

The Goals and Promise of the Sarbanes–Oxley Act

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Congress passed the Sarbanes–Oxley Act on July 25, 2002. By that day, stock market indices of large capitalization stocks had fallen 40 percent over the preceding 30 months. The headlines had been full of prominent companies involved in financial scandals and bankruptcies: Enron, Worldcom, Xerox, Sunbeam, Waste Management, Adelphia, Tyco, HealthSouth, Global Crossing, and others. Accounting restatements—that is, major corrections of past financial statements—were soaring in number, size, and market impact. In a democracy in which most voters own stock either directly or through their pension and retirement funds, government was certain to react. The only question was the shape the reaction would take.

At its core, the Sarbanes–Oxley legislation was designed to fix auditing of U.S. public companies, which is consistent with the official name of the law: the Public Company Accounting Reform and Investor Protection Act of 2002. By consensus of investors and Wall Street professionals alike, auditing had been working poorly. Sarbanes–Oxley created a unique, quasi-public institution to oversee and regulate auditing, the Public Company Accounting Oversight Board (PCAOB). The first task of this new board was to implement a second core goal: to enlist auditors to enforce existing laws against theft and fraud by corporate officers. Reinforcing this core are new rules concerning the auditor–firm relationship, auditor rotation, auditor provision of non-audit services, and corporate whistle-blowers. In a regulatory division of labor, the Securities and Exchange Commission (SEC) continues to oversee public companies, while PCAOB oversees auditors.

Sarbanes–Oxley has been attacked as a costly regulatory overreaction. However, the most trenchant critiques of overreaction are not actually about the legislation itself. For example, the criminal prosecutions at Enron, Tyco, and

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Worldcom enforced laws that were in place before Sarbanes–Oxley. Existing threats of personal liability faced by directors of U.S. firms from class action suits by shareholders remained largely unchanged by Sarbanes–Oxley. When New York Attorney General Eliot Spitzer opened investigations of research analysts, mutual funds, insurance companies, and the New York Stock Exchange, he used laws in place long before Sarbanes–Oxley. Many boards of public companies have changed their governance rules in recent years, but such changes were primarily due to stock exchange rules, not Sarbanes–Oxley.

So what effect has Sarbanes–Oxley had? At a direct level, the legislation created new incentives for firms to spend money on internal controls, above and beyond the increases in audit costs that would have occurred after the corporate scandals of the early 2000s. In exchange for these higher costs, Sarbanes–Oxley promises a variety of long-term benefits. Investors will face a lower risk of losses from fraud and theft, and benefit from more reliable financial reporting, greater transparency, and accountability. Public companies will pay a lower cost of capital, and the economy will benefit because of a better allocation of resources and faster growth. However, the law’s full costs are hard to quantify, and the benefits even harder, so any honest assessment of Sarbanes–Oxley must be tentative and qualitative.

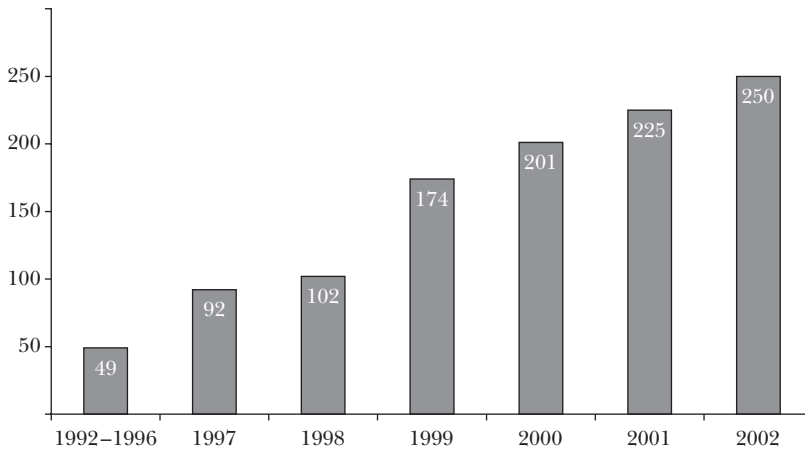
This paper will argue that Sarbanes–Oxley should bring net long-term benefits. If auditing before Sarbanes–Oxley was as poor as widely believed, or if incentives for public firms to spend money preventing fraud and theft were inadequate, raising the resources spent on auditing will bring social gains. Wholesale repeal would simply return the U.S. economy to the world of Enron and Worldcom. However, even five years after its passage, Sarbanes–Oxley remains a work in progress. Like many pieces of legislation, Sarbanes–Oxley is actually implemented through rules and enforcement strategies set by administrative officials. I will argue that Congress should be prepared to revisit the governance and accountability of the new Public Company Accounting Oversight Board. I will also argue that the PCAOB (not Congress) is the better body to customize new rules on control system disclosures to fit firms of varying types and sizes, and to dampen the incentives that seem to have initially produced overspending on audit and financial control systems.

Enforcement before Sarbanes–Oxley

Laws against fraud and theft are ancient and uncontroversial. The problem before the passage of Sarbanes–Oxley was not that such laws did not exist, but that in the area of corporate governance they were not effective enough. Without adequate enforcement, laws on the books are not the laws in practice. In the immediate aftermath of Enron, some held the view that President George W. Bush initially expressed, that the corporate scandals were only a few “bad apples” amid an otherwise healthy corporate governance system (*Economist*, 2002). But an array of evidence, both anecdotal and large sample, showed that misstatements and fraud were in danger of becoming systemic.

One piece of evidence was the general rise in accounting restatements (Financial Executives Research Foundation, Inc. 2001; U.S. General Accounting Office,

Figure 1

Accounting Restatements by U.S. Public Companies, 1992–2002

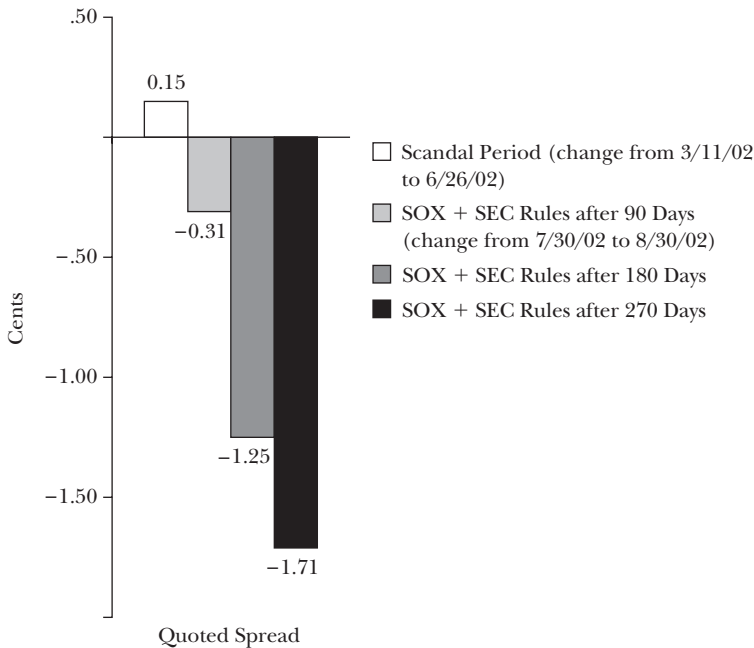
Sources: Moriarty and Livingston (2001) for 1992–1996; U.S. General Accounting Office (2002) for 1997–2002.

2002; Moriarty and Livingston, 2001; Taub, 2005), illustrated in Figure 1. Second, earnings management—that is, discretionary or special items in a firm’s reported earnings, or unusually large changes in inventory or accounts receivable relative to sales, all suggestive of opportunistic accounting by corporate managers—also rose steadily from 1987 to 2001 (Cohen, Dey, and Lys, 2005b). Third, liquidity and investor confidence had been experiencing a decline. These concepts are measured in the finance literature (Jain, Kim, Rezaee, 2006; Holmstrom and Kaplan, 2003) by trading activity, market depth, and bid–ask spreads. Figure 2 illustrates this change with bid–ask spreads, which will be wider when sellers have more private information, such that adverse selection is more of a risk, and lower when that private information is reduced by better auditing and revelation of information. Figure 2 shows that quoted spreads were widening prior to the passage of Sarbanes–Oxley, reflecting the effect of scandals on market liquidity and the willingness of dealers to expose themselves to potential adverse selection in trades. Figure 2 also shows that quoted spreads fell dramatically during the three-, six-, and nine-month periods after the passage of Sarbanes–Oxley, reflecting successive implementation of Sarbanes–Oxley by the enactment of SEC rules.¹ Fourth, the number of securities frauds alleged in significant class action lawsuits rose dramatically (Dyck, Adair, Zingales, 2006), as Figure 3 shows.

The number of audit failures implicating top audit firms also grew in the lead-up to Sarbanes–Oxley. In 2000, the accountancy firm Ernst & Young paid a record \$335 million to settle a single shareholder lawsuit. In 2001, an SEC investi-

¹ Qualitatively similar results have been found for effective spreads (reflecting actual trades) as well as the portion of spreads related to likely adverse selection.

Figure 2

Liquidity and Investor Confidence Pre- and Post-Sarbanes-Oxley*(as measured by change in bid-ask spreads over various periods)*

Source: Jain et al. (2006)

Note: Qualitatively similar results have been found for effective spreads (reflecting actual trades) as well as the portion of spreads related to likely adverse selection.

gation revealed over 8,000 violations at PricewaterhouseCoopers of a clear, long-standing rule against auditors owning stock in their audit clients—violations involving over two-thirds of the firm's top partners. Also in 2001, the SEC brought a fraud case against Arthur Andersen for its involvement in the Waste Management scandal. And after those revelations came the wave of even bigger audit failures like Enron and Worldcom, preceding the passage of Sarbanes-Oxley.

