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Compliance Management Systems: Do They Make a Difference?

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Abstract

Regulatory compliance is vital for promoting the public values served by regulation. Yet many businesses remain out of compliance with some of the regulations that apply to them—presenting not only possible dangers to the public but also exposing themselves to potentially significant liability risk. Compliance management systems (CMSs) may help reduce the likelihood of noncompliance. In recent years, managers have begun using CMSs in an effort to address compliance issues in a variety of domains: environment, workplace health and safety, finance, health care, and aviation, among others. CMSs establish systematic, checklist-like processes by which managers seek to improve their organizations' compliance with government regulation. They can help managers identify compliance obligations, assign responsibility for meeting them, track progress, and take corrective action as needed. In effect, CMSs constitute firms' own internal inspection and enforcement responsibilities. At least in theory, CMSs reduce noncompliance by increasing information available to employees and managers, facilitating internal incentives to correct instances of noncompliance once identified, and helping to foster a culture of compliance. Recognizing these potential benefits, some government policymakers and regulators have even started to require certain firms to adopt CMSs.

But do CMSs actually achieve their theoretical benefits? We review the available empirical research related to CMSs in an effort to discern how they work, paying particular attention to whether CMSs help firms fulfill both the letter as well as the spirit of the law. We also consider lessons that can be drawn from research on the effectiveness of still broader systems for risk management and corporate codes of ethics, as these systems either include regulatory compliance as one component or they present comparable challenges in terms of internal monitoring and shaping of organizational behavior. Overall, we find evidence that firms with certain types of CMSs in place experience fewer compliance violations and show improvements in risk management. But these effects also appear to be rather modest. Compliance in large organizations generally requires more than just a CMS; it also demands appropriate managerial attitudes, organizational cultures, and information technologies that extend beyond the systematic, checklist processes characteristic of CMSs. We address implications of what we find for policy and future research, especially about the conditions under which CMSs appear to work best, the types or features of CMSs that appear to work better than others, and the possible value of regulatory mandates that firms implement CMSs.

Compliance Management Systems:
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During the 1970s and 1980s, governments across the globe enacted laws to address a host of social problems: corrupt financial practices, pollution of the natural environment, and workplace health and safety hazards, to name just a few pressing concerns (Bardach and Kagan 2002). Although in many jurisdictions the pace of such lawmaking has more recently slowed, it has by no means stopped altogether. The more than 2,000-page long Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, for example, attempted to restructure all aspects of the financial services industry in the United States (Labonte 2017). The U.S. Environmental Protection Agency (EPA), to pick another example, promulgated 46 major regulatory actions during the Obama Administration, addressing environmental threats from greenhouse gases to toxic substances (McCarthy and Copeland 2016).

Despite the continued adoption of regulations by lawmakers and regulators, many of the problems that have spurred governments to issue new laws nevertheless have continued to

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persist. Financial services misconduct still exists, as witnessed by actions taken by employees of the bank Wells Fargo to create thousands of fraudulent consumer accounts in 2016 (Corkery 2016). During a recent seven-year period, U.S. financial regulators assessed approximately $12 billion in fines and penalties for violations of a variety of financial rules (U.S. Government Accountability Office 2016)—presumably just the tip of the iceberg in terms of undetected or unsanctioned noncompliance (Lund and Sarin 2020). Noncompliance undoubtedly pervades other areas of regulation as well. In each of the past ten years, for example, the U.S. EPA initiated an average of about 2,500 civil actions for noncompliance—and in one year alone more than 1,500 additional facilities voluntarily reported instances of noncompliance to the agency (U.S. EPA 2018). Furthermore, despite many laws on the books to prevent employment discrimination, the #MeToo movement has in recent years revealed the pervasiveness of sexual harassment across nearly every sector of the U.S. economy—with 38 percent of women reporting that they have experienced sexual harassment or assault in the workplace (Kearl 2018).

Clearly, the effectiveness of regulation depends not merely on what governments prohibit or require; it also depends vitally on the responses that these government regulations elicit from private sector managers and employees with the frontline responsibilities for compliance. Responsibility for compliance assurance, after all, does not fall exclusively on government, as government inherently lacks both the resources and information required to guarantee compliance. Of course, government enforcement efforts do seek to *motivate* compliance, but in many domains regulators' oversight resources are small or even shrinking (Armour et al. 2016). For example, expenditures at the U.S. EPA for environmental monitoring and enforcement has remained at about $600-$620 million annually since the mid-1990s, despite the growing number and complexity of environmental rules (Shimshack 2014; Bardach and Kagan 2002). It is inevitable that, to address social problems more effectively, governments must draw on the expertise and authority of the people who are arguably best positioned to identify and root out non-compliance: private sector managers.

This chapter explains how organizations' compliance programs—or what we refer to as compliance management systems (CMSs)—can work to leverage the capacity of firms' managers to create internal plans, procedures, and information systems designed to help their organizations meet regulatory compliance obligations. After explaining what these systems are and how their proponents intend for them to work, we review the available empirical evidence that speaks to the extent to which CMSs can in fact help firms fulfill the letter as well as the spirit of regulatory obligations. We find that, despite some obvious theoretical advantages, CMSs do not guarantee full compliance on their own, nor is it exactly clear how much any formal system, qua system, matters, as opposed to other organizational factors, such as an organization's top managers' attitudes toward compliance or a less tangible compliance-supportive "culture." Of course, the best possible circumstance to support compliance would seem to consist of a well-designed CMS combined with strong leadership commitment to, and an organizational culture supportive of, faithful compliance. We end this chapter with a brief discussion of implications for future research and for public policy decision-making.

The Rise of Compliance Management Systems

Regulatory compliance has been a management challenge for as long as governments have imposed regulations on businesses and other organizations. As a result, some type of compliance management "system" has always existed to whatever extent that businesses and other organizations have created deliberate internal processes to ensure that they comply with applicable rules. In more recent decades, however, the management of compliance responsibilities has tended to grow more formal as the complexity of regulations has increased along with the complexity of business operations and transactions. Moreover, rather than merely relying on outside lawyers or tax accountants for advice, as organizations have long done, businesses have increasingly assigned particular staff members—such as in-house lawyers, accountants, and human resource professionals—to play key roles in ensuring compliance with legal requirements (Edelman 2016; Edelman and Suchman 1997). Today, many large businesses and nonprofit organizations have even created entirely separate compliance departments staffed by a set of professionals known as "compliance officers" (Miller 2017; Sokol 2016; Martin 2015).

