases by a factor of 2.45. The fact that this finding has been found with both the cross-sectional and panel data

suggests that it is robust and indicates that the probability of state detection makes a modest contribution toward explaining compliance. In summary, however, neither the cross-sectional data reported in the earlier article, nor the panel data reported here, provide confidence in the expected utility model as conventional deterrence theorists would specify, measure, and estimate the model.

With the cross-sectional model, eight attempts were made to redeem the failure of deterrence to explain compliance (see Braithwaite and Makkai 1991). None of these were successful, and identical attempts with the panel data to qualify the model proved largely unsuccessful as well, except in relation to the effect of emotionality. As the theoretical rationale and details of measures are included in the previous study (Braithwaite and Makkai 1991, pp. 29-34), only the results of these replications are summarized below.

### *Redefining the Probability of Detection*

The question here is whether the probability of detection variable is too extreme a situation of noncompliance ("continually fails to meet six standards"). The following alternative detection question was asked: "There are occasions when most nursing homes slip into temporary noncompliance with one standard or another. When noncompliance with one of the standards does occur for a month, what are the chances that the Department of Community Services and Health will find out? Please indicate from 0% to 100% certain." The correlation of this item was only .36 with the detection measures reported above. However, this alternative measure performed no better on the second wave data, just as it did not on the first wave data.

### *Geographical Interaction*

In Australia, there are substantial interstate differences in the nature of regulatory enforcement and in the nursing home industry. On the first wave data, the expected utility model was not supported in any of the states, but with the second wave data there was a significant state-sanction interaction. This is caused by the deterrence model having a positive coefficient in Victoria, compared with negative coefficients in the other three states. When the model is estimated for the Victorian cases alone, however, the positive expected utility effect is not significant.

### *The Salience of Sanctions*

Deterrent threats cannot be expected to be powerful if they are never subjects of serious contemplation and calculation by managers (Zimring and

Hawkins 1973, pp. 142-7). The salience of sanctions was measured by a single item: "I have never given much thought to what the legal consequences of serious noncompliance with the Commonwealth standards would be." Although this interaction was significant, it shows that it was the actors who said they had not given much thought to the legal consequences who had the better fit with the deterrence model!<sup>10</sup> This is another perplexing result that will be shown to make sense only by comprehending that managers can dwell on deterrent threats in a way that undermines their commitment to compliance.

### *Curvilinear Effects*

A plausible hypothesis is that once the expected disutility of punishment passes a certain threshold, further marginal increases make little difference (Braithwaite and Makkai 1991, pp. 31-2). However, we see little evidence of this in plots, and logging the sanction measures in Figure 1 does not improve the results.

### *Belief in the Standards*

Previous work on the cross-sectional data showed that belief in the standards predicted compliance with them (Makkai and Braithwaite 1991). A plausible hypothesis is that a substantial proportion of actors will comply regardless of the odds of punishment simply because they believe that compliance is right. To test this hypothesis, an interaction between belief and the deterrent models in Figure 1 was tested. None of the deterrence by belief interactions are statistically significant when added to the models.

### *Tightening the Rational Fiduciary Assumption*

Our contention is that these data enable a test of a corporate deterrent model in a context that maximally satisfies the assumption of top management as a rational fiduciary of corporate interests. Even when respondents who were one or two standard deviations below the mean on a three-item scale to measure top management control were deleted from the analysis, the deterrence effects did not become positive and significant.<sup>11</sup>

One might hypothesize that rational actor models will not have much explanatory power with the one third of our sample of homes that are nonprofits. It is often argued that church nursing homes are motivated by a calculus of caring for residents rather than the rational pursuit of organizational interests. Although there was a significant main effect, with nonprofits

having higher compliance, the nonprofit-deterrence interactions were not significant.<sup>12</sup>

Another critique arises from the notion of the separation of ownership and control in modern organizations (Galbraith 1969). Managers who do not own the company will not necessarily act to maximize its interests. Fifty-five of the directors of nursing in the study also owned the nursing homes which they ran.<sup>13</sup> Although the numbers were small for these analyses, there were no new significant deterrent effects for the owner managers alone; the same result obtained with a larger sample of owner-managers on the cross-sectional data.