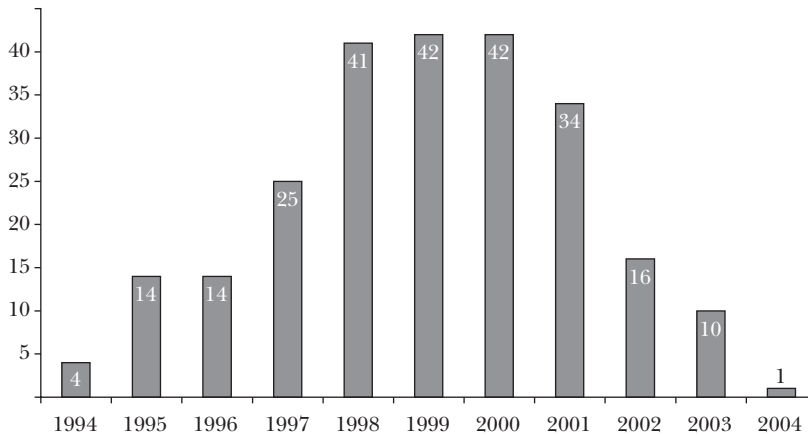
The preexisting system of detecting and enforcing rules against corporate fraud and theft were apparently not strong enough. Enforcement in this area occurs in both private and public forums.²

Private enforcement occurs through investor lawsuits. But in the context of large public companies with dispersed shareholders, private enforcement—which relies on lawyers to initiate and coordinate lawsuits—is widely recognized to suffer from the same agency and collective action problems it is meant to address (Macey and Miller, 1991; U.S. House of Representatives, 1995; Romano, 1991). Private enforcement also generally depends upon the threat of large damage awards,

² For a model of some trade-offs between public and private enforcement, see Glaeser, Johnson, and Shleifer (2001).

Figure 3

Fraud Alleged in Significant Securities Class Actions Against U.S. Public Companies, 1994–2004



Sources: Stanford Class Action Database; Dyck et al. (2006).

Notes: Excludes cases dismissed or settled for <\$2.5 million; all firms had \$750+ million in assets in the year prior to the class period. Relevant start date is first date of fraud as alleged in lawsuit.

which can often exceed a potential lawbreaker’s net worth, and thus fail to provide sufficient deterrence (Shavell, 1986). Thus, private enforcement is at best a weak enforcement tool; and because corporate managers can usually choose to settle the case and pay litigation costs with company funds, private enforcement can harm investors. In the 1990s, Congress and the U.S. Supreme Court curtailed private suits, particularly by requiring specific allegations of fraud and by eliminating liability for “aiding and abetting” securities fraud. Although some commentators argued that these legal changes helped pave the way for the financial scandals of 2001 and 2002, the Sarbanes–Oxley legislation loosened those constraints only modestly, by lengthening the time in which such suits can be filed.

The Securities and Exchange Commission has traditionally been the lead agency for public enforcement of laws and regulations that (to quote from its website) “protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.” In Sarbanes–Oxley, Congress increased the SEC’s budget from \$437 million in 2002 to \$776 million in 2003. But as this belated funding increase implies, SEC funding has lagged enforcement demands, allowing fraud and deceit to magnify other causes of stock market bubbles (Zingales, 2004). Before Sarbanes–Oxley, total U.S. spending on securities regulation (SEC spending together with spending by other public or quasi-public regulatory bodies) per dollar of market capitalization was less than 80 percent of spending in the United Kingdom (FSA, 2002). Even after Sarbanes–Oxley, U.S. spending on securities regulation remains below that of the United Kingdom (FSA, 2004; Jackson, 2005). The ability of these enforcers to raise the perceived odds of detection is also limited by information constraints.

To buttress public enforcement, and to permit the detection of fraud more efficiently than could be done by after-the-fact enforcement alone, the law has long relied upon a “gatekeeper” strategy designed to prevent fraud before it happens. The strategy is to enlist informed private actors to help detect and deter fraud (Kraakman, 1986; Choi, 1998; Coffee, 2006). Among the private actors are service providers, such as accountants and underwriters. Auditors have traditionally been employed as gatekeepers to prevent, detect, and punish lying by corporate agents. Auditing—mandated by law for public companies since 1934—is fundamentally a way to verify financial statements as truthful. Prior to Sarbanes–Oxley, however, auditors had been failing to detect and report improper accounting, allowing executives to exaggerate growth or profitability. Sarbanes–Oxley was principally designed to regulate auditors so that they will perform better as gatekeepers.

Prior to Sarbanes–Oxley, auditors were governed by a system of self-regulation which had apparently not preserved their ability to act as gatekeepers (for example, PAE, 2000). Public accountants were licensed by the states, but states devote few resources to supervising auditors; federal regulation of auditing was light; and no federal agency supervised auditors. A Public Oversight Board for auditors was created in 1978, but it was dominated by accountants, funded by the audit industry, and had no full-time directors, no inspection authority, and no rule-making authority. When the SEC proposed reforms after Enron’s collapse, the Public Oversight Board (2002) resigned en masse, stating “peer review . . . has come to be viewed as ineffective [and] has lost credibility.” Sarbanes–Oxley was a response to the failure of self-regulation of the auditing profession.

A variety of theories have been put forward as to why the auditors failed in their gatekeeper function. Healy and Palepu (2003) argue that auditing had for a long period been suffering from a “deprofessionalization”—a loss in the capacity of auditors to detect fraud—because of increased competition, falling audit fees and persistent liability risks, which reduced long-term rewards for auditing and increased incentives for rule-based accounting requiring little discretion or professional expertise. Levitt (2002) points to increased sales of consulting services by auditors to audit clients, which increased incentives to ignore fraud. Coffee (2006) points to legal changes that reduced liability risk for auditors who ignored fraud and to the fact that auditors were appointed and paid by managers, the very corporate agents that auditors were supposed to check. Except for legal liability standards for auditors, which remain largely the same as they were in 2001, elements of Sarbanes–Oxley respond to all of these theories.

Against Fraud: PCAOB and Institutional Design

The Sarbanes–Oxley legislation was complex: it imposed nine sets of mandates, shown in Table 1. Moreover, its application to foreign firms complicates any overall assessment. At its core, however, Sarbanes–Oxley enhances the role of auditors in enforcing laws against fraud and theft at public companies. This section discusses the first core component of the legislation, which fights fraud by creating

Table 1
Sarbanes–Oxley Act of 2002: Summary of Provisions

<i>Sections</i>	<i>Topics</i>
101–109	PCAOB’s creation, oversight, funding, and tasks
302, 401–406, 408–409, 906	New disclosure rules, including control systems and officer certifications
201–209, 303	Regulation of public company auditors and auditor–client relationship
301, 304, 306, 407	Corporate governance for listed firms (audit committee rules, ban on officer loans)
501	Regulation of securities analysts
305, 601–604, 1103, 1105	SEC funding and powers
802, 807, 902–905, 1102, 1104, 1106	Criminal penalties
806, 1107	Whistleblower protections
308, 803–804	Miscellaneous (time limits for securities fraud, bankruptcy law, fair funds)

a quasi-public institution to supervise auditors. The next section discusses the second core component, which was to fight theft by enlisting auditors to enforce new disclosure rules that give firms incentives to increase spending on financial controls.

The Sarbanes–Oxley legislation recognized that in certain cases, accounting standards themselves were part of the problem. Thus, the law required that the Financial Accounting Standards Board and the Securities and Exchange Commission tighten accounting standards in certain ways. For example, one change was in the area of the “special purpose entities,” which are firms created by a public company that usually serve to isolate some particular financial risk. However, Enron showed that such entities could also be used as a smokescreen for fraudulent transactions. Another accounting change involved “pro forma” accounting, in which firms report their results while leaving out unusual and nonrecurring transactions. This kind of accounting also proved susceptible to abuse. More generally, Sarbanes–Oxley requires the Financial Accounting Standards Board to be funded directly by public companies rather than by accountants, to ensure that its membership is independent of the accounting profession, and to consider emphasizing judgmental principles that seek fair reporting over bright-line rules that, by virtue of being clear cut, invite evasion.

The rise in accounting restatements and earnings manipulation suggested that the deeper issue was not with the accounting standards themselves, but rather with the enforcement of those standards through auditing (Bratton, 2003). Auditors were failing in their conventional role as gatekeepers against fraud. In response, the first and longest section of Sarbanes–Oxley creates a unique and significant new institution, the Public Company Accounting Oversight Board or PCAOB.

An Institutional Innovation: PCAOB

The primary goal of the Sarbanes–Oxley legislation was to improve audit quality and reduce fraud on a cost-effective basis. However, optimal auditing standards

should vary with the nature and type of auditing firm and audit client. Congress recognized that it was in no position to specify in detail either levels of costs or variations in standards of quality for audits, and decided to delegate.

But delegate to whom? Congress could have delegated to one of three traditional types of agents: 1) the executive branch of government, like an agency within the U.S. Department of the Treasury; 2) an independent agency, like the SEC; or 3) a private “self-regulatory” body, like the American Institute of Certified Public Accountants (AICPA) or the Public Oversight Board that had previously overseen auditors. However, each of these options risked leaving audit quality too low. President Bush had initially refused to support any legislative response to the corporate scandals, making an executive branch department or agency an unlikely choice. While the SEC would have been the natural existing independent agency to take on the new task of auditing oversight, the SEC faced the ongoing risk that future budgets might not be sufficient for additional responsibilities. In addition, adding another task to the SEC’s extensive existing mandates could have watered down its effectiveness (Wilson, 1989). Finally, the SEC was at the time led by an attorney who had long worked for the audit industry, who proposed but failed to convince Congress that an industry-dominated private body could do better than the Public Oversight Board and the AICPA had done in the past.

