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An Economic Analysis of Effective Compliance Programs

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Abstract: Tests for "effective" compliance programs take the form of lists specifying required elements in varying level of detail. From an economic perspective, an effective compliance program can be defined more fundamentally as the set of policies and procedures that a rational, profit-maximizing firm would establish if it faced an expected sanction equal to the social cost of violations. This paper explores the idea and several of its extensions and qualifications.

Introduction

Many regulatory systems demand that organizations implement compliance programs – either as a direct regulatory requirement, or as a cost-effective means for avoiding or mitigating penalties for violations. To receive regulatory credit, such programs must be "effective" – meaning, generally, that they must be reasonably designed and vigorously administered so as to deter and sanction violations of applicable norms. This article explores the economic meaning of "effective" compliance programs.

I. Effective Compliance Programs

Internal compliance programs are a key weapon in the arsenal of weapons that the government deploys against violations of regulatory norms Such programs are mandated under a number of statutes and regulations including the Bank Secrecy Act's anti-money laundering rules,[2] the Dodd-Frank Act's rules on swap dealers and futures commission merchants,[3] SEC

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[1] Stuyvesant Comfort Professor of Law, New York University Law School. I thank Emiliano Catan, Jeffrey Gordon, Sean Griffith and Haynes Miller for helpful comments.

[2] 31 U.S.C. § 5318(h)(1) (requiring that "[i]n order to guard against money laundering through financial institutions, each financial institution shall establish anti-money laundering programs . . . .")

rules governing investment advisors[4] and investment companies,[5] bank regulations implanting the "Volcker Rule" against proprietary trading by banking firms,[6] and rules of self-regulatory organizations such as FINRA[7] and NASDAQ.[8] Agreements to institute or upgrade compliance programs are often found in consent agreements with regulatory agencies,[9] deferred prosecution agreements and non-prosecution agreements,[10] and settlements of shareholders derivative

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[3] 7 U.S.C. § 6d(d) (requiring that "Each futures commission merchant shall designate an individual to serve as its Chief Compliance Officer . . . ."), § 6s(k)(1) (requiring that "[e]ach swap dealer and major swap participant shall designate an individual to serve as a chief compliance officer.").

[4] SEC Rule 206(4)-7(a), __ CFR __ (requiring that investment advisors "[a]dopt and implement written policies and procedures reasonably designed to prevent violation, by you and your supervised persons, of the Act and the rules that the Commission has adopted under the Act.")

[5] SEC Rule 38a-1, __ CFR __ (requiring that investment companies "[a]dopt and implement written policies and procedures reasonably designed to prevent violation of the federal securities laws by the fund, including policies and procedures that provide for the oversight of compliance by each investment adviser, principal underwriter, administrator, and transfer agent of the fund..")

[6] Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Securities and Exchange Commission, Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships With, Hedge Funds and Private Equity Funds Subpart D, 79 C.F.R. 5808 (January 31, 2014) [hereafter "Volcker Rule"] (requiring that banking agencies must develop and implement a program reasonably designed to ensure and monitor compliance with the prohibitions and restrictions on covered activities and investments).

[7] Rule 3130 of the Financial Industry Regulatory Authority (FINRA) requires that each member firm must designate a chief compliance officer and further requires the chief executive officer to certify that the member "has in place processes to establish, maintain, review, test and modify written compliance policies and written supervisory procedures reasonably designed to achieve compliance" with applicable rules, laws and regulations

[8] Rule 3012 of the National Association of Securities Dealers (NASD) requires members to designate an officer responsible for establishing, maintaining and enforcing a "supervisory control system." Among other things, this system must test and verify that the member's supervisory practices are reasonably designed to comply with applicable rules, laws and regulations.

[9] Hundreds of such settlements are available. For a sample, see United States Department of the Treasury, Comptroller of the Currency, In the Matter of RBS Citizens, N.A. (2013), available at http://www.occ.gov/static/enforcement-actions/ea2013-040.pdf; Corporate Integrity Agreement Between the Office of Inspector General of the Department of Health and Human Services and Cephalon, Inc. (2008), available at https://oig.hhs.gov/fraud/cia/agreements/cephalon.pdf; Board of Governors of the Federal Reserve System, In the Matter of Citicorp Inc. (2013), available at http://www.federalreserve.gov/newsevents/press/enforcement/enf20130326a1.pdf