Together, the establishment of professional staffs to manage compliance, combined with the implementation of a set of formal internal procedures and management structures to promote compliance, constitute what we refer to as CMSs. These management systems are tools that allow "every business to be its own enforcement agency—identifying, correcting, and preventing its own noncompliance" (Parker and Nielson 2006). Some of the common elements of CMSs include:

- Establishment of internal compliance policies
- Design of business processes and procedures to carry out policies
- Accessibility of policies and procedures
- Training in policies and procedures
- Record-keeping and auditing to assess regulatory compliance and adherence to internal procedures

- A confidential reporting hotline and a commitment to non-retaliation against whistleblowers
- Procedures for corrective action of non-compliance

Increasingly, an organization's compliance-related policies and procedures not only can be committed to operational manuals and training programs but also incorporated into the design of the organization's information technology and digital systems as well. Not only can tasks be automated so that they are hard-wired to be consistent with legal requirements, but information technology can also be designed to restrict access to certain information, ensure that only designated personnel give approvals to decisions (including exceptions to normal routines), and provide a digital basis for record-keeping and auditing.

CMSs are structured around the specific legal obligations that apply to the organizations within which they have been established—that is, around a host of substantive requirements that relate to financial accounting, tax reporting, employment practices, health care billing, interactions with government officials, workplace health and safety, environmental protection, and more. Although the specific rules that animate different organizations' CMSs vary, the general structure of a CMS often follows what is known as a "plan-do-check-act" model. That is, a CMS calls upon a firm's managers to develop a plan for how their organization will meet its applicable compliance obligations, and then to implement the plan, check to be sure the plan is working, and act to correct problems as they occur. A firm's plans will typically start with the assignment of distinct responsibilities for compliance on the part of different members of the organization: its leaders and overseers (such as its boards of directors), its employees, and especially any staff dedicated to managing the overall compliance system. Overall, CMSs function as a type of organizational "checklist" that helps employees and managers to be informed of legal obligations and to overcome lapses in attentiveness that are common when personnel face competing demands (Gawande 2009: 36).

As regulatory noncompliance represents only one of the risks confronting an organization, it is not surprising that some CMSs are nested within larger risk management systems—or at least are related to such systems. CMSs in this way belong to a larger family of management systems that have proliferated in business organizations over recent decades. CMSs' characteristic plan-do-check act model, for example, also characterizes a much more general management approach originally developed for promoting quality manufacturing.[1] This model's origin is often attributed to Japanese engineers from the 1950s, who themselves were inspired by the work of U.S. engineer Edward Deming (Moen and Norman 2010). In 1987, the International Organization for Standardization (ISO) developed a set of standards, known as ISO 9000, based on the plan-do-check-act model to guide companies in improving the quality of their products and services (Stamatis 1995). These ISO 9000 standards then served as a model for the subsequent development in 1996 of additional international standards on environmental management systems (EMSs), known as the ISO 14000 series of standards (ISO 2015). CMSs bear a close affinity with all of these other management systems, including additional organizational practices that would fall under the rubric of "enterprise risk management" and the implementation of corporate "codes of ethics."

Standards for CMSs have tended to grow more elaborate over time (Miller 2018), especially as CMSs in many countries have evolved from broad management principles to more

[1] CMSs also have parallels to certain conformity assessment processes used by organizations to determine whether their products meet industry technical standards (Hunter 2009).

detailed requirements calling for specific documentation and, in many cases, third-party verification. Recent guidance on CMSs issued by the U.S Department of Justice (DOJ), for example, spells out regulators' current high level of expectations for the rigor, detail, and thoroughness of CMSs. Under DOJ's guidance, a CMS should be "comprehensive" and "well-integrated into the company's operations and workforce," taking into account the firm's specific risks, location, sector, competitive position, and customers, among other factors (U.S. Department of Justice Criminal Division 2019: 2-3).

As suggested by the existence of the DOJ guidance, governmental entities increasingly encourage companies to adopt CMSs. Governments even sometimes require firms to adopt them. A notable example of a CMS mandate in the United States can be found in section 404 of the Sarbanes-Oxley Act of 2002, enacted in the aftermath of the Enron and WorldCom financial scandals. Section 404 requires firms to adopt certain new components of "internal financial control" and to audit their processes for ensuring the validity of their financial reports (Moeller 2004). Other examples of U.S. mandates for the adoption of CMSs or other comparable compliance-oriented processes include (Miller 2018; CFPB 2012):

- anti-money laundering programs required under the Bank Secrecy Act;
- internal compliance programs on bank's proprietary trading required under the Dodd-Frank Financial Reform Act;
- overall CMSs expected under the Consumer Financial Protection Bureau's supervisory authority;
- the establishment of compliance officer positions in swap dealers and futures commission merchants as required under the Dodd-Frank Act; and

- “policies and procedures reasonably designed to prevent violation” of the law mandated under Securities and Exchange Commission regulations imposed on investment advisors and investment companies.

Because these and other CMS requirements impose rules on organizations to develop systems designed to promote their compliance with yet other, subsidiary rules, they are sometimes considered a form of “meta-regulation” or “management-based regulation” (Parker 2002; Coglianese and Lazer 2003; Coglianese and Mendelson 2010; Coglianese 2019).[2]

In addition to embedding CMS requirements within statutes and regulations, governments sometimes require that firms accused of violating regulations adopt a CMS as part of an agreement settling a civil or criminal action (Miller 2018). For example, faced with a U.S. Federal Trade Commission (FTC) action over allegations that it violated federal privacy rules, the social media company Facebook agreed to establish a privacy-oriented CMS as part of its settlement agreement with the FTC. The settlement agreement specifically calls on Facebook to establish compliance officers and conduct privacy reviews on a quarterly basis, sharing these results with the company’s CEO, an independent auditor, and the FTC. Under the agreement, Facebook must also document any violations of its privacy policies and the steps it takes to correct these violations (Federal Trade Commission 2019).

Government regulators have also taken other steps to encourage companies to adopt CMSs, even when firms are not officially required to do so. For example, implementation of a

[2] CMS requirements are a form of meta-regulation with respect to the goal of compliance with other regulations established to serve separate outcomes of solving problems or reducing risks. But meta-regulation can also be designed to mandate the adoption of management systems with respect to those separate outcomes themselves. For further discussion, see National Academies of Sciences, Engineering, and Medicine (2018).

credible CMS is one of the factors that DOJ takes into account when determining the size of penalties against an organization and even whether to prosecute an organization or its managers at all (U.S. Department of Justice 2018: 9-28-300, 9-28-800, 9-28-1000; U.S. Sentencing Commission 2018: §§ 8B2.1, 8C2.5(f)). The U.S. Occupational Safety and Health Administration's Voluntary Protection Program exempts certain firms with health and safety management systems from routine inspections, and the U.S. Department of Agriculture reduces inspections for food processing facilities that institute systems for routine safety reviews (Short and Toffel 2010: 365-66). The U.S. EPA's Audit Policy reduces or waives penalties for violations that are discovered through a CMS and voluntarily disclosed to the agency (Pfaff and Sanchirico 2004; Short and Toffel 2010). From 2000-2006, the U.S. EPA ran the National Environment Performance Track program that exempted facilities from routine inspections if they implemented environmental management systems that, among other things, included procedures for third-party auditing of regulatory compliance (Coglianese and Nash 2014). The U.S. Department of Health and Human Services (HHS) has issued a variety of guidance materials designed to assist health care providers in establishing systems to track their compliance with federal billing and reimbursement requirements (HHS 2019).