With no appealing conventional choice, Congress innovated.³ The Public Company Accounting Oversight Board is neither a traditional private body, nor a public agency. Formally, PCAOB is a nonprofit corporation given a legal mandate to oversee public company auditors to protect investors and the “public interest in the preparation of informative, fair, and independent audit reports” (Public Company Accounting Oversight Board, 2004a). Sarbanes–Oxley tasks the PCAOB with registering, setting standards for, inspecting, investigating, and disciplining audit firms for public companies. Two members of its five-member board must be auditors, a rule intended to assure that PCAOB has the necessary expertise. Three board members must be independent of the accounting profession, which is intended to constrain regulatory capture from the audit industry. To prevent the board coming under political pressure from “above,” board members serve staggered five-year terms, and can be removed only for “cause,” a standard designed to be difficult to show. Each board member has a full-time position, and now earns approximately \$500,000 per year.

While mixed public/private bodies are not new (Freeman, 2000; Krent, 1990),

³ The innovative design of the PCAOB has cast a legal shadow over the Sarbanes–Oxley legislation. A lawsuit brought by an audit firm and a group of academics claims that PCAOB is unconstitutional because it wields the authority of a public agency but its members are not appointed by the president or the “head” of a “department,” as required by the Appointments Clause of the Constitution (Nagy, 2005; Bader and Berlau, 2005). The suit also claims that because it lacks a “severability” clause—language commonly included in a statute stating that each of its provisions should be construed separately for constitutional purposes—the entirety of Sarbanes–Oxley is unconstitutional. The outcome of the suit is not clear. While the suit faces obstacles, it is a challenge for PCAOB. In the near-term, Congress might not re-create a body with the same powers, particularly over auditor-attested control disclosures.

the blend of the Public Company Accounting Oversight Board is unique (Nagy, 2005). The PCAOB is *private* in that its charter declares that it is not a public agency and that its employees are not government employees or agents. This provision exempts PCAOB from many laws that apply to the Securities and Exchange Commission, such as laws requiring open meetings, public disciplinary hearings and administrative procedures, public access to records (such as inspection and disciplinary reports), and some “revolving door” laws regulating post-PCAOB employment by PCAOB employees. On the other hand, the PCAOB is *public* in that the SEC appoints the PCAOB board and the SEC must approve PCAOB’s budget, litigation, and rules. Moreover, Sarbanes–Oxley specifically granted PCAOB legal rights generally limited to government agencies, including a privilege protecting its files and employees from the “discovery” process (for example, court-ordered depositions) in private lawsuits, and immunity to its employees against civil liability for investigations.

The mixed public/private nature of the Public Company Accounting Oversight Board’s design carries over to its funding. Sarbanes–Oxley empowers PCAOB to impose “fees” on the audit firms subject to its oversight and, more importantly, on public companies (based on market capitalization). The SEC has power to approve and thus constrain PCAOB’s budget, but Sarbanes–Oxley makes clear that PCAOB fees are “not public monies” of the United States. Neither the SEC nor Congress can shift PCAOB’s resources to other public purposes as part of Congress’s budget-setting process, as Congress now can do with the SEC’s funds. This secure and separate source of funding addresses the fact that both the SEC and the self-regulatory bodies charged with enforcing laws against accounting fraud had been underfunded in the past. Before the corporate scandals of the early 2000s, the SEC was notoriously short of funds. Prior to Sarbanes–Oxley, when a dispute arose over how much authority the Public Oversight Board had over audit firms, the AICPA cut off funds of the Public Oversight Board. The PCAOB is more financially secure than either an organization funded out of the federal budget, like the SEC, or than a self-regulatory organization funding itself from the audit industry would have been.

The Public Company Accounting Oversight Board now has a budget of approximately \$100 million, which includes eight offices and about 500 employees. (For comparison, the SEC in 2005 had an approximately \$900 million budget, 18 offices, and 3100 employees.) PCAOB’s staff includes about 300 full-time inspectors annually reviewing all audit firms with more than 100 public company clients. PCAOB has enacted two lengthy sets of standards, one on auditing, and one on “control system” disclosures (Public Company Accounting Oversight Board, 2004b; 2004c). “Control systems,” which will be discussed at more length in the next main section, comprise the set of processes, practices, and technologies designed to control a company’s assets, ranging from a set of rules governing who and how many people must approve expenditures, to a procedure for comparing shipping documents to sales accounts, to computer software with built-in systems for making changes to computerized data.

The “Big Four” accounting firms—PricewaterhouseCoopers, Deloitte Touche

Tohmatu, Ernst & Young, and KPMG—audit most U.S. public companies; specifically, they audit 80 percent of U.S. public companies by number, and 99 percent by sales volume (U.S. Government General Accounting Office, 2003). PCAOB staff spends several months on-site with these firms each year. The PCAOB spot-checks selected audits, has authority to report deficiencies to the SEC, and provides a sanitized version of its inspection reports to the public. It reviews audit firm practices and policies on compensation, promotion, assignment, independence, client acceptance and retention, internal inspection, and training. If auditors fail to cooperate with its investigations, or if it finds violations, it may discipline auditors (subject to review by the SEC and then the courts). It can impose fines and the auditing equivalent of the death sentence: deregistration, which would force public companies to fire the auditor. In 2005, PCAOB brought five disciplinary proceedings against audit firms, and published nearly 300 inspection reports.

Improving PCAOB's Governance and Accountability

If or when Congress revisits the Sarbanes–Oxley legislation, it could improve upon the design of the Public Company Accounting Oversight Board in several ways.

First, Congress should require that PCAOB be reauthorized after some number of years of operation (Clark, forthcoming). Such reauthorization would force an evaluation of PCAOB's performance and effectiveness, and would provide an opportunity for Congress to alter the institution if (for example) it has been captured by the auditing industry or has shown signs of bureaucratic empire-building. While a near-term reauthorization would face a political risk that the law might not be approved absent headline-grabbing scandals, a reauthorization after, say, a decade would give PCAOB sufficient time to build political relationships so that reauthorization would be likely, absent a strong showing by PCAOB critics that the agency had been ineffective or unresponsive to legitimate concerns.

Second, rather than giving the SEC alone the task of ensuring ongoing accountability at PCAOB, it might be better to involve PCAOB's constituencies in its governance. For example, the PCAOB could be required to obtain and respond to evaluations by specified advisory groups—including investors, auditing firms, finance executives, and representatives of small business—giving those groups a permanent and substantive role in its deliberations. A process similar to this operates at the Financial Accounting Standards Board, which consults with a 34-member Financial Accounting Standards Advisory Committee made up of top corporate executives, audit firm partners, accounting academics, officers of self-regulatory organizations (such as the New York Stock Exchange), and financial analysts.

Third, audit clients that are unhappy about audit firm's judgments—particularly regarding control system weaknesses—should have a prompt and effective way to appeal the judgment to PCAOB staff. The SEC should monitor such appeals to verify that PCAOB is restraining the audit firms from imposing costs on public companies.

Fourth, while PCAOB's reports disclose problems found with past audits,

Sarbanes–Oxley prohibits PCAOB from releasing portions of inspection reports that criticize an audit firm’s control systems unless the audit firm fails to address the criticisms within 12 months of the report. As a result, the market and client firms will not know about and will not be able to react to those criticisms. Increased disclosure by PCAOB would be appropriate.

Fifth, PCAOB’s exemptions from public-right-to-know laws, while defensible in its start-up phase, should be revisited as its power and influence grows.

The PCAOB’s budget and staff will probably grow as it completes its start-up phase, and as it applies its standards to (or develops new standards for) new audit tasks. Its board and staff will learn from their inspections and from appeals by auditing firms to the SEC and the courts, and the PCAOB will learn as it responds to criticisms of its auditing and disclosure-attestation standards. Eventually the PCAOB will become a lobbying force, in Congress and at the SEC, in the setting of accounting standards by the FASB, and in efforts to coordinate audits across national boundaries by multinational firms subject to multiple regulators.

Against Theft: Control Systems, Disclosure, and Auditor Attestation

While many of the financial scandals in the early 2000s involved fraudulent disclosure or accounting statements, several prominent scandals also revealed outright theft by top corporate officials. Enron’s chief financial officer and Tyco’s chief executive officer have been sent to prison for what amounts to theft. The second core component of Sarbanes–Oxley is designed to fight theft by enlisting auditors to enforce new disclosure rules that strengthen the incentives for firms to increase spending on financial controls.

Earlier Law on Control Systems

U.S. public companies have long maintained “control systems” over their assets and accounting systems. Since 1977, U.S. public companies have been required to have such a system to provide “reasonable assurance” that transactions are authorized and recorded to permit preparation of compliant financial statements, and that fraud—including theft as well as deception—is detected and prevented.

As described earlier, a “control system” is the set of processes, practices, and technologies to provide such assurance. Courts have interpreted the phrase “reasonable assurance” to require only cost-justified controls, taking into account the size and nature of a company’s operations. The SEC enforces the mandate that companies have a control system, and investors may not sue based solely on the lack of a control system. By political tradition, federal enforcement of the control systems mandate has focused on disclosure, leaving it to the states to enforce laws against theft itself.

Auditor-Attestation Disclosure as a Deterrent

Prior to Sarbanes–Oxley, few nonfinancial firms disclosed engaging in internal control reviews or even stated that they had effective control systems (McMullen,

Raghunandan, and Rama, 1996).⁴ To be clear: Sarbanes–Oxley in no way mandates a control system or its contents—that obligation predated the law and remains unchanged. Nor does Sarbanes–Oxley direct the SEC, PCAOB, or other officials to focus enforcement resources directly on designing or improving control systems.