[10] See Wulf A. Kaal and Timothy Lacine, The Effect of Deferred and Non-Prosecution Agreements on Corporate Governance: Evidence from 1993-2013, 70 The Business Lawyer __ (2014); Brandon L. Garrett, Structural Reform Prosecution, 93 Virginia Law Review 853 (2007); Leonard Orland, The Transformation of Corporate Criminal Law, 1 Brooklyn Journal of Corporate, Financial and Commercial Law 45 (2006). For criticism of the use of these measures to effect corporate governance changes, see Jennifer Arlen, Prosecuting beyond the Rule of Law: Corporate Mandates Imposed through Pretrial Diversion Agreements (forthcoming); Jennifer Arlen, Removing Prosecutors from the Boardroom: Deterring Crime Without Prosecutor Interference, in Anthony Barkow and Rachel Barkow, eds., Corporate Governance in Prosecutors in the Boardroom (2011). An interesting recommendation that prosecutors should consider corporate governance reforms earl in the process, rather than at the time of settlement, is found in Lawrence A. Cunningham, Deferred Prosecutions and Corporate Governance: An Integrated Approach to Investigation and Reform, 65 Florida Law Review 1 (2014). For an example of a deferred prosecution agreement

lawsuits[11] and class action litigation.[12] Even when not legally required to do so, moreover, companies adopt compliance programs in order to enhance the chances that enforcement officials will refrain from charging suspected violations[13] or will impose a lower sanction for violations that are established.[14]

Merely adopting a compliance policy is insufficient; it is necessary also that the policy be reasonably designed and faithfully implemented within the organization.[15] But when is a compliance program "effective" in this sense? Government agencies provide guidance on this question in the form of lists of factors or required elements. A description of several leading formulations follows:

1. In one of the earliest such lists, the Bank Secrecy Act of 1970 sets out the following "minimum" requirements for an effective anti-money laundering program: (1) the development

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with compliance obligations, see *United States v. Aibel Group Limited*, No. CR H-07-05 (LNH), United States District Court for the Southern District of Texas (2007).

[11] E.g., *In re Johnson & Johnson Derivative Litigation*, 900 F.Supp. 2d 467 (D.N.J. 2012).

[12] E.g., *In re JP Morgan Chase & Co. Securities Litigation*, 2009 WL 537062 (N.D. Ill. 2009).

[13] See, e.g., United States Department of Justice, United States Attorneys Manual Principles of Federal Prosecution of Business Organizations § 9-28.300 (2013) [hereafter "U.S. Attorneys' Manual"] (one factor for consideration in determining whether to bring charges is "the existence and effectiveness of the corporation's pre-existing compliance program"); Criminal Division, United States Department of Justice & Enforcement Division, Securities and Exchange Commission, A Resource Guide to the U.S. Foreign Corrupt Practices Act (Nov. 14, 2012) [hereafter "FCPA Resource Guide"], p 56 (in determining whether to bring charges and what charges to bring, the agencies will consider "consider the adequacy of a compliance program, including "its design and good faith implementation and enforcement."); Securities and Exchange Commission, Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934 and Commission Statement on the Relationship of Cooperation to Agency Enforcement Decisions (available at http://www.sec.gov/litigation/investreport/34-44969.htm (2001) (when deciding "whether, and how much, to credit self-policing, self-reporting, remediation and cooperation," the SEC considers, inter alia, "[w]hat compliance procedures were in place to prevent the misconduct now uncovered? Why did those procedures fail to stop or inhibit the wrongful conduct?").

[14] See id. (existence of a compliance program also plays a role in the prosecutor's decisions to negotiate plea bargains and other agreements); Federal Sentencing Guidelines §8C2.5(f) (reducing guideline penalties "if the offense occurred even though the organization had in place at the time of the offense an effective compliance and ethics program"). Reductions of penalties for compliance programs are also common in civil cases. See, e.g., Environmental Protection Agency, Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations, 65 Fed. Reg. 19,6198 (2000); United States Department of Health & Human Services, Office of Inspector General, Updated OIG's Provider Self-Disclosure Protocol (2013), available at https://oig.hhs.gov/compliance/self-disclosure-info/files/Provider-Self-Disclosure-Protocol.pdf.

[15] The Department of Justice's Principles of Federal Prosecution of Business Organizations express the idea by admonishing prosecutors to "determine whether a corporation's compliance program is merely a 'paper program' or whether it was designed, implemented, reviewed, and revised, as appropriate, in an effective manner." U.S. Attorneys' Manual § 9-28.800.

of internal policies, procedures, and controls; (2) the designation of a compliance officer; (3) an ongoing employee training program; and (4) an independent audit function to test programs.[16] These four elements – internal controls, an internal compliance function, employee training, and independent validation – are sometimes referred to as the "four pillars" of AML compliance.[17] These requirements are found in nearly all official formulations of effective compliance promulgated in later years.