Such enthusiasm for CMSs is not limited to governmental entities. Even without special mandates or incentives, many companies are individually seeing value in adopting and implementing CMSs. Not only do firms prefer to avoid the financial penalties that can arise from compliance failures, they also have reason to avoid adverse reputational consequences and shocks to their share prices that can stem from noncompliance. In addition, by managing compliance better, some firms have even said they find that they manage their overall operations better and achieve improvements in their financial performance (Biegelman 2008).

The purported benefits of CMSs have also led various industry organizations and other nongovernmental standard-setting bodies to establish expectations for sound compliance management. The New York Stock Exchange, for example, requires all companies listed on the exchange to adopt a corporate code of "business conduct and ethics" that, among other things, "proactively promote[s] compliance with laws, rules and regulations, including insider trading laws" (NYSE 2019a). In addition, Exchange Rule 3130 requires each listed company to put "in place processes to establish, maintain, review, test and modify written compliance policies and written supervisory procedures reasonably designed to achieve compliance with applicable Exchange rules and federal securities laws and regulations" (NYSE 2019b).

Trade associations and other industry organizations see value for their members in responsible compliance management. The American Chemistry Council (ACC)—a trade association for the chemical manufacturing industry—requires its members to adopt "Responsible Care" management systems as a condition of membership. Through these systems, chemical companies identify a variety of risks to their operations, including non-compliance, and then they implement processes to manage these risks and correct deficiencies promptly when they are discovered (ACC 2019).

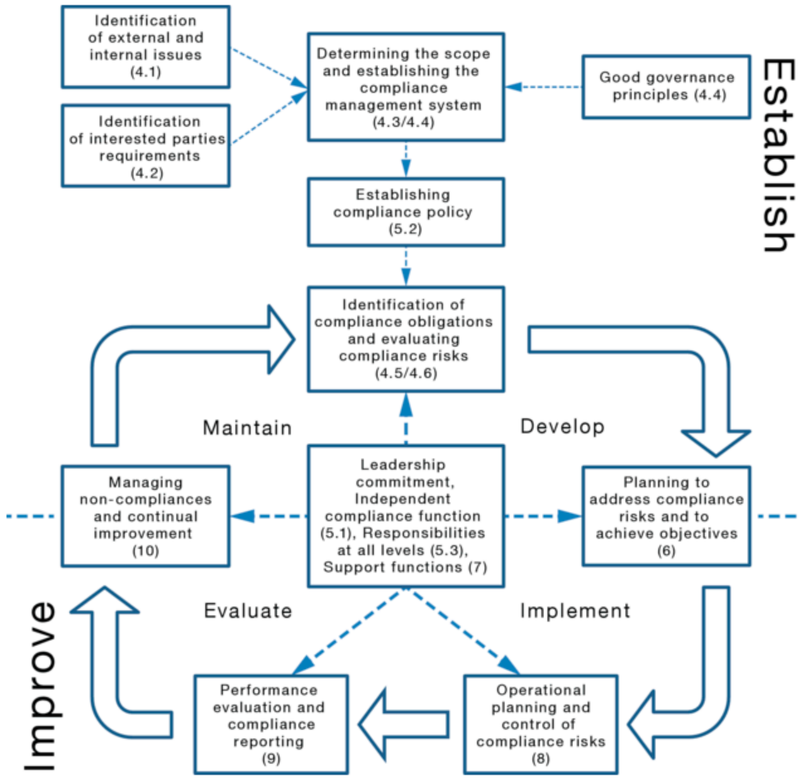
Under the nongovernmental standards for environmental management systems known as ISO 14000, a facility must understand its regulatory obligations, develop a plan for meeting them, track progress, identify shortcomings, and take corrective action. As of 2018, nearly 450,000 facilities worldwide were operating such an EMS (ISO 2018). Many large manufacturers now require their suppliers, as a condition of doing business, to adopt EMSs that meet the nongovernmental ISO standard on EMSs.

In 2014, ISO issued a new standard, ISO 19600, specifically on compliance management systems. Following the plan-do-check-act model, ISO 19600 calls on organizations to develop policies and plans designed to promote compliance with applicable legal obligations as well as other industry or internal standards (Figure 1). Although ISO 19600 is flexible as to how it is implemented—indeed, ISO currently considers it a set of "guidelines"—it does offer a detailed checklist of the organizational personnel, responsibilities, and activities needed for an organization to establish a comprehensive CMS. It specifically directs businesses to implement procedures and adopt measures for communication, employee training, internal controls, monitoring, reporting, auditing, and management review—all designed to carry out compliance policies and plans (ISO 2014). ISO 19600 also emphasizes the importance of an organization's leadership taking steps to ensure "the integration of the compliance management requirements into the organization's business processes" and "to continually improve the suitability, adequacy and effectiveness of the compliance management system" (ISO 2014). To ensure that problems of noncompliance can be identified, the standard calls on organizations to establish avenues for employees and customers to provide feedback, such as by providing helplines or other methods for reporting employee complaints and by establishing protections for whistleblowers.[3]

ISO 19600 is but one of a variety of nongovernmental efforts to promote and standardize the use of compliance management systems. As early as 1998, the leading Australian standard-setting organization adopted a standard on compliance programs, which it then revised in 2006

[3] Soltes (2019: 52) helpfully suggests that firms conduct random, anonymous surveys of employees asking about integrity problems, rather than exclusively seeking information on specific instances of non-compliance. When managers identify parts of their organizations where integrity problems are festering, they can better target interventions, such as by "redesigning incentives, creating new controls, or conducting training" (Soltes 2019: 53). Chen and Soltes (2018) further emphasize the need to evaluate CMS efforts using multivariate analysis and not individual metrics alone.