What Sarbanes–Oxley adds in §404 are two main obligations: 1) officers must evaluate and disclose “material weaknesses” in their firm’s control system, which the chief executive officer and chief financial officer must personally certify; and 2) outside auditors “attest” to those disclosures—that is, either agree with the officers or express a qualified or adverse opinion. PCAOB has adopted standards requiring audit firms to disclose three points: 1) how they tested a firm’s financial control system and the test results; 2) material weaknesses not disclosed by a firm’s officers; and 3) whether a system is “effective” in the sense that it provides the required “reasonable assurance.”

A “material weakness” is a deficiency with more than a “slight” chance of causing a material financial misstatement. This definition—based on pre-Sarbanes–Oxley auditing standards written by the American Institute of Certified Public Accountants—was a sensible starting point for the Public Company Accounting Oversight Board, drawing on precedent and setting a relatively high standard to start. However, it has been fairly criticized for two reasons: the criterion of a “slight” chance has obvious potential to impose unjustified costs; and more generally, the definition does not incorporate cost–benefit analysis, so weakness can be identified as “material” even if the cost of eliminating the weakness clearly exceeds the expected loss or harm that the weakness could impose on the company or investors. Over the last year, PCAOB announced it would consider amending the definition, in light of the high level of costs that complying with §404 of Sarbanes–Oxley has imposed (discussed below).

Incentive Effects of Sarbanes–Oxley on Control System Expenditures

In a formal sense, the two new obligations added by Sarbanes–Oxley seem modest and nonprescriptive. After all, even before the passage of Sarbanes–Oxley, if the board or officers knew their control system was materially deficient, such that their financial statements were materially misleading or employees were able to steal material assets, directors and officers were required to correct the deficiency. Likewise, before the passage of Sarbanes–Oxley, uncertainties about the effectiveness of a firm’s control procedures were required to be disclosed in SEC filings personally signed by a firm’s officers. Even after the passage of Sarbanes–Oxley, companies may continue to use a control system with many deficiencies as long as the system provides “reasonable assurance” that financial material misstatements will not result. Nothing in the Sarbanes–Oxley legislation requires managers to agree with auditors, or to fix weaknesses solely because auditors deem them material. Contrary to claims by certain critics (for example, Butler and Ribstein,

⁴ Since 1991, banks have been required to evaluate their control systems and disclose this information to audit committees and regulators, but not to the public.

2006), Sarbanes–Oxley does not mandate a “one-size-fits-all” control system, and firms continue to spend a wide range of amounts on highly varied control systems.

Nevertheless, Sarbanes–Oxley did create new incentives to disclose control system weaknesses. Because top officers must certify personally that they have evaluated their firms’ control systems, their ability to claim plausibly that they were unaware of control deficiencies—a claim that used to be common—is weakened. Auditor-attestation has induced further disclosures. Auditors have also spread knowledge of best practice and common deficiencies. Since the passage of Sarbanes–Oxley, over 10 percent of firms have disclosed material weaknesses, although fewer did so in 2005 than in 2004, and among the largest firms with more than \$1 billion market capitalization, only 2 percent disclosed material weaknesses in 2005 (Dunn, 2006). Beneish, Billings, and Hodder (2006) and De Franco, Guan, and Lu (2005) each find that prices of firms disclosing weaknesses fall a market-adjusted 2 percent on average. Some disclosures would have been made under pressure from market forces and salient scandals, but the sharp increase in such disclosures is consistent with the goals of Sarbanes–Oxley.

Disclosure, in turn, creates powerful incentives to fix weaknesses. Investors may be unable to distinguish weaknesses that are cost-justified from those that are not, and may not trust managers to draw such distinctions. The disclosure mandate could present managers with a Hobson’s choice of overspending on controls, in the sense that the higher spending is not warranted by the potential benefits, or facing higher costs of raising capital. The interaction of disclosure with liability risks also has a powerful effect: if a material weakness is disclosed but not fixed, a subsequent material financial misstatement will trigger private lawsuits (and possibly SEC sanctions) that will be more threatening to individual defendants, because it will be evident they knew about the weakness. Even a small increase in liability risk caused by increased disclosure rules creates large new incentives to spend money on control systems. That is because top executives in a firm may share in any liability that results from not fixing a deficiency, but will often bear only a tiny fraction of the firm’s costs in fixing the deficiency—80 percent of chief executive officers of companies in the Standard and Poor’s 500 own less than 1 percent of their firms’ stock.

Auditor attestation also changes incentives to spend on controls. Requiring both managers and auditors to disclose weaknesses creates an asymmetric push for more spending: if managers identify a weakness as material, auditors have no incentive to disagree; but if managers fail to identify a weakness as material that auditors believe to be material (whether because of a difference of opinion, or differing knowledge of best practices, or a greater degree of risk-aversion), managers know the weakness will be disclosed anyway, along with the fact of their disagreement. At large companies, managers have not yet publicly disagreed with auditor disclosure that a control system was ineffective (Dunn, 2006). However, some hints exist that managers and auditors are disagreeing in private. For example, auditor dismissals and resignations are strongly correlated with control weakness disclosures and delays in SEC filings (Ettredge, Heintz, Li, and Scholz, 2006; Ettredge, Li, and Sun, 2006). Auditors are even less likely than managers to bear

costs of correcting control weaknesses. In fact, auditors often benefit from additional spending to fix control weaknesses, regardless of whether the additional costs are well spent (Langevoort, 2006). Audit fees are roughly 40 percent higher for firms disclosing material weaknesses (Eldridge and Kealey, 2005).

At larger firms, the incentives to increase control expenditures are increased by the new, enhanced role of independent audit committee members. A combination of Sarbanes–Oxley provisions and stock exchange rules now require listed companies to have fully independent audit committees with the power to hire, compensate, oversee, and fire auditors, and to communicate with auditors outside the presence of managers. Most independent directors on these committees own even less stock than chief executive officers, and so have even less to gain from keeping control costs low. Also, the independent directors may perceive themselves to have as much or even more to lose than officers from spending too little. Taking these incentives together, decisions about control systems seem likely to be made by agents who have incentives to overspend under Sarbanes–Oxley, as it is currently implemented.

Evaluation of Control System Disclosure and Auditor Attestation

Setting an optimal level of control costs for public companies depends upon too many variables that change too continually for principals (dispersed shareholders) and agents to be able to specify an amount for a particular firm in a verifiable way. Nor is it plausible for Congress to provide any detailed oversight of control systems. The level of expenditures on control systems—the purpose of which is to control agents—must be delegated to an agent of some kind.

Before Sarbanes–Oxley, the agents who set the level of control system expenditures were the same managers the control systems were meant to constrain. They had (and would still have) incentives to underspend. Even honest managers could be tempted to underspend if control systems are not accurately priced by the market (Stein, 1989). The incentive to underspend would be particularly large for managers planning to engage in fraud, either by deception (to increase incentive compensation or allow for opportunistic insider trading) or by theft. Whether the earlier problem of underspending on control systems is worse than the current situation, with overspending being likely, is not resolvable at the level of theory. Empirical studies of costs and benefits of Sarbanes–Oxley are discussed below, but these are not soon likely to resolve the relative merits of underspending and overspending, either.

However, even if companies are being induced to overspend on control systems by the way Sarbanes–Oxley is currently being implemented, the next practical step is for PCAOB to promulgate rules and enforcement patterns that will reduce such incentives to overspend. In fact, as noted above, PCAOB has already begun to issue “guidance” to auditors and to begin the process of amending its standards on attestation in a way that will tend to reduce incentives for control spending. This change is partly in reaction to pressure from the SEC, and partly because of the ever-present threat of further legislative intervention by Congress. But it is also because Sarbanes–Oxley did not mandate any particular level of

control system expenditure, relying instead on the indirect pressure of disclosure rules, and because the legislation assigned the design and interpretation of those rules to a well-funded, independent agency, relatively immune (in the short run at least) from capture by the interests of either managers or auditors. In short, Sarbanes–Oxley created a flexible, adaptive system for adjusting control system expenditures that may come closer to an optimum than would be true with any plausible alternative.

Complements to the Core Elements of Sarbanes–Oxley

To complement the two core elements of Sarbanes–Oxley—the creation of the PCAOB and requirements for auditor-attested disclosures—the legislation added rules to protect auditors’ ability to function as gatekeepers. Managers are required to disclose any control weaknesses (material or not) to audit committees and auditors, and it became a crime to mislead auditors. Congress earmarked roughly 30 percent of the SEC’s budget increase in 2003 for 200 professionals to oversee PCAOB and auditors. To constrain managers from suborning auditors, Sarbanes–Oxley mandated five-year rotation of auditor partners with their client firms (but not auditing firms, as many advocated). It also required auditors to retain documents, not to destroy them as the Arthur Andersen auditing firm legally did with Enron’s work papers. Employees must be able to communicate audit concerns on a confidential, anonymous basis to audit committees; employees may sue and recover legal fees from public companies if they are retaliated against for informing regulators or supervisors of violations of SEC rules or federal antifraud laws; and such retaliation is criminalized.