2. The U.S. Sentencing Guidelines, another early formulation of the idea, requires that in order to receive sentencing credit organization defendants must "exercise due diligence to prevent and detect criminal conduct;" and "otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law."[18] The organization must "establish standards and procedures to prevent and detect criminal conduct;" its governing authority must be "knowledgeable about the content and operation of the compliance and ethics program and [must] exercise reasonable oversight with respect to the implementation and effectiveness" of the program. The organization must use reasonable efforts "not to include within the substantial authority personnel of the organization any individual whom the organization knew, or should have known through the exercise of due diligence, has engaged in illegal activities or other conduct inconsistent with an effective compliance and ethics program;" must use reasonable efforts to conduct effective training regarding the compliance and ethics program; must take reasonable steps to ensure that the compliance and ethics program is followed; must take reasonable steps to ensure that it maintains mechanisms for anonymous and

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[16] Bank Secrecy Act, 31 U.S.C. § 531(h).

[17] See Federal Deposit Insurance Corporation, Supervisory Insights: Understanding BSA Violations, available at https://www.fdic.gov/regulations/examinations/supervisory/insights/siwin06/article03_bsa.html. The USA PATRIOT Act, adopted in 2001, adds a fifth pillar: risk-based procedures that enable the institution to form a reasonable belief that it knows the true identity of its customers. See 31 U.S.C. § 5318(*l*).

[18] Federal Sentencing Guidelines §8B2.1(a).

confidential reporting of violations or concerns; and must promote and consistently enforce the compliance and ethics program throughout the organization.[19]

3. The U.S. Attorneys' Manual remarks that "the critical factors . . . are whether [a compliance] program is adequately designed for maximum effectiveness in preventing and detecting wrongdoing by employees and whether corporate management is enforcing the program or is tacitly encouraging or pressuring employees to engage in misconduct to achieve business requirements."[20] This document lists key questions for prosecutors to ask: "Is the corporation's compliance program well designed? Is the program being applied earnestly and in good faith? Does the corporation's compliance program work?"[21] In answering these questions, prosecutors are to consider "the comprehensiveness of the compliance program; the extent and pervasiveness of the criminal misconduct; and any remedial actions taken by the corporation, including, for example, disciplinary action against past violators uncovered by the prior compliance program, and revisions to corporate compliance programs in light of lessons learned." Prosecutors may also examine corporate governance factors: "do the corporation's directors exercise independent review over proposed corporate actions rather than unquestioningly ratifying officers' recommendations; are internal audit functions conducted at a level sufficient to ensure their independence and accuracy; and have the directors established an information and reporting system in the organization reasonably designed to provide management and directors with timely and accurate information sufficient to allow them to reach an informed decision regarding the organization's compliance with the law."[22] Finally,

[19] Sentencing Guideline § 8B2.1.
[20] U.S. Attorneys' Manual § 9-28.800.
[21] Id.
[22] Id.

prosecutors may consider whether the compliance program is "designed to detect the particular types of misconduct most likely to occur in a particular corporation's line of business."[23]

4. The banking agencies' regulation implementing the "Volcker Rule" against proprietary trading by banking institutions lists the following components of an effective compliance program for mid-sized institutions: (1) written policies and procedures reasonably designed to document, describe, monitor and limit regulated activities; (2) a system of internal controls reasonably designed to monitor compliance; (3) a management framework that clearly delineates responsibility and accountability for compliance; (4) independent testing and audit of the effectiveness of the compliance program; (5) training for trading personnel and managers, as well as other appropriate personnel, to effectively implement and enforce the compliance program; and (6) making and keeping records sufficient to demonstrate compliance.[24]

5. The Department of Justice and the Securities and Exchange Commission have articulated an elaborate set of criteria for programs designed to ensure compliance with the Foreign Corrupt Practices Act. Their "Resource Guide to the U.S. Foreign Corrupt Practices Act" recognizes that there no "one-size-fits-all" effective program,[25] but goes on to list the following elements as emblematic: (1) commitment from senior management and a clearly articulated policy against corruption;[26] (2) code of conduct and compliance policies and procedures;[27] (3) oversight, autonomy, and resources;[28] (4) risk assessment;[29] (5) training and

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[23] Id.
[24] Volcker Rule, Subpart D.
[25] FRCA Resource Guide p. 57. The Department of Justice commonly includes many or all these factors as requirements in deferred prosecution agreements. See, e.g., See, e.g., Non-Prosecution Agreement, In re Lufthansa Technik AG (Dec. 21, 2011), available at http://www.justice.gov/criminal/fraud/fcpa/cases/lufthansatechnik/2011-12-21-lufthansa-npa.pdf; Non-Prosecution Agreement, In re RAE Sys. Inc. (Dec. 10, 2010), available at http://www.justice.gov/criminal/fraud/fcpa/cases/rae-systems/12-10-10rae-systems.pdf; Non-Prosecution Agreement, In re Paradigm B.V. (Sept. 21, 2007), available at http://www.justice.gov/criminal/fraud/fcpa/cases/paradigm/0.
[26] FRCA Resource Guide 57.
[27] Id.
[28] Id. at 58.