Figure 1: ISO's Flowchart of Model Compliance Management System



Source: ISO (2018)

(Standards Australia 2006).[4] In 2011, Germany's accounting and auditing association, the Institut der Wirtschaftsprüfer in Deutschland eV (IDW), issued PS 980, a standard on how to audit compliance programs (IDW 2011). Austria's standard-setting organization in 2013 established ONR 192050, a standard on compliance management standards.

In addition to these various standards for general compliance systems, a number of other nongovernmental standards exist for systems intended to address specific regulatory issues, such

[4] Standards Australia now considers its CMS standard to have been superseded by ISO 19600.

as bribery (OECD 2010; ICC 2011) and antitrust (ICC 2013). Indeed, a year after issuing ISO 19600 on general compliance management systems, the ISO also adopted a similar standard, ISO 37001, on anti-bribery management systems,. ISO is currently at work on a still broader standard on organizational governance which will, among other things, aim to encourage the adoption of a governance system "supporting existing national legislation, policy, regulation, or guidance" (ISO 2019a). ISO is also undertaking a process for updating ISO 19600 and making it more formal; once revised, ISO 19600 is expected to be renumbered as ISO 37301 (ISO 2019b).

Do Compliance Management Systems Work?

The proliferation of governmental and nongovernmental standards, incentives, and mandates promoting the use of compliance management systems indicates that these systems have received widespread and rather enthusiastic support—most especially, it seems, in the years following the financial crisis and Great Recession of 2007-2008. Such support suggests that many people presumably believe that CMSs will work as intended to increase compliance with regulations. That belief accords with common sense. After all, any organization with leaders who deliberately and systematically manage operations with compliance in mind would seem more likely to produce behaviors, products, and outcomes that comport with the law, at least compared to an organization whose leaders pay no attention to regulatory compliance whatsoever and leave compliance entirely to chance or to the whims or consciences of individual managers and employees.

But despite this common-sense expectation, the efficacy of CMSs remains an empirical question. If nothing else, persistent revelations of major cases of organizational illegalities offer reason to wonder whether the formalities associated with these systems really add all that much increased assurance of compliance.[5] After all, Volkswagen, Wells Fargo, and other companies at the heart of recent compliance scandals all had some kind of established compliance programs staffed with compliance professionals (Grüninger and Schöttl 2017; Martinez 2020). Moreover, notwithstanding their own professional commitments, chief compliance officers are still human and might themselves be prone to negligence or mismanagement, if not perhaps at times corruption.

All this said, the mere existence of violations in organizations with CMSs does not mean that CMSs fail in general to promote compliance. The proper question is not whether a formal CMS prevents *all* instances of noncompliance. Nor is it whether an organization with a formal CMS simply fares better than an organization with a totally devil-may-care approach. The proper question is a counterfactual one, but the counterfactual needs to be a realistic one. It is realistic to ask whether the kinds of CMSs that have emerged in recent years—specifically those built around quality engineering concepts such as the plan-do-check-act model—tend to fare better on average than the more traditional, if less systematic, ways that companies have managed compliance for years. A still more important, but also more difficult, empirical question may be to understand when and how CMSs work—that is, to identify which ways of designing or operating a CMS prove most effective and under which kinds of conditions different designs work better than others.

Existing empirical studies on CMSs and related management systems have been motivated by questions like these. This research has not yet investigated relatively recent CMS

[5] Martinez (2020) notes that "when one considers the significant compliance failures that continue to occur despite the adoption of increasingly sophisticated internal compliance programs, it suggests that it may be time to affirmatively question certain understandings and assumptions that serve as the foundation of modern-day compliance programs."

standards such as ISO 19600, but considerable research exists on various older cousins of CMSs, such as corporate codes of ethics and EMSs adopted under ISO 14000. From that research, some possible lessons can be gleaned about the performance of CMSs.

The Theory Behind CMSs

Before turning to the available empirical evidence, though, it is helpful to consider further the theoretical reasons why CMSs might be expected to generate improvements in compliance—that is, reasons beyond just a common-sense intuition that having a CMS is likely to be better than not having one. Any theoretical rationale for CMSs must stem ultimately from what leads managers and employees within businesses and other organizations to violate the law. Although these drivers of disobedience are taken up in greater depth elsewhere in this volume, it suffices to focus here on three main factors: ignorance, incentives, and illegitimacy.[6]

With respect to ignorance, sometimes people working in organizations simply do not know how their own actions or the organizational activities in which they take part are regulated or what the rules require, a problem that grows more profound both as regulations increase in complexity (Fairman and Yapp 2005: 504-505) and business operations increasingly depend on globally dispersed suppliers and customers. The internal procedures and routines that constitute a CMS should in principle ensure that employees know about applicable legal requirements (such as through regular training sessions) or, even when they do not know the rules, are steered in the direction of complying with them (such as through information technology).

[6] We do not mean to the suggest that all noncompliance stems from one of these factors. After all, sometimes noncompliance occurs simply by accident—that is, even individuals who know the rules might forget to follow them or otherwise act inadvertently.

But even when they do know what the rules require, employees will not infrequently face incentives to cut corners or even outright cheat. These incentives can be substantial even if subtle. Whenever compliance makes it take longer or cost more for employees to accomplish a task, the overarching imperatives of nearly any organization will run in tension with the dictates of the law. This tension may be most pronounced in organizations facing significant employee turnover or low morale, or when managers or workers are chronically overworked (Bardach and Kagan 2002: 219). CMSs purport to shape the incentives that employees face, as they seek to establish expectations for compliance that, at least to some degree, counteract other organizational pressures.

In addition, the documentation and auditing routines that constitute a CMS also aim to change the incentive calculus for managers and employees by making noncompliance more detectable, thereby enhancing deterrence. Although regulators themselves offer deterrence through the threat of fines and penalties, these consequences seldom affect directly the managers or workers who have the greatest impact on compliance. Ultimately, the managers of the firms themselves have authority to motivate their workforces on many dimensions—through recognition, promotion, or financial rewards. By helping managers identify and understand the rules they need to follow, CMSs may help "instill a kind of discipline of higher performance" (Gawande 2009: 35-36).

Finally, compliance behavior can be shaped by the law's perceived legitimacy (Tyler 1990). Research indicates that when business managers and employees believe that regulatory requirements are legitimate they are more like to follow them (Malesky and Taussig 2019). CMSs might help promote this pathway to compliance by ensuring that employees not only understand the rules but also understand why they are important. Furthermore, a CMS may signal to employees that the organization's top leadership view regulations as legitimate. By developing and implementing compliance management systems, managers may even help construct a "corporate conscience" (Selznick 1992: 352), elevating compliance to a place alongside other values such as earning profits.