### *Allowing for the Cost of Compliance*

The strongest critique that can be made of the study is that, although it is a more fully specified subjective expected utility model than others in the literature, like all other perceptual deterrence studies, it fails to incorporate the cost of compliance into the model. In the previous study, 31 standards were grouped into high-, medium-, and low-cost standards according to the nursing home's estimates of what it would cost to come into compliance when those standards were out of compliance (Braithwaite and Makkai 1991, pp. 33-4). This grouping has been confirmed as robust by second wave data on what it actually did cost to come into compliance.<sup>14</sup> As in the first wave, the sanction equations estimated separately for high-, low-, and medium-cost standards indicate few significant deterrent effects for any group. Across all groups, there are significant effects for the probability of state detection variable. For the remaining 72 opportunities to find significant deterrent effects for the tests in Tables 1 and 2, 11 significant effects were found—5 for the low-cost standards, 1 for the medium-cost standards, and 5 for the high-cost standards. All of the significant effects were negative except for the state detection effects. The data thus give little indication that systematically accounting for cost can salvage the deterrence thesis on these data.

### *Disapproval and Internalization*

Perceptual deterrence studies over the past decade have tended to show that, for some crimes, the expected certainty and, particularly, the expected severity of punishment are less potent predictors of compliance with the law than expectations of informal sanctions (Burkett and Jensen 1975; Kraut 1976; Anderson et al. 1977; Meier and Johnson 1977; Jensen and Erickson 1978; Akers et al. 1979; Tittle 1980; Meier 1982; Paternoster et al. 1983a, 1983b; Bishop 1984; Williams 1985; Paternoster and Iovanni 1986;

Paternoster 1989; Nagin and Paternoster 1991; but see Piliavin et al. 1986; Williams and Hawkins 1989; Simpson 1990; Nagin and Paternoster 1993). These studies have shown that actors can be punished by (a) formal sanctions, (b) social disapproval from others, and (c) by their own conscience (Grasmick and Green 1980, p. 325).

So far, this study has only addressed the first of these. In a rather limited fashion, the second of these can also be tested by using an expected utility model for the effect of a media scandal. The odds of sanction is measured by the item "In the same situation—the nursing home continually fails to meet six standards—what are the chances that this will result in a scandal in the media? (from 0% to 100% certain)." The expected severity of social disapproval is measured by ratio rating of the following item, according to the standard severity methodology: "Prosecution that results in no fine but a scandal in the media about living conditions in the home." When this expected disutility of scandal is added as another sanction threat in Table 1, it has no significant effect on compliance, either in terms of the two main effects, or as a deterrence composite. Expectations of a scandal in the media do not seem to deter. It must be said that this is a narrowly conceived conception of social disapproval, excluding the odds of disapproval by professional peers, family, residents, neighbors and friends, and indeed by the regulators themselves. Although this article presents a fully specified model of formal sanctions for this domain, the types of informal disapproval that might matter are only partially specified.

Theorists often posit that self-disapproval is a more immediate and potent sanction than disapproval by others (e.g., Braithwaite 1989). One source of its superior power is that it can begin to influence an actor as soon as an act is contemplated and before it is committed, whereas social disapproval and formal punishment can only be mobilized after the event and only in circumstances where others acquire evidence of who committed the act. Recent perceptual deterrence studies have found that self-disapproval is more strongly related to compliance than social disapproval (Grasmick and Bursik 1990; Grasmick, Bursik, and Kinsey 1991). Expected self-disapproval was measured here by asking directors of nursing how they thought "the person responsible *should* feel if they did not meet a standard. Now for the first standard, if a home did not meet it, should the person responsible feel: extremely guilty, quite guilty, a little guilty, regretful but not guilty, not even regretful." A total guilt score was calculated by summing the 1-5 scores across the 31 standards. Table 3 shows that the total guilt score of directors of nursing has a significant effect on the compliance of their organizations with the standards.<sup>15</sup> Nursing homes run by managers who report at Time 1 that one