continuing advice;[30] (6) disciplinary measures and incentives;[31] (7) third-party due diligence and payments;[32] (8) confidential reporting and internal investigation;[33] (9) continuous improvement: periodic testing and review;[34] and (10) pre-acquisition due diligence and post-acquisition integration in mergers and acquisition transactions.[35]

6. In 2014, Leslie Caldwell, the Assistant Attorney General of the Justice Department's Criminal Division, issued a somewhat different set of hallmarks for effective compliance programs: (1) strong, explicit, and visible high level commitment to the corporate compliance policy; (2) a clearly articulated and visible corporate compliance policy memorialized in a written compliance code; (3) periodic evaluation of compliance codes on the basis of a risk assessment addressing the individual circumstances of the company; (4) assignment of responsibility to senior executives for the implementation and oversight of the compliance program; (5) training and guidance designed to ensure that the compliance code is effectively communicated to all directors, officers and employees; (6) an effective system for confidential, internal reporting of compliance violations and concerns; (7) an effective process with sufficient resources for responding to, investigating, and documenting allegations of violations; (8) implementing mechanisms designed to enforce the compliance code, including appropriately incentivizing compliance and disciplining violations; (9) periodic reviews and testing of the compliance code to improve its effectiveness.[36]

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[29] Id.
[30] Id. at 59.
[31] Id.
[32] Id. at 60-61.
[33] Id. at 61.
[34] Id. at 62.
[35] Id. at 62.
[36] Remarks by Assistant Attorney General for the Criminal Division Leslie R. Caldwell at the 22nd Annual Ethics and Compliance Conference, October 1, 2014, available at http://www.justice.gov/opa/speech/remarks-assistant-attorney-general-criminal-division-leslie-r-caldwell-22nd-annual-ethics.

7. The Comptroller of the Currency rates banks' compliance with consumer protection and civil rights statutes and regulations and the adequacy of its operating systems. Factors to be considered include the nature and extent of compliance with consumer protection and civil rights statutes and regulations; the commitment of management to compliance and their ability and willingness to assure continuing compliance; and the adequacy of operating systems, including internal procedures, controls, and audit activities, designed to ensure compliance on a routine and consistent basis. To receive the highest rating, a bank must convince the regulators that (1) management is capable of and staff is sufficient for effectuating compliance; (2) an effective compliance program, including an efficient system of internal procedures and controls, has been established; (3) changes in consumer statutes and regulations are promptly reflected in the institution's policies, procedures, and compliance training; (4) the institution provides adequate training for its employees; (5) if any violations are noted, they are minor and easily corrected; (6) there is no evidence of discriminatory acts or practices, reimbursable violations, or practices resulting in repeat violations; and (7) violations and deficiencies are promptly corrected.[37]

As these and other statements demonstrate, there is no universally accepted definition of an effective compliance program, even though there is substantial overlap among the examples. We can observe also a certain evolution of thinking towards increasing complexity (from the four requirements of the Bank Secrecy Act to the considerably more elaborate recent Justice Department statement) and inclusion of different factors (note the focus in the Justice Department statement on assignment of responsibility, risk assessment, and attention to business partners and agents). The lack of uniform standards may not be problematic for those working in a particular field, where the governing standard is the only one that really matters. But the profusion and complexity of pronouncements, important and useful as they are, does suggest that

[37] Comptroller of the Currency, Comptroller's Handbook, Bank Supervision Process 73 (2007).

current thinking has not penetrated to the core of the issue. The following section investigates whether economic analysis can offer insights on this question.

II. A Simple Economic Analysis of Compliance

Assume that employees in a rational, profit-maximizing, risk-neutral firm engage in random illegal on-the-job conduct. The government imposes a fine f on the firm for proven violations, which is administered with probability p. The firm experiences a sanction pf for violations. For the moment, assume that the government's enforcement efforts are costless.

The firm spends an amount C on activities such as setting an appropriate "tone at the top," screening employees, conducting training programs, maintaining mechanisms for confidential reporting of misconduct, operating surveillance and reporting procedures, sanctioning employees for violations, and so on. As a result of these activities the firm avoids the sanction *pf* with probability *z*. The probability *z* increases with the firm's compliance spend, but at a decreasing rate: $z'(C) > 0$, $z''(C) < 0$.