Despite these theoretical reasons for expecting CMSs to promote compliance, there also exist reasons to be skeptical about whether CMSs will in fact reduce overall noncompliance—or at least to question how substantial their effects might be. Even CMSs intended to enhance compliance by promoting information, changing incentives, and promoting the law's legitimacy still might not be sufficient to address the major sources of noncompliance. Even if such systems are well-designed, they might not be conscientiously or effectively implemented—or even if well-designed and sincerely implemented, they may still be too weak to make much of a difference. They might still be overwhelmed by or counteracted by the pervasive corporate norms that drive individual and collective decision-making in ways incompatible with compliance.

In the end, cultural change within an organization might be truly what it takes to improve compliance. A CMS might be one indicia of an organizational culture of compliance, but by itself it may be too weak to change an organization's values, beliefs, and culture (Parker and Nielsen 2009). Scholars who study organizational change underscore how difficult it can be to effectuate deliberate and dramatic changes in existing values and patterns of behavior (Schein 2010; Howard-Grenville, Bertels and Boren 2015). Implementing a checklist probably does not hold much sway over the behavior of employees or managers compared to the pressures that stem from short-term shareholder expectations and the "tyranny" of quarterly earnings reports. In the face of financial pressures, employees and their managers might simply go through the motion in implementing CMSs without undertaking the real behavioral changes needed to avoid certain kinds of legal compliance problems—that is, they may engage in what is called "pencil whipping" (National Academy of Sciences, Engineering, and Medicine 2018) or "window dressing" (Parker and Nielsen 2009: 9).[7] Such rote and meaningless execution of a CMS might be especially expected when CMSs are mandated by regulation or imposed on an organization as the result of an enforcement action, rather than voluntarily and enthusiastically embraced by an organization's top managers. If managers see their CMS simply as a means to negotiate reduced penalties or obtain official forbearance from regulators, the systems they put in place might even promote cynicism and weaken values that motivate compliance (Parker and Nielsen 2009: 9).

Furthermore, CMSs could well suffer, perhaps ironically, from their inherent focus on rules and on compliance with the *letter* of the law, dampening necessary attention to the adherence to the *spirit* of the law and to upholding other ethical values. Conceivably, a rule-oriented system might unintentionally undermine ethical decision-making by narrowing the scope of what managers and employees feel they need to address, leading them to "gloss over" the broader ethical dimensions of behavior (Michael 2006: 482-83). Although Volkswagen admitted to corporate wrongdoing, its engineers had, in fact, still designed diesel engines that met the letter of the required laboratory emissions test, fulfilling the technical parameters of the regulation. The problem was that the engineers designed the engines to recalibrate automatically after the testing time period once the engines were operating on the road, thus undermining the

[7] A similar type of mindlessness can pervade the process of auditing CMSs too. Audits may simply look for the existence of various procedures rather than inquiring whether these are optimal, or even appropriate, procedures for their intended purpose.

regulation's ultimate purpose (Coglianese and Nash 2017). When CMSs are oriented solely around avoiding the imposition of regulatory sanctions, they might even crowd out the intrinsic motivations needed to ensure that individuals act ethically and in full compliance with the law (Gneezy and Rustichini 2000; Gneezy, Meier and Rey-Biel 2011; Stucke 2014). Such an effect could be significant in large organizations facing complex or changing regulatory demands, as their legal obligations probably cannot be fully anticipated by any simple compliance *system* per se; they must rely on the exercise of good judgment by their managers and employees.

Empirical Evidence of Efficacy

We know of no systematic empirical research comparing firms that have implemented systems meeting the ISO 19600 standard with firms that have not. Some empirical studies do exist on related organizational interventions, such as internal financial control systems, corporate codes of ethics, and ISO-certified environmental management systems. Furthermore, at least two studies have focused on consumer-oriented CMSs in Australia. We briefly survey these various studies and distill what they suggest about the efficacy of CMSs more generally. The evidence overall is limited and mixed. Some existing empirical research supports the theoretical expectation that CMSs can improve compliance, but other research also tends to reinforce a degree of skepticism about whether formal compliance systems lead to substantial improvements. Of particular concern is research indicating that an excessive emphasis on rules, to the exclusion of values, may undermine employees' motivation to act responsibly.

We begin with research on corporate codes of ethics, and the internal programs to support these codes, because they provide an analogue to a formal CMS. Paine (1994) has distinguished between ethics programs that emphasize compliance—perhaps the closest stand-in to a CMS—

and those that emphasize integrity and values. Researchers have investigated empirically whether this distinction between compliance-based and values-based corporate ethics programs makes a difference, generally finding that values-based programs motivate ethical behavior more effectively than compliance-based ones (Trevino et al. 1999; Hofeditz et al. 2017, Goebel and Weissenberger 2017). As Weaver (2014) explains in a review of the literature, compliance-based programs appear to change behavior through "contractual, exchange-oriented relationship[s] involving doing (or not doing) one thing in order to achieve (or avoid) something else (namely, formal or informal reward or punishment)" (Weaver 2014: 298). As such, they are limited to shaping conduct "in a calculative way" (Weaver 2014: 298). But programs that instead appeal to deeply shared beliefs such as fairness and altruism are thought to have greater potential to impact employees' behavior on a deeper level (Weaver 2014: 298).

Survey research reinforces some caution about placing a heavy emphasis on compliance, as doing so may crowd out employees' intrinsic motivations to be ethical (Hofeditz et al. 2017: 40). Programs that emphasize "unquestioning obedience to authority" may backfire and actually promote misconduct (Trevino et al. 1999: 132; see also Gorsira et al. 2018). Indeed, "[w]hat hurts the most is … the perception that the ethics or compliance program exists only to protect top management from blame" (Trevino et al. 1999: 132). Based on a survey of about 10,000 employees across six major American companies, Trevino et al. (1999: 131) suggest "that specific characteristics of the formal ethics or compliance program matter less than broader perceptions of the program's orientation towards values and ethical aspirations." The more effective way to motivate compliance appears to be to provide workers with "a greater degree of involvement and a greater voice" in compliance-related decisions, thereby demonstrating "that compliance behavior is built on their own responsibility instead of control and external regulations" (Hofeditz et al. 2017: 40).

Of course, compliance and respect for the rule of law themselves represent important ethical values. Research on corporate ethics programs suggests that the best approach may be to combine a compliance-based emphasis with broader values-based efforts (Kaptein 2015, Ruiz et al. 2015; Bussmann et al. 2018). The most effective programs appear to be those that situate compliance management in a larger ethical context and seek to demonstrate consistency between espoused values and actual behaviors, identifying and correcting behavior that managers define as deviating from those values. That alignment between values and policies appears crucial. If employees observe that managers do not themselves fully embrace compliance and other espoused values, cynicism may ensue, undermining compliance goals. An ethical organization depends on managers who respond with "direction, detection, and discipline" in the face of allegations of unethical behavior or legal violations—that is, respond with efforts to promote compliance (Weaver 2014: 298).