**TABLE 3: Assessing the Effect of Guilt on Compliance for Those Homes Where the Director of Nursing Has Major Control Over the Running of the Nursing Home**

	<i>Compliance</i>
Full deterrence model $(P_{CD} \times P_{CA}) + (P_{CD} \times P_{CI} \times S_{CI}) + (P_{CD} \times P_{CF} \times S_{CF}) +$ $(P_{SD} \times P_{SC} \times S_{SC}) + (P_{SD} \times P_{SL} \times S_{SL})$	-.20**
Guilt	.13*
Adjusted $F^2$	.32
<i>N</i>	200

NOTE: Model controls for the control variables and the deterrence measures as shown in Table 2.

\* Significant at the .05 level; \*\* significant at the .01 level.

should feel guilty about noncompliance have less noncompliance in their organization at Time 2.

Hence, like other recent perceptual deterrence studies (Grasmick and Bursik 1990; Grasmick, Bursik, and Kinsey 1991), there is no evidence for a social disapproval effect, but there is support for a self-disapproval effect on compliance (see also the support for a self-disapproval effect in Nagin and Paternoster [1993]).

### *Dialectics of Corporate Deterrence*

In the previous two sections, a number of different attempts to salvage the deterrence model through respecification failed. After all these failures, one successful model respecification was based on the theory of emotions. One of the contributions of the sociology of the emotions is the suggestion that human beings cannot be well understood as rational calculators; much of their action is driven by emotions such as envy, love, shame, pride, and retribution. It is sequences of emotions that will be found to underlie exploitative, destructive, or violent conduct more than weighing the costs and benefits of different choices (Scheff and Retzinger 1991). Noncompliance with laws can be an attempt to communicate righteous indignation (Katz 1988). The more threatening government sanctions become, the more enraged the mood of righteous resistance to state commands can become.

If emotions, rather than rational calculation, are in control of managers much of the time, then expected utility theory will have limited explanatory power. To this end, an interaction was added between deterrence and an emotionality scale that has been validated on an Australian adult sample

(Braithwaite 1987).<sup>16</sup> A significant interaction ( $p = .03$ ) was found. The expected utility model did improve compliance for those homes where the director of nursing was classified as low on emotionality (see Figure 2).<sup>17</sup> The opposite was found to be the case for directors of nursing with high emotionality.<sup>18</sup>