With compliance, the firm's cost of violations is:

$$(1 - z)(pf) + C$$

The firm will engage in compliance if the cost of sanctions with compliance is less than or equal to the cost of sanctions without compliance:

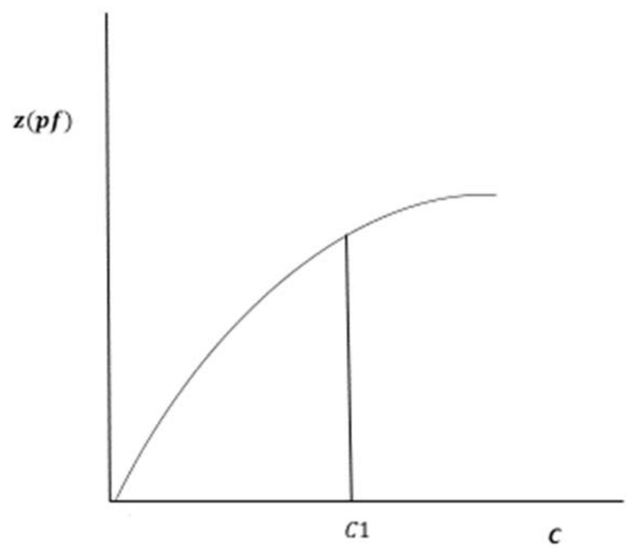
$$(1 - z)(pf) + C \leq (pf)$$

This is equivalent to the proposition that the firm will spend on compliance if the cost of compliance is less than or equal to the cost of sanctions avoided:

$$C \leq z(pf)$$

As shown in Figure 1, the firm will expend resources up to the point $C1$ where the marginal cost of compliance equals the marginal cost of sanctions avoided:

Figure 1: Firm's Compliance Expenditure



As compared with the situation without compliance, $C1$ generates a benefit for the firm equal to:

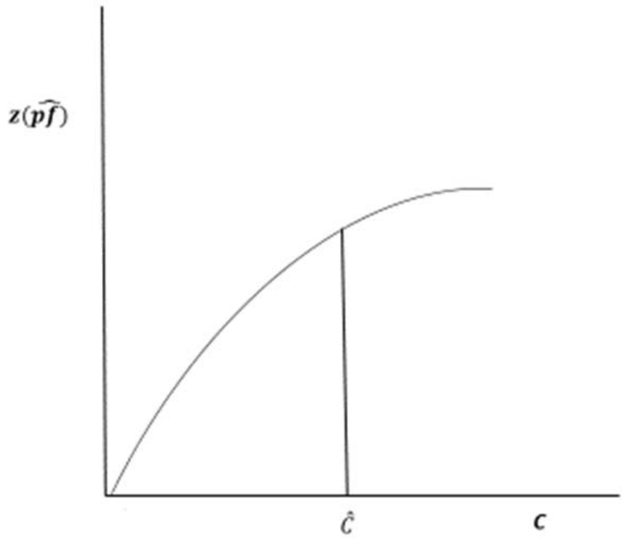
$$z(pf) - C1$$

Now let us use this framework to investigate when a compliance program can be considered effective in an economic sense. To determine a first approximation of an optimal compliance program, assume that the government sets the sanction for violations at their social cost:

$$pf = \widehat{pf}$$

Setting the expected sanction equal to the social cost of violations causes the firm to internalize the cost of its activities. In response, the firm will be to adopt a socially optimal level of compliance expenditure $\hat{C}$:

Figure 2: Optimal Compliance



$\hat{C}$ is socially optimal as a first approximation in that it maximizes the surplus generated by compliance expenditures. Accordingly, we can define an effective compliance program in terms of $\hat{C}$: *an effective compliance program is the set of policies and procedures that a rational, profit-maximizing firm would establish if it faced an expected sanction equal to the social cost of violations*.

Let us now consider the impact of different values of *p* and *f*. Many combinations of *p* and *f* can generate the optimal expected fine $\widehat{pf}$. The particular values of *p* and *f* are not of concern if we assume that enforcement is costless and firms are risk-neutral. But these considerations matter when we relax these assumptions.