The Sarbanes–Oxley Act also increased disclosure requirements for auditor compensation by requiring a clear breakdown of audit, audit-related, and non-audit fees, and restricted non-audit services that audit firms can provide to audit clients. These restrictions have been harshly criticized as “quackery” (Romano, 2005), but in fact, Sarbanes–Oxley only added two types of non-audit services to a list the SEC had already banned. The two additional prohibitions—on the design of financial information systems and the outsourcing of internal audits—are closely interwoven with firms’ financial controls, which are what auditors are supposed to be evaluating. The SEC’s rules implementing this part of Sarbanes–Oxley exempted such services to the extent that the work falls outside an audit’s scope, and audit firms continue to earn significant non-audit revenues from audit clients, although the amount has fallen significantly as audit firms have spun off or sold much of their non-audit consulting businesses. Whatever one’s view of the trade-off between the efficiencies of providing a bundle of audit and non-audit services and the possibility that being paid more for non-audit services may lessen incentives for honest and diligent audits, Sarbanes–Oxley only tweaked prior law in this situation—and did so to avoid a situation in which auditors would audit their own work. The rules may need refinement; for example, Abbott, Parker, Peters, and Rama (2005) suggest that nonroutine internal audit services might be exempt from this provision. But the PCAOB has the flexibility to make such adjustments, if they prove desirable.

Measuring the Benefits and Costs of Sarbanes–Oxley

Serious problems confront any effort to estimate empirically the effects of Sarbanes–Oxley. The legislation was enacted amidst sharp financial, economic, and political changes. It makes a large number of simultaneous, disparate legal changes, which continue to be implemented and phased in over time. The implementation of the law is also being accompanied by a host of other, overlapping legal changes (Clark, forthcoming). The benefits of the Sarbanes–Oxley act are by their nature difficult to isolate, which doesn't mean they aren't real and substantial. Given the corporate scandals of the early 2000s, and the awareness of this behavior by investors and other market participants, the chances are good that public and private enforcement and manager behavior would have changed even had Sarbanes–Oxley not been enacted. The problems of estimating the effects of this legislation are not unusual or unique to Sarbanes–Oxley (Jackson, 2005), but they may be more severe than is typical.

Many studies of Sarbanes–Oxley find results consistent with intuitive hypotheses regarding likely effects, but most studies are unable to reject alternative hypotheses that other events caused those effects, and most studies report effects consistent with both positive and negative evaluations of the law's core provisions.⁵

Benefits of Sarbanes–Oxley: Real But Hard To Quantify

While evidence in this area should be treated as indicative rather than conclusive, most evidence is consistent with Sarbanes–Oxley providing benefits. Earnings management, measured in a variety of ways, fell after Sarbanes–Oxley (Cohen, Dey, and Lys, 2005a, 2005b), as did frauds that form the basis for significant class action securities lawsuits, as illustrated earlier in Figure 3 (Dyck, Adair, Zingales, 2006). Before Sarbanes–Oxley, a correlation existed between abnormal accounting accruals—that is, accruals not predicted by standard empirical models of accruals—and the importance of an audit client to its auditor, but this correlation vanished after the law passed (Ahmed et al., 2006). Chan, Farrell, and Lee (2006) report that firms disclosing material control weaknesses engaged in more earnings management than other firms. The disclosures mandated by Sarbanes–Oxley appear to be valued by investors. Markets react in predictable, economically significant ways to

⁵ In addition to studies reviewed in the text, four studies attempt to measure overall market reactions to the Sarbanes–Oxley legislation. Three factors caution against drawing any firm conclusions from these studies. First, the studies produce wildly different overall results. Li, Pincus, and Rego (2006), Chhaochharia and Grinstein (2005), and Jain and Razaee (2006) find a positive effect on U.S. firms. Zhang (2005) reports a negative impact of \$1.4 trillion, which as she notes is so large as to undermine its plausibility. Second, these studies produce different cross-sectional results. Third, the financial scandals which affected the odds that Sarbanes–Oxley would pass were also affecting what it would likely contain, how it would be implemented, and its likely costs or benefits. Wintoki (2006) finds positive abnormal returns for firms in the largest two size quartiles, and negative abnormal returns for firms in the smallest size quartiles, consistent with evidence discussed in the text. Litvak (2005) finds that stock prices of cross-listed non-U.S. firms subject to the law fell relative to same-country firms not subject to the law. For a short review of these studies, see Coates (2006).

new control disclosures (Beneish, Billings, and Hodder, 2006; De Franco, Guan, and Lu, 2005; Hammersley, Meyers, and Shakespeare, 2005; Chan, Farrell, and Lee, 2006; Leuz, Triantis, and Wang, 2005).

Investor confidence also increased after the passage of Sarbanes–Oxley. Bid–ask spreads and market depth, which as Figure 2 showed were widening and falling, respectively, during 2001–2002, reflecting falling investor confidence, began to tighten and rise again in both the month and in the nine months after passage of the legislation (Jain, Kim, and Rezaee, 2006). Similar trends can be observed in survey measures of investor confidence. By April 2006, even a majority of financial officers—who have generally been critical of Sarbanes–Oxley—believed that the law (and §404 in particular) had increased investor confidence in financial reports. In that survey, a third reported that Sarbanes–Oxley had already helped to prevent or deter fraud (Financial Executives Research Foundation, Inc., 2006). At firms with more than \$25 billion revenues, 83 percent of financial officers agreed that investors were more confident as a result of Sarbanes–Oxley.

No methodology yet developed permits summing the benefits of Sarbanes–Oxley into dollar amounts that could be compared meaningfully to rough estimates of its costs, which, as discussed next, are substantial. Thus, whether the legislation produced *net* benefits remains unclear.

Costs: Substantial, Hard To Estimate, Fixed Component, and Falling

Four things are clear about the costs of Sarbanes–Oxley: 1) they are substantial; 2) they are hard to estimate; 3) they have a fixed component, and so fall more heavily on small firms; and 4) they are falling over time.

Direct costs consist of PCAOB fees, firms' compliance costs, and increased audit fees. Only PCAOB fees are known, and they are minor—more than half of companies paid less than \$1,000 in 2004. Few firms disclose compliance costs. Audit fees are disclosed by firms, and have increased significantly since the passage of Sarbanes–Oxley, but the portion of the increase attributable specifically to the legislation is unobservable (Coates, 2006). Audit fees were already rising sharply prior to Sarbanes–Oxley, in part due to a riskier auditing climate and in part due to reduced competition as a result of the demise of Arthur Andersen, formerly a top audit firm (Asthana, Balsam, and Kim, 2004).

Qualitative evidence from news media, surveys, and descriptions of control audits supports the view that Sarbanes–Oxley directly increased both audit fees and internal audit costs, on the order of \$1 million per \$1 billion of revenues, although the ratio of audit costs to revenues is declining as firm size rises. Those costs have also been falling over time for a number of reasons: learning; deferred benefits from costs accrued up-front; push-back from firms unhappy with initial costs; and a gradual relaxation in caution as memories of Enron and other corporate scandals fade. Firm executives, who have reason to exaggerate costs, report that total compliance costs fell about 15 percent in 2005 (Financial Executives Research Foundation, Inc., 2006). Audit firms, who have reason to understate costs, report that their clients are seeing a decline in total compliance costs of about 40 percent (Litan, 2005).

Indirect costs—like opportunity costs of manager time spent or greater risk-

aversion as a result of perceived pressure for tighter financial controls—are even harder to measure. But these costs, too, seem to be falling over time, perhaps even more rapidly than direct costs, as the initial managerial attention needed to comply with Sarbanes–Oxley can be returned to normal business activities, and the degree to which the law increases liability risk becomes better known.

Going Private and the Effect of Sarbanes–Oxley on Small Firms

Several papers examine whether Sarbanes–Oxley has caused public companies to “go private”—that is, cease to be subject to SEC regulations by selling out to managers, concentrated owners, or privately held firms (Block, 2004; Carney, 2005; Hsu, 2004; Engel, Hayes, and Wang, 2004). In the best study of this subject to date, Kamar, Karaca-Mandic, and Talley (2006) report that compared to European Union firms, the odds that U.S. firms would sell to private buyers increased from 43 to 66 percent. However, this increase is limited to U.S. firms with market capitalizations of less than \$30 million and to transactions in the first year after passage of Sarbanes–Oxley, with no effect appearing in the second year. If all exits by such firms since mid-2002 were caused solely by Sarbanes–Oxley, they would represent less than 0.02 percent of U.S. market capitalization. Their findings are consistent with Marosi and Massoud (2004) and Leuz, Triantis, and Wang (2006), who examine a broader set of firms that “go dark”—that is, that legally cease to file SEC disclosures, either because they have gone private or because the number of their shareholders has fallen below the trigger level for SEC registration. They find that Sarbanes–Oxley modestly increased firms going dark, mostly among very small firms with poor performance and low growth. The U.S. Government Accountability Office (formerly the U.S. General Accounting Office) (2006) reports that 25 percent of firms going dark from 2003 through the first quarter of 2005 were not trading at all.

Thus, claims that Sarbanes–Oxley has triggered a wave of large buyouts (as in “Going Private,” *Wall Street Journal*, 2006) have no support in the data. With respect to small firms, these studies cannot distinguish Sarbanes–Oxley from other contemporaneous legal changes affecting U.S. companies. These findings are also consistent with either a positive or negative interpretation: they can support a belief that Sarbanes–Oxley increased costs more than benefits, or a belief that the law increased information about accounting manipulation and poor performance. As Kamar, Karaca-Mandic, and Talley (2006) put it: “[T]he exodus of small firms from the public capital market . . . would be a blessing if the departing firms were prone to . . . financial fraud . . .” The studies are also consistent with small firm managers overestimating the cost of compliance with Sarbanes–Oxley. The most costly part of Sarbanes–Oxley—the §404 requirements for disclosure of financial controls described above—does not even apply to smaller firms (under \$75 million in market capitalization) until 2008. It remains uncertain what form those requirements will then take, or how large their costs will be.