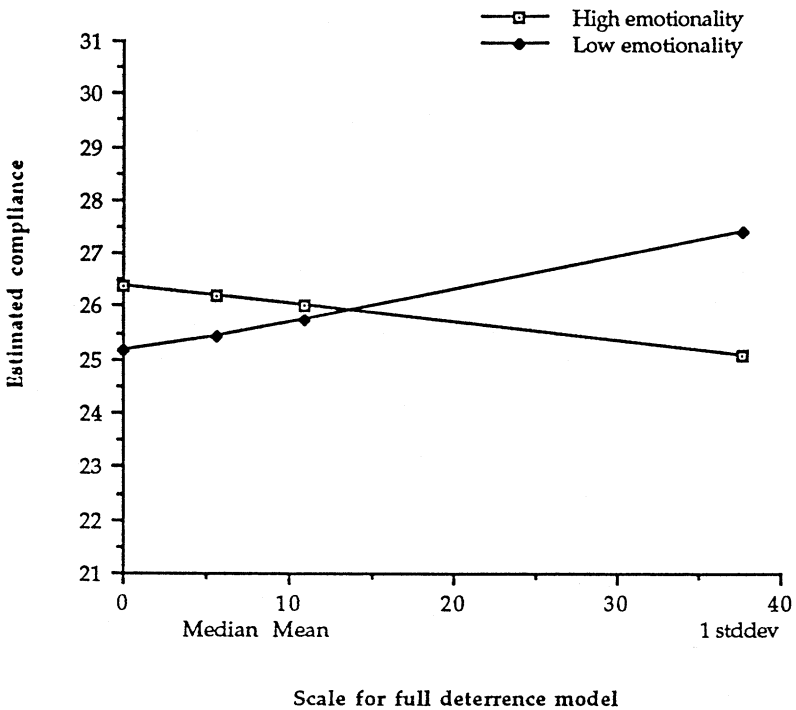
Figure 2 suggests that for the half of the managers who might be described as cool and calculating (low on emotionality), deterrence has some explanatory power; for the half who are higher on emotionality, there is a counter-deterrent effect. The discussion of the fieldwork later in the article will suggest that what lies behind this is a dialectic of deterrence. The quantitative treatment of the data in Figure 2 masks much of the dialectic because it classifies whole people as emotional or not. In the field, managers were observed in their emotional moments when they irrationally resisted deterrent threats only to calm down later into a more calculative posture. The dialectic has also been observed in reverse: managers who are cool and calculating until they reach a point where they are fed up, exploding into a rage of resistance.

The uncovering of the emotionality interaction suggests that lying behind a failure overall to find a deterrence effect are individual cases where sanctions work, other individual cases where they are irrelevant, and still others where they are counterproductive. Instances where sanction threats worked were observed during observations of 133 government nursing home inspections in Australia, the United States, and England<sup>19</sup>—there are simple rational calculators in the nursing home industry. There are others for whom the observation of sanctioning improves compliance because their commitment to the law is contingent (“I’ll play by the rules so long as the cheats are punished”) (Levi 1987). Other actors are morally committed to the extent of cautious metarules (“If in doubt about the consequences of rule breaking, play by the rules”) (McGaw, Scholz, and Carroll 1988). These actors must perceive at least some sanctioning for doubts to be sowed. So the cases where the deterrence model works, or partially works, are easy enough to see and understand.

So are the cases where the deterrence model is irrelevant. During fieldwork, there were encounters with managers who did not have the slightest idea of what sanctions might be imposed for noncompliance, let alone the likelihood that any of these things might happen (see Zimring and Hawkins 1973, pp. 142-9). Punishment was also not going to add to compliance for a small number of actors whose belief in the law was so strong as to be deontological (“I obey the law whatever it costs”) (Yeager 1990).

The challenge is to understand the cases where sanctions *reduce* compliance, cases which, in this domain, seem to be greater in number than those where sanctions increase compliance. Why is it true that for highly emotional





**Figure 2: Effect of Interaction Between Emotionality and Full Deterrence on Compliance With the Law; Model Controls for Variables in Table 1**

managers the perception that deterrent threats are high is associated with increased noncompliance? If the perception of high deterrence is formed by their observation of the actual issuance of enforcement threats, the answer is provided by fieldwork observations that highly emotional managers tend to be insulted by deterrent threats. This leads them to the same defiance or resistance of the regulatory regime that Sherman (1992, 1993) has discovered as a response to arrest for domestic violence in certain contexts. For some types of actors, arrest seems to reduce domestic violence; for others—for example, unemployed assailants—it seems to increase it.