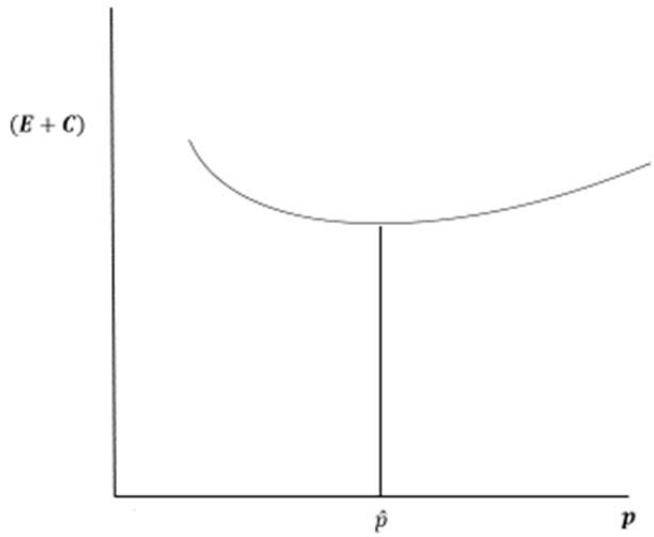
If firms are risk-averse, they will experience a low-probability/high-fine regime as more costly than a high probability/low fine regime because the former is riskier. Accordingly, risk-averse firms will expend more resources on compliance when fines are high and the probability of detection is low than when fines are low and the probability of detection is high.

On the other hand, governments expend fewer resources on law enforcement when the probability of detection is low and fines are high than they do when the probability of detection is high and fines are low. The reason is that it is usually more costly for the government to detect violations than to impose fines for violations once detected.

The optimal values for p and f minimizes the sum of the firm's compliance costs C and the government's enforcement cost E. These two costs tend to offset one another, but probably not completely. For low levels of p, it is probable that the government's cost savings in enforcement is more than offset by the firm's increased compliance spend. For high levels of p, likewise, it is probable that the firm's cost savings is more than offset by the government's enhanced enforcement spend.

This suggests that the social optimum is an intermediate level of enforcement and fine:

Figure 3: Optimal Probability of Detection



This tradeoff between government enforcement and internal enforcement through compliance programs should be a function of comparative costs. The government should expend money on enforcement so long as the firm cannot perform the same task at lower cost. Optimally, both the government and the private sector will be involved in compliance.[38]

The foregoing suggests an interesting footnote to the economic theory of punishment. As noted by Becker and others, government can conserve on resources by adopting a low

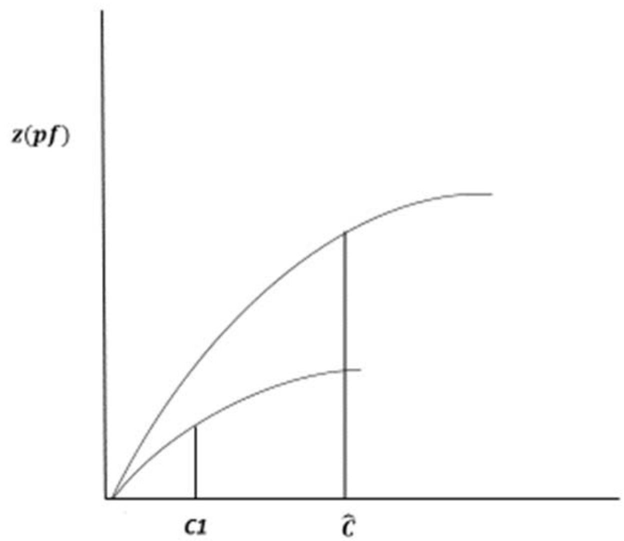
[38] For example, firms have superior access to information and thus can detect violations at lower cost than the government, which must rely on formal legal processes; on the other hand, firms may have an incentive not to perform the compliance function vigorously because they may have to pay for violations discovered. Compliance programs may also lack the threat value of government investigations and therefore may sometimes be less effective at smoking out instances of misconduct.

probability of detection/high fine enforcement policy.[39] Conventionally, the limits on this strategy are conceived as flowing from the defendant's solvency constraint and the public's unwillingness to tolerate high punishments for minor offenses. The theory of compliance suggests another constraint. The government's choice between policy instruments not only affects the government's costs; it also affects the firm's compliance response. If the government spends lightly on enforcement and relies on high fines to deter misconduct, the firm increases compliance spending in order to reduce the risk of having to pay a substantial fine. The efficiencies claimed for low-detection high-fine enforcement strategies may be overstated unless the costs of compliance are taken into account.

We now consider situations in which the firm will not engage in optimal compliance expenditures. Consider the case where the expected sanction for violations is too small. In such a case, as shown in Figure 4, the firm will spend too little on compliance:

[39] See Gary S. Becker, Crime and Punishment: An Economic Approach, 76 Journal of Political Economy 169 (1968); A. Mitchell Polinsky and Steven Shavell, Enforcement Costs and the Optimal Magnitude and Probability of Fines, 35 Journal of Law and Economics 133-48 (1992).