Cross-Listings and the Effect of Sarbanes–Oxley on Stock Exchanges

Some have claimed that Sarbanes–Oxley has hurt the ability of U.S. stock exchanges (principally the New York Stock Exchange) to compete successfully with

foreign stock exchanges (principally the London Stock Exchange) for new listings generally, and particularly for cross-listings of foreign firms. To date, these claims have not been supported by serious empirical analysis, which faces challenges possibly even more daunting than those facing the studies discussed above.

One difficulty with such claims is that the decline in U.S. exchanges' share of cross-listings fell more in 2001, prior to Sarbanes–Oxley, than it has since Sarbanes–Oxley, and this pattern holds true for high-tech and non-high-tech firms alike. Preliminary analysis by Zingales (2006), moreover, suggests that a more plausible cause of the decline in cross-listings are the continued improvements in the liquidity of foreign equity markets (Halling, Pango, Randal, and Zechner, 2006), which have diminished the relative attractiveness of a U.S. listing. To the extent U.S. legal changes have had an effect on cross-listings, a more likely culprit is the dramatic decline in the research coverage of U.S.-listed stocks, caused in part by enforcement actions against investment banks and mutual funds by New York Attorney General Eliot Spitzer and the SEC, which resulted in costly structural regulation of research firms and a decline in funds' "soft-dollar" purchases of research, and the effects of the SEC's Regulation FD, which leveled the informational playing field between professional analysts and the public. Cross-listings may also be deterred by a fear of private litigation, but as noted above, private enforcement of U.S. laws was not significantly affected by Sarbanes–Oxley.

Thus, Zingales (2006) points out that if the benefits of cross-listing on a U.S. stock exchange remain, in the form of 90 basis points lower cost of capital (as estimated by Hail and Leuz, 2006), then the benefit to an average foreign firm from cross-listing will outweigh even initially high (and now falling) costs of compliance with Sarbanes–Oxley's control system disclosure requirements, at least for firms above \$230 million in market capitalization. Further evidence that Sarbanes–Oxley is not to blame for lost competitiveness by U.S. exchanges is a small survey by Ernst & Young of the chief executive and financial officers of 20 of the 42 U.S. companies that chose to list their stock on the AIM market, which is the London Stock Exchange's international market for smaller growth companies. Only 20 percent of respondents named Sarbanes–Oxley as a factor in their choice, and 40 percent stated their companies already complied with Sarbanes–Oxley or were working to do so in the near future. A larger survey by Brau and Fawcett (2006) covered 249 chief financial officers of U.S. firms that either started to go public in the United States and then stopped or were large enough to go public but chose not to do so. In that survey, Sarbanes–Oxley was cited as a reason to not go public by only 19 percent of the respondents.

Round-up of Other Provisions in Sarbanes–Oxley

Sarbanes–Oxley is a large and complex piece of legislation, and some of its more controversial aspects are outside the core components just discussed. For the most part, these noncore parts were either ineffective window dressing or, even without Sarbanes–Oxley, would have been imposed by existing regulatory bodies

(Cunningham, 2003). This section briefly addresses three concerns that have been raised over noncore parts of the legislation.

No Material Change in the “Criminalization of Agency Costs”

The Sarbanes–Oxley legislation increased maximum criminal sentences for fraud, consistent with Congress’s penchant over the last 50 years to criminalize more conduct and increase criminal penalties (Stuntz, 2001; Bowman, 2005). But in federal law, maximum sentences are unimportant. Most sentences are effectively chosen by prosecutors under guidelines of the U.S. Sentencing Guidelines Commission. Sentence guidelines for white-collar crime were lengthened in 2001 and 2003, but those changes were underway prior to Sarbanes–Oxley (Pernio, 2002; Brickey, 2004). Some top executives involved in corporate scandals have received long sentences: WorldCom’s chief executive officer received a sentence of 25 years; Enron’s chief executive officer Jeff Skilling, 24 years; Dynergy’s chief executive officer, 24 years; and Adelphia’s chief executive officer, 15 years. But all of those sentences reflect pre–Sarbanes–Oxley law and guidelines.

Nor did anything in the Sarbanes–Oxley Act materially add to what Butler and Ribstein (2006) complain was a “criminalization of agency costs.” While the act increased resources of the Securities and Exchange Commission, the SEC does not enforce criminal laws. That task is managed by the Department of Justice and the states, whose resources were unchanged by Sarbanes–Oxley. Sarbanes–Oxley did not cause the increase in prosecutions of white-collar crime in the last five years with its emphasis on corporate managers, nor did it cause the more aggressive tactics by prosecutors in such cases. At the federal level, those changes reflect administrative decisions of Bush appointees within the U.S. Department of Justice (Bucy, 2004; Ashcroft, 2003; Thompson, 2003). At the state level—and the states put more than twice as many people in prison for securities fraud than the federal government (Jackson, 2005)—the federal Sarbanes–Oxley law had no effect. Even if Sarbanes–Oxley had never been passed, New York State Attorney General Eliot Spitzer could have brought the same high-profile cases, under the same laws, against Wall Street research analysts, mutual fund advisors, the New York Stock Exchange, and the insurance industry.

No Significant New Chief Executive Certification Requirements

As discussed earlier, Sarbanes–Oxley required that chief executive and financial officers certify they have evaluated a firm’s control systems relating to both financial statements and disclosures more generally. The law act made two other minor changes to the officer certification requirements: 1) it required a formal certificate to be signed, separate and apart from the SEC filings themselves, which may have temporarily heightened the salience of the signing requirement, and 2) it implemented an earlier proposal requiring certification of quarterly statements by both the chief executive officer and chief financial officer. Both changes likely contributed to the atmosphere of caution that followed passage of the legislation, but both are likely to diminish in importance

over time, as the act of signing becomes routine and as any investments in control systems to back-up these certifications are made.

Despite claims that these requirements represented a significant new requirement, the law was only a modest change (Fairfax, 2002). Chief executive and financial officers have long signed annual reports; chief financial or accounting officers have long signed quarterly reports; and firms have long been required to have effective control systems. In addition, prior to Sarbanes–Oxley, the SEC already required personal certifications from chief executive and financial officers for quarterly reports of firms with annual revenues greater than \$1.2 billion.

The major change in Sarbanes–Oxley was not that chief executive and financial officers were required to sign forms or certify financial statements, but that they were required to do so in the shadow of the genuinely new requirement (discussed earlier) that officers certify and auditors attest to specific disclosures regarding control systems.

“Corporate Governance” Rules and Bans on Loans to Executives

The Sarbanes–Oxley legislation has been criticized for imposing corporate governance rules that reshaped boards, without compelling evidence that the new rules will have a net benefit (Romano, 2005; Linck, Netter, and Yang, 2005). Other than greater disclosure, however, Sarbanes–Oxley prescribes few corporate governance changes. Both the New York Stock Exchange (NYSE) and Nasdaq imposed extensive governance changes on firms shortly following the passage of Sarbanes–Oxley, including requirements that a majority of directors be independent. NYSE’s rules require that each audit committee member be “financially literate” and at least one be a “financial expert”; that the audit committee publish a charter of duties; that the audit committee meet with auditors separately from managers; and that firms have fully independent nominating and compensation committees. These changes were underway prior to Sarbanes–Oxley, and were partly attempts to reduce political pressure to enact Sarbanes–Oxley, but nothing in Sarbanes–Oxley required them or would now prevent their modification. The only new governance mandates in Sarbanes–Oxley require each audit committee member of a listed company be “independent,” and that the audit committee control the audit–firm relationship—which is also what the stock exchange rules require. Sarbanes–Oxley also requires firms to disclose if they have a code of ethics and if any audit committee members are “financial experts,” a step which provides incentives (but no mandate) for firms to adopt codes and add experts. Were Sarbanes–Oxley repealed tomorrow, the new post-Enron rules for corporate governance would endure.

One of the few truly prescriptive parts of Sarbanes–Oxley is its ban on loans to executive officers, which stemmed in large part from the revelation that WorldCom’s chief executive officer had borrowed \$409 million from WorldCom prior to its demise. Critics of this provision correctly note that the ban intrudes into a domain traditionally regulated by the states, which long ago replaced such bans with liability rules that discourage loans and other self-dealing

transactions, and give insiders incentives to have such transactions approved by independent directors (Coates, 1999). Prior to the 1990s, such loans were relatively rare. In any event, the ban in Sarbanes–Oxley is ineffective, because it does not cover economic substitutes for the most common type of loan (to buy stock), such as the grant of options or restricted stock, nor does it ban an increase in short-term compensation contemporaneously with a decrease in long-term compensation. Twenty-five top law firms wrote a memo arguing that the Sarbanes–Oxley ban did not cover routine credit extensions other than loans, such as payment of an officer’s legal expenses subject to a contingent repayment by the officer (Law Firms, 2002). To date, the SEC has not brought contrary enforcement actions.

Conclusion

The process by which Sarbanes–Oxley was enacted has been criticized for being rushed and for ignoring relevant research (Butler and Ribstein, 2006; Romano, 2005; Zingales, 2004). Neither criticism is fair.

The core ideas behind Sarbanes–Oxley had developed for years. Federal bills to create an auditing oversight body date to 1978, after hearings and reports prompted by auditing failures in the market downturn of the early 1970s. Similar legislation was debated again in 1995. In the run-up to Sarbanes–Oxley, Congress heard scores of witnesses debate in detail how auditing should be regulated. In a number of other controversial areas—executive compensation and stock options, audit firm rotation, general design of accounting rules—Congress showed a willingness to choose further study over either regulation or delegation (Bratton, 2003).