Observation of regulatory encounters in nursing homes shows that different things get different people defiant about enforcement threats. One of Sherman's (1993) candidates here is procedural injustice, drawing on the work of Tyler (1990). Qualitative fieldwork in this study also supports the interpretation that perceptions of procedural injustice do sometimes fuel

defiance, though quantitatively only the *control* dimension of perceived procedural injustice (feeling that your point of view was not fairly taken into account) predicted deterioration in compliance (Makkai and Braithwaite 1994). Resentment over “not being trusted” or being treated “as someone who would only do the right thing when forced to” also fueled defiance. Managers’ perceptions that inspectors treat them with distrust predicts deterioration in compliance (Braithwaite and Makkai 1994). Trust is connected in managers’ thinking with a wider set of values about professionalism: “When they keep treating you as unprofessional, untrustworthy, you end up deciding if they want to treat me like a businessman who only cares about the bottom line, then I’ll be a businessman.” Because there is evidence of an association between perceptions of enjoying professional autonomy and regulatory compliance in this industry (Makkai and Braithwaite 1993b), threatening nurse managers in a way that they interpret as an insult to their professionalism can be counterproductive. In criminology, such effects are normally theorized as labeling effects juxtaposed against deterrent effects (Tittle 1975; Ward and Tittle 1993).

All of the above is consistent with a large psychological literature showing that punitiveness undermines self-restraints (Lepper 1973, 1981, 1983; Lepper and Greene 1978). Just as strong external incentives retard internalization, using reasoning in preference to power-assertion tends to promote it (Cheyne and Walters 1969; Parke 1969; Hoffman 1970; Baumrind 1973; Zahn-Waxler et al. 1979; McCord 1993). Deterrence can, therefore, be counterproductive with people whose voluntary commitment to comply (grounded in professional values, for example) is undermined when they see themselves as coerced into complying. Cognitive dissonance theory interprets this common finding in terms of people devaluing intrinsic reasons for compliance when they believe they choose to comply only to get extrinsic benefits (Bandura 1986). In the classic studies, children value learning less for its own sake when they convince themselves that the only reason they learn is to get rewards or avoid punishments. Note that this kind of counterproductive effect can be just as true of being coerced by the threat of a media scandal as it can be of coercion by formal punishment.

The limitation of this literature, from the point of view of the findings in this article, is that it neglects the role of emotion. Scheff and Retzinger (1991) bring emotion back in with their formulation that humiliation is transformed into rage or defiance when shame is bypassed. Scheff and Retzinger, we suspect, would interpret our emotionality measure as evincing a propensity to bypass shame instead of acknowledging shame and dealing with it. That is, managers who score high on the emotionality measure are managers who read negative evaluations of inspectors as humiliation, which they transform

into anger and defiance. This accounts for why deterrent threats are counterproductive with highly emotional actors. Like other regulatory fieldworkers (e.g., Bardach and Kagan 1982), we have observed how an inspector's deterrent threat can poison the social bond between regulator-regulatee, engendering a downward spiral of anger and defiance in the relationship.

Social bonds between regulator and regulatee may be important in a very different emotional context of counterproductive enforcement with actors who are low in self-efficacy or disengagers.<sup>20</sup> Multivariate analyses show that directors of nursing who believe in themselves, who are high on Bandura's (1986, p. 412) concept of self-efficacy, achieve superior compliance by their nursing homes (Jenkins 1992). Other research has associated low feelings of self-worth among nonmanagerial staff with poor delivery of care (Tellis-Nayak and Tellis-Nayak 1989; Sheridan, White, and Fairchild 1992). This raises the risk in strategies that heighten punitive threats that they might worsen compliance by undermining self-efficacy: "Criticism, fines repeatedly don't have facility staff angry so much as demoralized. They keep getting knocked down. Soon they don't try. They stop trying" (Chicago nursing home administrator).

Another study has found that directors of nursing who score high on a disengagement scale have nursing homes with deteriorating compliance (Braithwaite, Braithwaite, Gibson, and Makkai 1992). Their noncompliance is not so much to be interpreted as rational playing of the regulatory game as dropping out of the game. Staying engaged with the game can be a fragile accomplishment. The comment of one director of nursing, not a disengager, when asked how she would deal with a major disaster of noncompliance being detected by the inspectors at her home was, "I would commit suicide. I couldn't cope." Suicide is an extreme and uncommon form of disengagement, but alcoholism or simply giving up ("burn out" as they call it) are quite common. Once players drop out of the game, changing the payoffs in the game can have no effect: "The staff wouldn't know what the penalties are and wouldn't care." But the deeper problem is that punitive threats might cause disengagement and, therefore, reduce compliance.