In addition to studies of corporate ethics programs, research exists on other initiatives related to compliance management. For example, one recent study modeled the impact on managers' compliance decisions of regulatory policies that promote self-policing and the disclosure of regulatory violations, deducing that financial incentives such as stock-based executive compensation packages are far more important in shaping the behavior of individual managers (Armour et al. 2020).

Other studies have examined empirically the impact of the compliance management requirement in section 404 of the Sarbanes Oxley Act. This law requires certain companies to implement enhancements to their financial internal controls, specifically third-party auditing of internal financial control systems and senior officer reports on the effectiveness of these systems. A few studies comparing similar firms subject to and not subject to section 404 have found seemingly modest improvements (around a 3.5 percent change) in certain indicators of the effectiveness of these systems, such as the disclosure to the regulator of internal control breakdowns (Iliev 2010, Ge, Koester and McVay 2017). Although these findings do not measure the overall impact of internal financial control systems on compliance per se, they suggest that companies tend to do a somewhat better job of managing their financial reporting once they implement the additional compliance management features called for by section 404. That said, it should be noted that several other empirical studies in recent years have failed to find any evidence at all consistent with improvements from section 404 enhancements (Fan, Li and Raghunandan 2017; Bhaskar et al. 2019; McCallen et al. 2019).

Research on an entirely different type of compliance-oriented system—ISO 14000 environmental management systems—suggests that these systems might promote a modest increase in compliance with environmental regulations. ISO 14000-compliant systems not only aim toward improving a facility's environmental performance but also toward helping companies "fulfill...compliance obligations" (ISO 2015). Potoski and Prakash (2006: 146-70) found that facilities that became certified to the ISO 14000 standard did spend less time out of compliance than comparable facilities. Although these improvements were statistically significant, the effects were substantively slight: the ISO-certified facilities were on average out of compliance only *one week* less than other facilities (Potoski and Prakash 2006).[8]

[8] Other data raise questions about the effectiveness of ISO 14000 in ensuring compliance. A 2007 investigation by the U.S. EPA's Inspector General investigated compliance performance among facilities that participated in the

Toffel and Short (2011) studied firms that voluntarily reported information about their environmental regulatory compliance under a special federal policy that offers penalty relief to encourage self-auditing. They found that firms that voluntarily reported violations under this policy, which required having discovered them through self-policing, tended to be "subsequently cited for fewer regulatory violations by agency inspectors" (Toffel and Short 2011: 611). Based on careful analysis and the use of multiple dependent variables, Toffel and Short's results are quite robust; however, they cannot fully discern whether the firms that self-reported violations were in fact more compliant or whether these firms instead were just the recipients of greater regulatory forbearance when agency inspectors arrive.[9]

Parker and Nielsen (2006, 2009) come perhaps closest to the study of systems similar to those that conform to ISO 19600. In an initial study, Parker and Nielsen focused on the extent to which Australian companies adopted different types of CMS elements. Drawing on a sample of nearly a thousand large firms subject to antitrust and consumer protection regulations, Parker and Nielsen (2006: 471) found that most firms adopted only rather low-cost CMS elements, such as consumer complaint systems. Firms tended to avoid implementing CMS elements that "involve[d] more proactive internal management to identify and prevent misconduct in ways that are embedded in the organizational habits of management" (Parker and Nielsen 2006: 472). For

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EPA's National Performance Track Program—a program that required facilities to have in place a formal environmental management system such as ISO 14000 that included third-party auditing of regulatory compliance. The Inspector General found that 37 percent of the Performance Track facilities it studied had greater compliance problems compared with the average firm in the same sector (US EPA 2007).

[9] Such a possibility would be difficult to rule out in any study based on data from regulatory inspections. In their analysis of the frequency of inspections, Toffel and Short (2011) did find possible evidence of another kind of regulatory forbearance, as the firms that in the past stepped forward to disclose their violations were inspected less frequently in the future. In another study, Short and Toffel (2010: 366) found that facilities under some pressure from regulators to self-audit and disclose regulatory violations failed to improve their compliance performance over time, suggesting possibly that facilities that implement self-policing in response to sanctions, or perhaps as part of the settlement of an enforcement action, might tend to be less committed to compliance in the first place and thus less effective at improving their self-policing.

example, relatively few firms established CMS elements such as compliance-oriented training programs, management accountability systems, and whistleblowing protections. Only the smallest number of firms implemented programs for performance measurement and discipline based on compliance. Parker and Nielsen (2006: 472) attributed the varied and seemingly weak implementation of compliance system elements to the fact that the managers in their study did not necessarily see "any immediate financial or reputational gain" from adoption of the more substantial elements, whereas the adoption of simple complaint-processing elements provided for reporting of both compliance issues and the identification of customer concerns that could help firms improve their services and overall enhance their market competitiveness.

In subsequent analysis, Parker and Nielsen (2009) examined the relationship between CMS adoption and improved organizational compliance. Drawing on surveys of the same thousand large Australian firms, Parker and Nielsen (2009: 25) found that compliance was associated with firm size, resources, and management oversight. That is, the firms reporting fewer compliance problems tended to be larger, have one or more staff members dedicated to promoting regulatory compliance, and have clearly defined procedures for handling compliance failures. Parker and Nielsen distinguished between the formalities of CMSs on the books and what they called "compliance management in practice"—the resources, management attention, and values that make CMSs effective (Parker and Nielsen 2009: 29). They suggested that, without suitable staff resources, sufficient management attention, and reinforcing organizational values, CMSs fail to achieve meaningful results.

Overall, the empirical research on programs similar to CMSs reveals their potential for improving compliance but also reinforces a degree of caution about expecting too much from the mere formalization of a compliance "system." In virtually any ongoing business or other organizational setting, individuals are undertaking activities each day that could potentially result in a violation of a regulation, a fact that suggests that, more than needing a mere *system*, what organizations need most may be clear *values* and ongoing *vigilance* focused on compliance. A certified CMS or other formal program may help, but such systems appear neither to be necessary nor sufficient for the attainment of compliance. As Parker and Gilad (2011: 175) have noted, even when companies have adopted compliance systems, a CMS "does not stand alone" but is instead "only one small aspect of the structure internal to the organization, which is itself a part of broader social structures." Understanding the precise contribution of a CMS is a difficult matter for empirical inquiry because compliance-oriented behavior within any organization will be a function of a variety of factors, both internal and external to that organization (Gunningham, Kagan, and Thornton 2003; Howard-Grenville, Nash, and Coglianese 2008), making it hard to isolate the precise effect of the CMS itself.[10] Researchers still have a long way to go toward understanding exactly what contributions CMSs can make and which types of, or elements within, a CMS are most effective in improving compliance and under exactly what conditions.