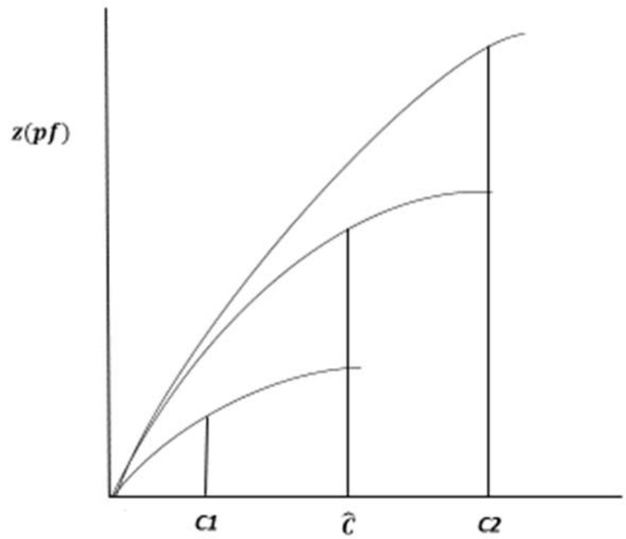
Figure 4: Compliance Expenditures When Sanctions Are Too Low



With an inefficiently low expected fine, the firm both engages in too many violations and institutes compliance expenditures of $C1 < \hat{C}$.

Inefficiencies also result if the government imposes an expected sanction for violations larger than their social cost. As shown in Figure 5, when the expected sanction is too large, the firm institutes compliance expenditures of $C2 > \hat{C}$:

Figure 5: Compliance Expenditures When Sanctions Are Too High



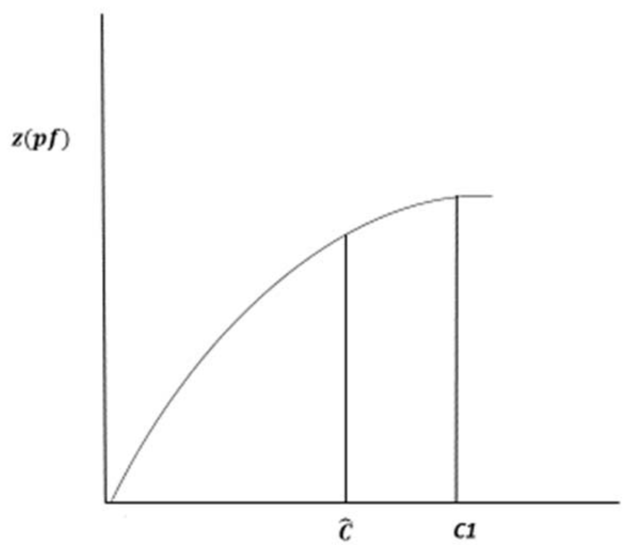
The firm engages in too little of the activity which generates the risk of violations, and also spends too much rather than too little on compliance activities.

So far we have considered the situation where the government imposes a fine for violations. The compliance response, however, provides an additional policy tool. Even if a low sanction (or no sanction) is imposed for the underlying violation, the firm will behave optimally if it spends $\hat{C}$ on compliance. Thus when fines are too low, the government may be able to achieve optimal behavior by mandating an effective compliance program.

This strategy confers advantages as compared with policing the underlying conduct. To incentivize the firm to adopt an effective compliance program, the government does not need to impose a fine equal to the social cost, but only a penalty of sufficient magnitude such that it is cheaper for the firm to institute an effective compliance program than not to do so. This lower penalty is likely to encounter reduced public resistance. Moreover, although the government must expend resources to supervising the compliance program, it is probably cheaper to mandate an effective compliance program than to police the underlying conduct. Unlike primary misconduct, which is usually hidden from view, large parts of the compliance program are easy to observe.

The option of mandating a compliance program thus holds promise for improving the cost-effectiveness of regulation. However, there is also a danger associated with this approach. Governments have an incentive to require firms to overspend on compliance programs. The reason is that regulators do not pay the costs of the program, but obtain benefits by appearing "tough on crime" and by deflecting blame for violations. This situation is shown in Figure 6:

<u>Figure 6: Excessive Compliance Requirement</u>



The firm's optimal compliance expenditure is $\hat{C}$ but the government requires $C1$. Even though $C1$ is socially inefficient, regulators may avoid criticism by observing that it reduces the rate of violations.