More fine-grained analysis is required on each of these mechanisms. Theoretically, however, we contend there is a useful abstraction for how to (a) communicate noncompliance in a way that is perceived as procedurally fair, (b) communicate noncompliance in a way that does not communicate distrust, (c) communicate noncompliance in a way that shows respect for professionalism, (d) give praise<sup>21</sup> to low-self-efficacy actors when they fix one of their problems, and (e) encourage disengagers to become reengaged with the challenge of providing the best possible care for their residents.<sup>22</sup> This is the communication tactic of seeking to prevent regulatees from

bypassing shame over failure to meet standards while sustaining social bonds of respect between regulator and regulatee. Braithwaite (1989) has called this communication tactic reintegrative shaming. A preliminary test of the hypothesis that reintegrative shaming can overcome the problems of counterproductive regulation revealed in this article has found that inspection teams with a philosophy of reintegrative shaming do improve compliance in the nursing homes they visit (Makkai and Braithwaite, forthcoming). In contrast, inspection teams that stigmatize and that communicated disapproval with a low level of reintegration (as well as teams who were “tolerant and understanding”) actually leave the homes they inspect worse off.

We have found with both cross-sectional and panel data that expected punishment does not predict compliance, whereas reintegrative shaming does. Does the policy prescription of abandoning deterrence models in favor of reintegrative shaming follow? Not at all. We have said that our fieldwork reveals many contexts where deterrence works; indeed, it works as a general matter for actors low in emotionality. We encountered directors of nursing who would scoff to us about their determination to resist: “They threaten. They don’t do it.” In such cases, compliance will not come without sanctions. Law enforcement policy cannot be designed for the average case; it must also accommodate the most intransigent cases.

Our fieldwork revealed a multiplicity of types of actors and contexts within the nursing home industry. Furthermore, it showed that single managers can have multiple selves—a calculating business self, an emotional self that (irrationally) resists, and a caring nurse self. Much of the art of effective regulation is about encouraging managers to put their best self forward. Some selves and contexts are such that deterrent threats reduce compliance, some are such that the threat has no effect, and others are such that they increase compliance.

It is wrong to think of the deterrence model as a simple linear process of A causing B. We have seen how the emotions call into play self-generating oppositions. Control generates countercontrol, which can undermine, or even reverse, the effect of the original threat of control. In light of this insight, it should not be surprising to find coefficients for the effect of perceived threats on compliance that are countertheoretical. The habit of thinking in lines can be abandoned. This means abandoning static deterrence strategies in favor of dynamic regulatory institutions that are responsively contradictory. Responsive regulatory institutions can be observed to move from the bottom to the top and then backtrack to the bottom of a regulatory pyramid (Ayres and Braithwaite 1992, chap. 2). Once a dialectical imagination in thinking about regulatory institutions is embraced, we can see that “the seeds of the future

are always enfolded in the oppositions shaping the present" (Morgan 1986, p. 265).

Our fieldwork suggests that it would be dangerous to run a regulatory regime without sanctions, a folly to interpret our quantitative findings as bearing this implication. Equally, they show that displaying sanction threats can make things worse.<sup>23</sup> The implication of the quantitative research on the expected utility model is that it cannot be assumed that increases in the certainty and severity of corporate punishment will translate into proportionate improvements in compliance or, indeed, into any improvement. The policy implication of the qualitative research is that a deterrent capability is essential to securing corporate compliance with the law. Its importance, however, is contextualized to certain moments in unfolding histories of encounters with certain types of regulated actors.