Systems versus Cultures

One perennial worry about CMSs—or any formalized management system—is that they might comprise merely "paper programs" that lack any meaningful impact on how an organization operates (U.S. Department of Justice Criminal Division 2019: 9). This worry often is expressed in terms of the possibility of a disconnect between organizational *systems* and

[10] We should presumably expect, for example, that compliance will be a function of the nature and demands of the regulations themselves and the behavior of public regulators (Fairman and Yapp 2005; Black 2012; Coglianese 2019), factors which certainly need to be taken into account in any empirical inquiry of the efficacy of CMSs in promoting compliance.

organizational *cultures*. Not infrequently managers and executives find compliance systems to be an annoyance and burden, “seeing them as a series of box-checking routines and mindless training exercises” entirely separate from their organization’s real goals and values (Chen and Soltes 2018). Unless a compliance system aligns with, and is paired with, an overall culture within an organization that supports compliance, it is hard to see the system proving very effective. As Gunningham and Sinclair (2014: 516) argue, “culture can indeed ‘eat systems for breakfast.’” Experienced compliance professionals recognize that “[t]o be truly effective, the compliance program must be grounded in a culture based on integrity and strong ethical values” and that, “[w]ithout integrity, a compliance program will have form but not substance, and over time [it] will fail to do what it’s designed to do” (Steinberg 2011: 33).

The relationship between compliance systems and cultures needs further research. The establishment of a CMS, after all, could well be one effective means for an organization to promote a culture of compliance. But the system and its operation might also just as easily assume a life of its own, divorced from the real values and beliefs held by those within an organization. It might even be viewed as “just a project or one-time idea” rather than an ongoing set of values baked into “the ‘cultural mind-set’ of all employees” and part of an ongoing effort toward continuous improvement (Biegelman and Bartow 2006).

A particular worry is that CMSs predicated on standards such as ISO 19600 will adhere to a systems engineering mindset, when what it fundamentally takes to inspire people to follow the law, especially in the face of competing pressures to cut compliance corners, is a more psychological or humanistic mindset. The systems engineering mindset upon which many contemporary CMSs are based might seem comprehensively rational, but that approach also might be more susceptible to the kinds of crowding-out and pencil-whipping effects about which researchers have expressed concern (Michael 2006; Ford 2008).

Important research findings by behavioral scientists Robin Ely and Debra Meyerson point toward what might well prove a more promising alternative. Ely and Meyerson (2010) studied an offshore oil and gas company that adopted a novel approach to instilling respect for proper safety practices by rig workers. The company adopted intensive training programs in communication skills and personal growth designed to counteract traditional masculine traits exhibited by a nearly all-male workforce. Such traits—especially displays of fearlessness and risk-taking—are often antithetical to compliance, as workers look out for their own individual egos and well-being instead of necessarily the needs of the entire operation. In particular, workers at the company studied by Ely and Meyerson had previously been reluctant to admit ignorance or mistakes, rarely asking for help and at times even willing to cover up the mistakes of others (Ely and Meyerson 2010: 6-8).

But the company found that safety practices improved dramatically—with a reported 84% decrease in accidents at the company—after its intensive initiative that focused largely on educational efforts designed to foster "collectivistic" goals of common purpose and acceptance (Ely and Meyerson 2010: 15). Workers were explicitly encouraged to find ways to contribute to the well-being of the group, rather than personal advancement. The company undertook numerous ongoing efforts to help employees link performance with a larger social good, imbuing their work with deeper meaning and promoting a willingness to learn and improve. As a result,

"[r]ather than hiding limitations or mistakes stemming from a lack of knowledge, as was common in other dangerous workplaces, workers … brought them to the fore, thus further revealing vulnerability in behaviors anathema to conventional masculinity. When they were new, they welcomed guidance; when they didn't know how to solve a problem, they sought input from others; and when they made mistakes, they analyzed them. Rather than interpreting lack of knowledge, mistakes, and failures as self-image threats to be defended against, these workers saw them as opportunities to learn" (Ely and Meyerson 2010: 17).

Importantly, after the company had implemented the intensive initiative, rig workers who failed to follow "safety rules" started to see that their "coworkers intervened" to help reinforce compliance (Ely and Meyerson 2010: 16). Overall, the initiative promoted an organizational culture that "gave priority to workers' safety and emphasized the importance of community, making clear management's concern for workers and reinforcing for workers their responsibilities to each other" (Ely and Meyerson 2010: 21-22).

The company in Ely and Meyerson's study focused its initiative on the larger purposes of safety and worker well-being—not on simply ensuring compliance with rules for their own sake. Also instrumental was the genuine ways that top management signaled their commitment to their employees and led by example. In this respect, Ely and Meyerson's findings are consistent with those of many compliance professionals who emphasize the need for CMSs to enjoy the full support of senior leaders (U.S. Department of Justice Criminal Division 2019: 9-10). Walberg (2018: 246) notes that "[t]he oft-quoted mantra about the 'tone at the top' is more than just rhetoric; it makes a huge difference, especially for compliance officers" who must carry out an organization's CMS on a regular basis. As Biegelman (2008: 174) observes, employees pay attention to top leadership and to "every word they say and every action they take." Top managers' "commitment to all elements of compliance sets an example for everyone else. If an executive does not follow company policies and procedures, it is reasonable to assume that those below will not follow them either" Biegelman (2008: 174). That kind of commitment by an organization's top leaders—combined with a supportive organizational culture—cannot be easily captured within a formal "system" per se, even though these less tangible factors may in the end be the most important ones for ensuring that an organization consistently complies with the law (cf. Coglianese & Nash 2001).

Implications for Future Research and Policy Decision-Making

As noted at the outset of this chapter, governmental authorities appear increasingly eager to require firms to adopt CMSs. Yet the available empirical evidence supporting such requirements is hardly extensive nor does it provide great confidence that CMS mandates will yield substantial benefits in terms of improved compliance. Additional research would prove beneficial. Future research should both explore new questions and also continue to address measurement and causal inference challenges of the kind to which we have alluded up to this point in this chapter.