III. Applications

The definition of an effective compliance program suggested in this paper – the program that a rational profit-maximizing firm would adopt if faced with an expected fine equal to the social cost of violations – cannot easily be translated into concrete elements of actual programs. It is couched at too abstract a level and requires assessment of costs that are difficult or impossible to quantify. As a practical matter, therefore, list-type criteria for effective compliance programs are necessary and appropriate. Nevertheless, the economic approach has the virtue of clarifying thinking. Beyond this, the economic approach does offer certain guides for interpretation in practical cases:

1. The fact that firms have an incentive to adopt compliance programs, even in the absence of government compulsion, suggests that the government could usefully examine the policies and procedures voluntarily adopted by firms as guidance for the elements of a government-mandate program. To be sure, the utility of examining private sector models is limited by two considerations. First, the pervasive influence of government mandates has made it nearly impossible to identify a pure private sector solution, since nearly all private sector compliance programs are adopted against the background of government requirements. Second, the reliability of private solutions must be assessed in light of the fact that companies facing regulatory requirements may face incentives to violate the law, so may not voluntarily adopt effective programs. These qualifications suggest caution, but do not nullify the value of examining private-sector models for effective compliance. In fact it is likely that the evolution

of government thinking on the elements of an effective compliance program has been informed by an active dialog with the private compliance sector.

2. The government should not micro-manage the requirements for an effective program. Since companies have different characteristics, history, and cultures, any attempt to specify the ingredients of an effective program at a granular level will likely generate poor results. No regulator or prosecutor can hope to know more about the internal workings of an organization than the existing managers who spend their professional lives there. Thus regulatory requirements for compliance programs, if articulated at a excessive level of detail, are doomed to be balky, inefficient, and insensitive to the particular circumstances and unique culture of any given organization. The better approach is for the government to identify key components and general principles and then allow the regulated entity to design the details.

3. Courts should generally defer to an agency's judgment about the effectiveness of an organization's compliance program. The agency will ordinarily be familiar with the policies underlying the laws being enforced, and often has knowledge of conditions in the industry and in the regulated firm. On the other hand, as noted above, governments face a temptation to demand more in compliance than is socially optimal. For this reason, even while exercising deference, a court should scrutinize the program in order to assure itself that it is not unreasonably designed and not administered in an irrational or unfair manner.

4. A final issue concerns the legal consequences that follow if a regulated entity commits a violation even though it has an effective compliance program in place. On the one hand, as demonstrated above, an effective program can achieve the socially optimal level of violations. Moreover, recognition of an effective program as a defense reduces a firm's risk by providing a

“safe harbor” against liability. These considerations might suggest that an effective compliance program should provide an absolute defense against liability.

Other considerations counsel against an affirmative defense. It is often hard to determine whether a compliance program is actually effective – either because it is difficult to assign values or weigh the impact of different components, or because the firm presents the program as effective when in fact it is not. This means that there is substantial room for error in the determination of an effective program. The fact that a violation occurred, while not establishing the ineffectiveness of the program, might nevertheless lead a reviewer to revise the assessment she might otherwise make: other things equal, it is more probable, given a violation, that the compliance program under review was ineffective. The possibility of error in the determination of whether a a program is effective suggests that an affirmative defense might not represent the best social policy.

In addition to the possibility of error, there are activity levels to consider. In the presence of an affirmative defense, a firm that has an effective compliance program in place will tend to engage in more of the activities that create a risk of compliance violations. The reason is that the firm gets a benefit from these activities but does not pay for violations that occur even with an effective program in place. In consequence, an affirmative defense for effective compliance programs may lead to inefficiently high activity levels and resultant harm to the public.

For these reasons, it appears most appropriate for the law to recognize the presence of an apparently effective compliance program as a substantial factor in mitigating the penalty or tipping the balance in favor of non-enforcement, but not as an absolute defense to liability.

Conclusion

This paper has offered simple economic description of an effective compliance program: the set of policies and procedures that a rational, profit-maximizing firm would establish if it faced an expected sanction equal to the social cost of violations. Firms that operate effective programs minimize the net social costs of violations. In any given case, the firm's compliance expenditures will be a function of the government's enforcement strategy: if the government opts for a low-detection, high-fine approach, a risk-averse firm will expend more on compliance than if the government adopts a high-detection, low-fine strategy.

If the government can require firms to adopt effective compliance programs, the result will be efficient even if budget or political constraints prevent the government from imposing an optimal fine. But offsetting the government's cost saving here is the need to ensure that the firm does in fact operate an effective program. Courts should generally defer to the government's determination that a firm has or has not implemented an effective program; but the deference should be qualified by the fact that the government's incentives are not fully aligned with those of the public: governments face a temptation to impose compliance requirements that in some cases may reduce rather than increase social wealth.

Strong policy arguments can be developed both in favor of and against the creation of an affirmative defense for effective compliance programs. All things considered, it is probably preferable for the government not to provide an affirmative defense, but rather to give substantial credit for effective compliance programs in connection with matters such as charging, settlements, and sentencing.

END