Static deterrence models need to be replaced with dynamic models that accommodate the disparate effects discovered here. Consider models that first seek to motivate professionals to be professional (to feel trusted), that sustain the morale of those low in self-efficacy, and that persuade disengagers to engage in a dialogue over regulatory objectives. Consider dynamic strategies that shift their appeal to sanctions when the professional abuses trust by acting as a calculative crook. If both persuasion and sanction threats fail (for example with disengagers who remain disengaged), incapacitative remedies may be needed. No amount of sanction threats may change an alcoholic manager who is simply incompetent to run a nursing home. To ensure incapacitation, the licence might be rescinded. Here the description is of a dynamic response that involves a pyramid of strategies—try persuasion and reintegration first, then sanctions when that fails, then incapacitation if that fails (Ayres and Braithwaite 1992; Fisse and Braithwaite 1993). This is simply an illustration of the possibilities for designing dynamic, plural models that incorporate a deterrence strategy. Then the most useful kind of empirical research involves evaluating the implementation of the total strategy package. This means examining whether regulatory outcomes improve under the force of the strategy or improve more compared with other locations where different strategies are used. It means diagnosing the reasons why the strategy has counterproductive effects in single cases, even in the face of a positive overall effect.

Imposing passive deterrence models on dynamic regulatory encounters will never give correct answers to questions like: What percentage increase in compliance can be achieved by an X% increase in deterrence? Yet the capacity for responsive deterrence is critical to workable business regulation in a world where driving self-interest and driving emotion both have contex-

tual power. Conceptualizing deterrence as a dialectic of unfolding contradiction allows regulators to shuttle backward and forward among dialogue, praise, disapproval, sanctions, and incapacitation. To secure better nursing homes, a cleaner environment, safer streets, and bedrooms, we must reframe the regulatory oppositions that shape our world. The simplest way to do this is by refraining from using sanction threats as a frontline measure of social control. By using dialogue as the frontline measure, and deterrence only as a fallback, we might minimize the fallout from deterrence that backfires.

### NOTES

1. With both corporate and individual action, the standard philosophical assumption is that "all rational decision-making must begin with an agent's perception of his or her environment" (Goodpaster 1983, p. 8; see Gibbs 1975, p. 115).

2. A further reason for excluding the expected severity main effect is that this causes serious multicollinearity problems in an integrated model. Whereas the first wave data reported in Braithwaite and Makkai (1991) had only one correlation at .91, the reduction in the data by 48 cases in the present second wave analysis resulted in three correlations being greater than .90. It should be noted that the technique of centering the data (see Jaccard, Turrisi, and Wan 1990; Aiken and West 1991) did not significantly reduce these high correlations and the substantive conclusions remained unchanged when the models were estimated with centered data.

3. There have been cases of imprisonment for nursing home benefit fraud in homes that also had shocking quality of care standards. When the analyses were rerun with directors of nursing being asked to estimate how they perceived the severity of a prison sentence for the proprietor rather than a \$2,000 fine, the results were substantially the same as those reported here. There is a significant negative effect that disappears when the multivariate outliers are excluded.

4. The selection of the sample was complex. Based on a proportionate random sample, stratified by number of beds, type of ownership, and the level of resident disability, 242 nursing homes were selected for the study. The government agreed to inspect these homes over a 20-month period. The remaining 168 nursing homes were geographically located within the sampling regions, being all other homes inspected by the government during this 20-month period. Because preliminary analyses indicated that there were no substantial differences between these two groups of homes in terms of geographical and organizational characteristics of the nursing home, the sociodemographic characteristics and attitudes of the directors of nursing, and the nursing home's compliance ratings, the two groups have been combined and are treated as a single sample.

5. See Braithwaite et al. (1993) for a detailed discussion of the response rates for the study. The preliminary data analyses indicated that the time between the first and second inspections did not affect either compliance or the relationship between the expected utility model and compliance.