Congress acted no differently in passing Sarbanes–Oxley than it does in passing most significant legislation. In fact, perhaps the most important component of Sarbanes–Oxley was precisely to delegate power to PCAOB, so that it could customize rules and respond to feedback much more rapidly than Congress could do on its own. Professional lobbyists, of course, may seek the outright repeal of Sarbanes–Oxley as a bargaining tactic while planning to settle on regulatory reform as a compromise, but academics, policymakers, and the public would do well to see those tactics for what they are and recognize Sarbanes–Oxley, like many regulatory institutions, as a work in progress. Rather than pushing for repeal of Sarbanes–Oxley, a more cost-effective approach is to push for the SEC and PCAOB to use their authority to exempt or curtail requirements or prohibitions that are unnecessarily costly.

References

- Abbott, Lawrence J., Susan Parker, Gary F. Peters, and Dasaratha V. Rama.** 2005. "Corporate Governance, Audit Quality and the Sarbanes-Oxley Act: Evidence from Internal Audit Outsourcing." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=759864.
- Admati, Anat R., and Paul Pfleiderer.** 2000. "Forcing Firms to Talk: Financial Disclosure Regulation and Externalities." *Review of Financial Studies*, 13(3): 479–519.
- Aguilar, Melissa K.** 2005. "SOX 404 Deficiencies Preceded by 'Effective' 302 Reports." *Compliance Week*, July 26, 2005.
- Ahmed, Anwer S., Scott Duellman, and Ahmed M. Abdel-Meguid.** 2006. "Auditor Independence, Corporate Governance and Abnormal Accruals." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=887364.
- Ashcroft, John.** 2003. Memorandum to All Federal Prosecutors: Department Policy Concerning Charging Criminal Offenses, Disposition of Charges, and Sentencing. September 22, 2003. <http://f11.findlaw.com/news.findlaw.com/hdocs/docs/doj/ashcroft92203chrghmem.pdf>.
- Asthana, Sharad, Steven Balsam, and Sungsoo Kim.** 2004. "The Effect of Enron, Andersen, and Sarbanes-Oxley on the Market for Audit Services." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=560963.
- Bader, Hans, and John Berlau.** 2005. "The Public Company Accounting Oversight Board: An Unconstitutional Assault on Government Accountability." Competitive Enterprise Institute, October 4, 2005. <http://www.cei.org/gencon/025,04873.cfm>.
- Beneish, Messod D., Mary B. Billings, and Leslie D. Hodder.** 2006. "Internal Control Weaknesses and Information Uncertainty." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=896192.
- Berger, Philip G., Feng Li, and M. H. Franco Wong.** 2005. "The Impact of Sarbanes-Oxley on Cross-Listed Companies." Unpublished Paper.
- Block, Stanley B.** 2004. "The Latest Movement to Going Private: An Empirical Study." *Journal of Applied Finance*, 14(1): 36–44.
- Bowman, Frank O., II.** 2005. "The Failure of the Federal Sentencing Guidelines: A Structural Analysis." *Columbia Law Review*, 105(4): 1315,1319–20.
- Bratton, William W.** 2003 "Enron, Sarbanes-Oxley and Accounting: Rules versus Principles versus Rents," *Villanova Law Review* 48(4): 1023.
- Brau, James C., and Stanley E. Fawcett.** 2006. "Initial Public Offerings: An Analysis of Theory and Practice." *Journal of Finance*, 61(1): 399–436.
- Brickey, Kathleen F.** 2004. "Enron's Legacy." *Buffalo Criminal Law Review*, 8(1): 221–75.
- Bryan, Stephen H., and Steven B. Lilien.** 2005. "Characteristics of Firms with Material Weaknesses in Internal Control: An Assessment of Section 404 of Sarbanes Oxley." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=682363.
- Bucy, Pamela H.** 2004. "Carrots and Sticks." *Buffalo Criminal Law Review*, 8(1): 279–322.
- Bushee, Brian J., and Christian Leuz.** 2005. "Economic Consequences of SEC Disclosure Regulation." *Journal of Accounting and Economics*, 39(2): 233–64.
- Butler, Henry N., and Larry E. Ribstein.** 2006. *The Sarbanes-Oxley Debacle: How to Fix It and What We've Learned*. Washington, DC: American Enterprise Institute Press.
- Carney, William J.** 2005. "The Costs of Being Public after Sarbanes-Oxley: The Irony of 'Going Private.'" *Emory Law Journal*, 55(1): 141–60.
- Chan, Kam C., Barbara R. Farrell, and Picheng Lee.** 2006. "Earnings Management, and Return-Earnings Association of Firms Reporting Material Internal Control Weaknesses under Section 404 of the Sarbanes-Oxley Act." Unpublished Paper.
- Chhaochharia, Vidhi and Yaniv Grinstein.** 2005. "Corporate Governance and Firm Value—The Impact of the 2002 Governance Rules." Cornell University, Johnson School Research Paper 23-2006. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=556990.
- Choi, Stephen.** 1998. "Market Lessons for Gatekeepers." *Northwestern Law Review*, 92(4): 916–66.
- Clark, Robert C.** Forthcoming. "Corporate Governance Changes in the Wake of the Sarbanes-Oxley Act: A Morality Tale for Policymakers Too." *Georgia State University Law Review*.
- Coates, John C., IV.** 1999. "'Fair Value' as a Default Rule of Corporate Law: Minority Discounts in Conflict Transactions." *University of Pennsylvania Law Review*, 147: 1251.
- Coates, John C., IV.** 2006. "A Short Critique of Selected Empirical Studies of the Sarbanes-Oxley Act." Unpublished Paper.
- Coffee, John C., Jr.** 2006. *Gatekeepers: The Professions and Corporate Governance*. Oxford: Oxford University Press.
- Cohen, Danial A, Aiysha Dey, and Thomas Lys.** 2005a. "Trends in Earnings Management and Informativeness of Earnings Announcements in the Pre- and Post-Sarbanes Oxley Periods." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=658782.
- Cohen, Danial A, Aiysha Dey, and Thomas Lys.** 2005b. "Trends in Earnings Management in

- the Pre- and Post-Sarbanes Oxley Periods." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=813088.
- Cunningham, Lawrence A.** 2003. "The Sarbanes-Oxley Yawn: Heavy Rhetoric, Light Reform (and It Just Might Work)." *Connecticut Law Review*, 35(3): 915-989.
- De Franco, Gus, Yuyan Guan, and Hai Lu.** 2005. "The Wealth Change and Redistribution Effects of Sarbanes-Oxley Internal Control Disclosures." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=706701.
- Dunn, Christine.** 2006. "Effective Controls, Clean Opinions Rule the Roost." *Compliance Week*. April 25, 2006. <http://www.complianceweek.com/>.
- Dyck, Alexander, Morse Adair, and Luigi Zingales.** 2006. "Who Blows the Whistle on Corporate Fraud?" http://papers.ssrn.com/sol3/papers.cfm?abstract_id=891482.
- Economist.* 2002. "The Backlash against Business." July 4. http://www.economist.com/world/na/displayStory.cfm?story_id=1217728.
- Eldridge, Susan W., and Burch T. Kealey.** 2005. "SOX Costs: Auditor Attestation under Section 404." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=743285.
- Engel, Ellen, Rachel M. Hayes, and Xue Wang.** 2004. "The Sarbanes-Oxley Act and Firms' Going-Private Decisions." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=546626.
- Ettredge, Michael, Jim Heintz, Chan Li, and Susan W. Scholz.** 2006a. "Auditor Realignments Accompanying Implementation of Sox 404 Reporting Requirements." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=874836.
- Ettredge, Michael, Chan Li, and Lili Sun.** 2006b. "The Impact of Internal Control Quality on Audit Delay in the SOX Era." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=794669.
- Fairfax, Lisa M.** 2002. "Form over Substance? Officer Certification and the Promise of Enhanced Personal Accountability under the Sarbanes-Oxley Act." *Rutgers Law Review*, 55(1).
- Financial Executives Research Foundation, Inc.** 2001. *Quantitative Measures of the Quality of Financial Reporting*, June 7, 2001. <http://www.fe.org/download/QualFinRep-6-7-2k1.ppt>.
- Financial Executives Research Foundation, Inc.** 2006. *Sarbanes-Oxley Compliance Costs Are Dropping*, April 6, 2006. <http://www2.fe.org/news/press.cfm>.
- Financial Services Authority.** 2004. *Annual Report*. http://www.fsa.gov.uk/pages/Library/Corporate/Annual/ar04_05.shtml.
- Freeman, Jody.** 2000. "The Private Role in Public Governance." *New York University Law Review*, 75(3): 543-675.
- Glaeser, Edward L., Simon Johnson, and Andrei Shleifer.** 2001. "Coase versus the Coasians." *Quarterly Journal of Economics*, 116(3): 853-99.
- Griffin, Paul A., and David H. Lont.** 2005. "The Effects of Auditor Dismissals and Resignations on Audit Fees: Evidence Based on SEC Disclosures under Sarbanes-Oxley." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=669682.
- Hail, Luzi, and Christian Leuz.** 2006. "Cost of Capital Effects and Changes in Growth Expectations around U.S. Cross-Listings." European Corporate Governance Institute. ECGI Finance Working Paper 46-2004. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=549922.
- Halling, Michael, Marco Pango, Otto Randal, and Josef Zechner.** 2006. "Where Is the Market? Evidence from Crosslistings in the U.S." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=890308.
- Hammersley, Jacqueline S., Linda A. Meyers, and Catherine Shakespeare.** 2005. "Market Reactions to the Disclosure of Internal Control Weaknesses and to the Characteristics of Those Weaknesses under Section 302 of the Sarbanes Oxley Act of 2002." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=830848.
- Healy, Paul, and Krishna G. Palepu.** 2003. "How the Quest for Efficiency Undermined the Market." *Harvard Business Review*, July 1, 2003.
- Hilary, Gilles, and Clive Lennox.** 2005. "The Credibility of Self-Regulation: Evidence from the Accounting Profession's Peer Review Program." *Journal of Accounting and Economics*, 40(1-3): 211-29.
- Holmstrom, Bengt, and Steven N. Kaplan.** 2003. "The State of U.S. Corporate Governance: What's Right and What's Wrong?" *Journal of Applied Corporate Finance*, 15(3): 8-20.
- Hsu, Peter C.** 2004. "Going Private—A Response to an Increased Regulatory Burden?" UCLA, School of Law. Law and Economics Research Paper: No. 04-16. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=619501.
- Jackson, Howell E.** 2005. "Variation in the Intensity of Financial Regulation: Preliminary Evidence and Potential Implications." Harvard University Law School, John M. Olin Center Discussion Paper 521. http://www.law.harvard.edu/programs/olin_center/papers/521_Jackson.php.
- Jain, Pankaj K., Jang-Chul Kim, and Zabihollah Rezaee.** 2006. "Trends and Determinants of Market Liquidity in the Pre- and Post-Sarbanes-Oxley Act Periods." Paper presented at the 14th Annual Conference on Financial Economics and Accounting, Indiana University, Bloomington.