Different measures of compliance—the key outcome for evaluating CMSs—will continue to present different strengths and limitations. Self-reported survey responses may be relatively easy to collect but they can be subject to obvious biases. Voluntary disclosures to regulators may prove similarly feasible to obtain but could be problematic for other reasons. Firms with greater compliance may ironically tend to be the same firms that report more violations, simply because they monitor more carefully or care more earnestly about being forthright with regulators. Relying alternatively on inspectors' reports or levied penalties may present its own source of bias if regulators systematically cut firms with CMSs some slack.

Adding to these measurement challenges is the perennial search for causal inference. Causation becomes harder to assess when firms voluntarily adopt CMSs, as these volunteers are presumably different from other firms in relevant ways. The same organizational factors that lead companies to choose to adopt a CMS—such as perhaps a managerial commitment to compliance—can also affect compliance. Even when CMSs are mandatory, other organizational factors will still be present and may need to be accounted for to determine the precise effects of CMSs.

These research challenges are hardly unique to the study of CMSs, but improving measurement and causal inference will remain a continued aspiration for research on CMSs. Beyond these perennial challenges, future research would benefit from the pursuit of answers on a range of new or relatively unexplored issues, including:

(1) *The relative efficacy of different types of CMSs*. With the proliferation of different CMS standards around the world, researchers should be open to the possibility that some types of CMSs might work better than others. Additional research should compare systems implemented in more holistic or values-based terms versus those more narrowly oriented toward compliance checklists.

(2) *The relative value of different elements within CMSs*. Are training programs more important than complaint hotlines? Are third-party audits more effective than internal audits? We currently know surprisingly little about which of the various elements common to CMSs are more important than others.

(3) *The conditions under which different types of CMSs or different elements tend to perform better*. Do CMSs (or certain types or elements of CMSs) work better in large companies

versus small companies? Or in regulatory regimes characterized by principles-based requirements versus highly detailed prescriptions?

(4) *The ways that CMSs combine with other business programs and practices to promote ethical behavior*. When a company combines a CMS with a corporate code of ethics program, or a CMS with an environmental risk management system, how do these different systems or programs mesh with each other? Does their interaction synergistically improve the efficacy of each?

(5) *The role of organizational factors in the efficacy of CMSs*. Practitioners and researchers already recognize that other organizational factors such as leadership and culture matter. Researchers should do more to take such internal factors into account when studying CMSs (cf. Howard-Grenville, Nash, and Coglianese 2008).

(6) *The impact and interaction of outside factors, such as industry competitiveness or community demands*. Researchers who study the effect of government regulation on business behavior recognize the importance of businesses' social and economic "licenses" to operate (Gunningham, Kagan, and Thornton 2003). Further research is needed to investigate how these external factors affect CMS performance.

(7) *The role of government regulators, standards organizations, or public prosecutors in shaping CMS adoption and performance*. What steps can governments take to promote the effective use of CMSs? Do government mandates reinforce or undermine the motivation of business leaders to adopt CMSs?

Additional research on these kinds of questions would help improve both public- and private-sector decision-making related to CMSs.

When it comes to public policy, it is already apparent that CMS mandates, however intuitively appealing, raise a series of additional questions. If an effective CMS depends in substantial part on sincere top management support and a conducive organizational culture, a mandate could well prove counterproductive. The compulsory nature of a CMS might itself generate resistance or a begrudging, rote manner of implementation that crowds out more intrinsic motivations. Moreover, because it will be difficult to define in an enforceable rule what counts as *sufficient* management commitment or a *supportive* organizational culture, many CMS mandates will likely continue to take the form of a checklist of required actions or elements. When mandates take this form, they may lead organizations to approach compliance management in a rote, box-checking fashion.

Many regulatory agencies lack the capacity to identify insufficiently serious CMS implementation. This is a challenge that more generally plagues all types of management-based regulation: "Can government even know what truly constitutes 'good' management?" (Coglianese 2008a). Motivating businesses to do better at managing their own compliance at a minimum calls for a different skillset than most inspectors or auditors at regulatory agencies typically possess. Compliance management is all about human behavior and how to shape it, not just an exercise in legal analysis or systems engineering (Chen and Soltes 2018).

Ultimately, public policy decision-making should take into account both the benefits and costs of mandating CMSs (Coglianese 2008b:19-22). These systems—even when implemented in a rote fashion—might well still produce paper trails that provide benefits in terms of helping government regulators detect underlying regulatory violations. Yet in terms of preventing such violations in the first place, the research evidence to date suggests some skepticism that these systems offer anything more than relatively modest benefits. Against modest benefits must be weighed the costs of mandating CMSs, which in some cases might be considerable. It should not be assumed that it simply "cannot hurt" to require firms to implement a CMS. The costs of mandating CMSs include the direct costs of complying with required planning, auditing, and other compliance management activities, which themselves can be substantial. The internal financial control requirements of the Sarbanes Oxley Act, for example, apparently increased auditing fees as much as 36 percent (Ge, Koester, and McVay 2017) to 64 percent (McCallen et al. 2019). To these direct costs of complying with CMS mandates must be added any management time diverted from other productive activities, including potentially other activities that would be more effective in promoting compliance. Any perverse incentives that CMS mandates might produce, such as fostering more rote, checklist-oriented CMSs and crowding out other more productive behavior, should also be considered a cost. In the end, in many instances it may well be better for government agencies simply to encourage CMS adoption through the provision of resources or positive incentives, rather than imposing mandates that compel firms to go through the motions of systematic compliance management.

Conclusion

As reflected in an increasing array of government mandates and private standards, interest in compliance management systems appears to be growing. At least in theory, CMSs can help managers identify and address deficiencies in their operations that undermine regulatory compliance. They can provide a source of systematic discipline for how managers oversee the inner workings of their organizations, allowing managers essentially to take on the roles of inspectors and enforcers of legal rules established by regulatory authorities. Research suggests that CMSs may in some cases live up to their promise, at least to some degree, but so far the available studies also suggest that the impacts of CMSs in reducing regulatory violations may be rather modest.

Such seemingly modest results raise questions about whether most conventional CMSs can sufficiently overcome the significant organizational pressures that often lead many employees and managers to see compliance as being of at best secondary importance to their jobs. When it comes to changing what managers value and prioritize, CMSs may prove to be relatively weak instruments. Part of the reason that they seem to result in comparatively modest impacts may be that organizations have long engaged in other practices to promote compliance, even if these alternatives are less systematic and would not meet prevailing CMS standards. Furthermore, what may ultimately matter most for promoting compliance is the overall compliance commitment of an organization’s top managers and the degree to which the organization’s culture supports ongoing compliance vigilance. Additional research is needed on the relationship between compliance systems and these other factors affecting compliance, as well as on how government regulators can better encourage private organizations to engage in serious efforts to ensure that their employees and managers follow the rules.

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