6. Analyses were undertaken to determine if there were any significant differences between homes that had and had not been visited a second time by an inspection team. Out of seven characteristics of the director of nursing, four characteristics of the nursing home and three characteristics of the proprietor, only one characteristic of the director of nursing was found to significantly differ ( $p < .01$ ).

7. See Braithwaite et al. (1993) for a detailed discussion of the standards.
8. These 31 standards provide an objective measure of organizational compliance. A separate study has shown that the standards are reliable, valid, and comprehensive in their coverage of the medical, personal, and social needs of the nursing home's residents (Braithwaite, Braithwaite, Gibson, Landau, and Makkai 1992).
9. For a detailed discussion of the control variables, readers are referred to Braithwaite and Makkai (1991).
10. As with the deterrence models, when the multivariate outliers ( $p < .001$ ) are excluded, the interaction term becomes nonsignificant.
11. The scale consisted of three items ("As director of nursing I have final say on most of the decisions that matter"; "I have the authority to run this home in the way I think best"; "I have the freedom to run this home pretty much as I like") with a Cronbach alpha of .73.
12. This suggests that compliance is generated by other nonlegal factors. One possibility is the motivation to care for patients. However, analyses of three aspects of professionalism—orientation, values, and autonomy—indicate that caring values do not directly affect organizational compliance (Makkai and Braithwaite 1993b).
13. It is difficult to distinguish between part and sole owners in the data (see Makkai and Braithwaite [1993] for further details).
14. Following the second wave inspection, directors of nursing were asked to complete a second questionnaire that included a request to provide the actual costs of complying with those standards that had been marked as out of compliance at the first inspection. The actual cost data had unsatisfactorily high rates of noncompletion (see Makkai and Braithwaite 1993a). However, when the frequency distribution for the available overall cost per standard was compared to the frequency distribution of the overall expected cost per standard, the distributions were similar. On this basis, the same standards that were grouped into high-medium-low classifications in the first wave study were similarly classified in this article.
15. As we would not expect directors of nursing who do not have control over the running of the nursing home to feel guilt over noncompliance, directors of nursing with little or no control were excluded from the analysis ( $n = 25$ ). The guilt effect remains even when multivariate outliers ( $p < .001$ ) are excluded from the model.
16. Items and scaling information are reported in Table 2. For the interaction term the scale was then dichotomized into two groups with 50% in each group.
17. Predicted compliance scores were estimated when the deterrence model was 0, the median (5.6), the mean (10.83), and one standard deviation above the mean (37) with all the control variables being set at their mean value.
18. When the multivariate outliers ( $p < .001$ ) are excluded, similar changes as those that occurred with the earlier deterrence models are noted. If a more radical level of significance ( $p < .05$ ) is used to determine the subsample of outliers ( $n = 47$ ), there is a significant negative correlation between full deterrence and compliance ( $r = -.34$ ;  $p < .01$ ) for this group.
19. For a description of this fieldwork, see Braithwaite et al. (1993), especially Appendix A.
20. The difference here is akin to the difference between the Scheff-Retzinger explanation of murder as a spiral of threat-bypassed-shame-rage, and suicide as occurring when an attempt to gain reassurance from others is responded to with hopelessness or rejection by them (Scheff 1990, p. 196). Both murder and suicide are explained as failures of the social bond; both explanations are about rejection and social disintegration, but of very different kinds.
21. As, for example, by urging attendance in discussion groups with other outstanding directors of nursing who can be role models of commitment to excellence. There is evidence that praise by Australian nursing home inspectors is associated with improved compliance (Makkai and Braithwaite 1993b).

22. Inspectors who believe in the specific strategy of "suggesting other nursing homes as models of how to solve a particular problem" do significantly better than other inspectors at improving the compliance of the nursing homes they visit.

23. It may be, of course, that these counterdeterrent effects will be greater where threats are displayed in regular interpersonal encounters with inspectors (as with nursing homes) than in domains where threats are more impersonal (insider trading).

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