- Jain, Pankaj K., and Zabihollah Rezaee.** 2006. “The Sarbanes–Oxley of 2002 and Security Market Behavior: Early Evidence.” *Contemporary Accounting Research* 23(3): 629–54.
- Kamar, Ehud, Pinar Karaca-Mandic, and Eric L. Talley.** 2006. “Going-Private Decisions and the Sarbanes–Oxley Act of 2002: A Cross-Country Analysis.” University of Southern California. Center in Law, Economics and Organization Research Paper C06-05. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=901769.
- Kraakman, Reiner H.** 1986. “Gatekeepers: The Anatomy of a Third-Party Enforcement Strategy.” *Journal of Law, Economics, and Organization*, 2(1): 53–104.
- Krent, Harold J.** 1990. “Fragmenting the Unitary Executive: Congressional Delegations of Administrative Authority Outside the Federal Government.” *Northwestern Law Review*, 62(1): 62–112.
- Langevoort, Donald C.** 2006. “Internal Controls after Sarbanes–Oxley: Revisiting Corporate Law’s Duty of Care as Responsibility for Systems.” *Journal of Corporation Law*, 31(3): 893–947.
- Law Firms.** 2002. Sarbanes–Oxley Act Interpretive Issues under Section 402 —Prohibition of Certain Insider Loans: <http://www.lw.com/upload/docs/doc29.pdf>.
- Leuz, Christian, Alexander J. Triantis, and Tracy Yue Wang.** 2006. “Why Do Firms Go Dark? Causes and Economic Consequences of Voluntary SEC Deregistrations.” University of Maryland, Robert H. Smith School of Business Research Paper RHS 06-045. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=592421.
- Levitt, Arthur, Jr.** 2002. “Accounting and Investor Protection Issues Raised by Enron and Other Public Companies.” Presented at U.S. Senate, Committee on Banking, Housing and Urban Affairs Hearing, February 12, 2002. <http://www.iasplus.com/resource/levitt.pdf>.
- Li, Haidan, Morton Pincus, and Sonja O. Rego.** 2006. “Market Reaction to Events Surrounding the Sarbanes–Oxley Act of 2002 and Earnings Management.” Unpublished Paper. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=475163.
- Linck, James S., Jeffry M. Netter, and Tina Yang.** 2006. “Effects and Unintended Consequences of the Sarbanes–Oxley Act on Corporate Boards.” (May 16) AFA 2006 Boston Meetings Paper. <http://ssrn.com/abstract=902665>.
- Litan, Robert.** 2005. “Sarbanes–Oxley Section 404 Costs and Implementation Issues: Survey Update.” <http://www.soxinternalcontrolinfo.com/pdfs/CRAII.pdf>.
- Litvak, Kate.** 2005. “The Effect of the Sarbanes–Oxley Act on Non-US Companies Cross-Listed in the US.” University of Texas Law, Law and Economics Research Paper 55. <http://ssrn.com/abstract=876624>.
- Macey, Jonathan R., and Geoffrey P. Miller.** 1991. “Attorney’s Role in Class Action and Derivative Litigation: Economic Analysis and Recommendations for Reform.” *University of Chicago Law Review*, 58 (February) pp. 1–7.
- Marosi, Andras, and Nadia Z. Massoud.** 2004. “Why Do Firms Go Dark?” http://papers.ssrn.com/sol3/papers.cfm?abstract_id=570421.
- McMullen, Dorothy A., Kannan Raghunandan, and Dasaratha V. Rama.** 1996. “Internal Control Reports and Financial Reporting Problems.” *Accounting Horizons*, 10(4): 67–75.
- Moriarty, George B. and Philip B. Livingston.** 2001. “Quantitative Measures of the Quality of Financial Reporting; Statistical Data Included.” *Financial Executive*, 17(5): 53.
- Nagy, Donna M.** 2005. “Playing Peekaboo with Constitutional Law: The PCAOB and Its Public/Private Status.” *Notre Dame Law Review*, 80(3): 975–1071.
- Panel on Audit Effectiveness.** 2000. *Report and Recommendations* (Aug. 31, 2000). <http://www.pobauditpanel.org/download.html>.
- Perino, Michael A.** 2002. “Enron’s Legislative Aftermath: Some Reflections on the Deterrence Aspects of the Sarbanes–Oxley Act of 2002.” *St. John’s Law Review* 76 (Fall): 671.
- Public Company Accounting Oversight Board.** 2004a. Annual Report.
- Public Company Accounting Oversight Board.** 2004b. Auditing Standard No. 2. PCAOB File No. 2004-08. <http://www.sec.gov/rules/pcaob/34-50688.htm>.
- Public Company Accounting Oversight Board.** 2004c. Auditing Standard No. 3. PACOB File No-2004-05. <http://www.sec.gov/rules/pcaob/34-50253.htm>.
- Public Oversight Board.** 2002. *The Road To Reform: A White Paper From The Public Oversight Board On Legislation To Create A New Private Sector Regulatory Structure For The Accounting Profession.*
- Rezaee, Zabihollah, and Pankaj K. Jain.** 2006. “The Sarbanes–Oxley Act of 2002 and Security Market Behavior: Early Evidence.” *Contemporary Accounting Research*, 23(3): 629–54.
- Romano, Roberta.** 1991. “The Shareholder Suit: Litigation without Foundation?” *Journal of Law, Economics, and Organization*, 7(1): 55–87.
- Romano, Roberta.** 2005. “The Sarbanes–Oxley Act and the Making of Quack Corporate Governance.” *Yale Law Journal*, 114(7): 1521–1161.
- Shavell, Steven.** 1986. “The Judgment Proof Problem.” *International Review of Law and Economics*, 6(1): 45–58.
- Stein, Jeremy C.** 1989. “Efficient Capital Mar-

kets, Inefficient Firms: A Model of Myopic Corporate Behavior." *Quarterly Journal of Economics*, 104(4): 655–69.

Stuntz, William J. 2001. "The Pathological Politics of Criminal Law." *Michigan Law Review*, 100(3): 505–600.

Taub, Steven. 2005. "Record Number of Restatements in 2004. Review of Reviewed Item." CFO.com, January 21. <http://www.cfo.com/article.cfm/3594659?f=related>.

Thompson, Larry D. 2003. "Principles of Federal Prosecutions of Business Organizations." Memorandum to United States Attorneys, January 20, 2003. http://www.usdoj.gov/dag/cftf/business_organizations.pdf.

U. S. House of Representatives. 1995. *Conference Report, Private Securities Litigation Reform Act of 1995*. H.R. Report No. 369, 104th Congress. <http://www.lectlaw.com/files/stf04.htm>.

U.S. Government Accountability Office. 2006. *Consideration of Key Principles Needed in Addressing Implementation for Smaller Public Companies*. GAO-06-361.

U.S. General Accounting Office. 2002. *Financial Statement Restatements: Trends, Market Impacts, Regulatory Responses, and Remaining Challenges*. GAO-03-138.

U.S. General Accounting Office. 2003. *Public*

Accounting Firms: Mandated Study on Consolidation and Competition. GAO-03-864.

Wall Street Journal. 2006. "Going Private." June 3. <http://www.opinionjournal.com/weekend/hottopic/?id=110008469>.

Wilson, James Q. 1989. *Bureaucracy: What Government Agencies Do and Why They Do It*. New York: Basic Books.

Wintoki, Modupe. 2006. "Corporate Boards, Regulation and Firm Value: The Impact of the Sarbanes-Oxley Act and the Exchange Listing Requirements." <http://www.southernfinance.org/conference/SFA2006/awards.php?PHPSESSID=fc396d3399c7ca2a0a6f9b50d9e0eaf7>.

Zhang, Ivy X. 2005. "Economic Consequences of the Sarbanes-Oxley Act of 2002." http://w4.stern.nyu.edu/accounting/docs/speaker_papers/spring2005/Zhang_Ivy_Economic_Consequences_of_S_O.pdf.

Zingales, Luigi. 2004. "The Costs and Benefits of Financial Market Regulation." European Corporate Governance Institute. ECGI Law Research Working Paper 21-2004. http://Papers.Ssrn.Com/Sol3/Papers.Cfm?Abstract_Id=536682.

Zingales, Luigi. 2006. "Is the U.S. Capital Market Losing Its Competitive Edge?" Unpublished Paper.