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DISSERTATION

The Role of Public and Private Litigation in the Enforcement of Securities Laws in the United States

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This document was submitted as a dissertation in August 2007 in partial fulfillment of the requirements of the doctoral degree in public policy analysis at the Pardee RAND Graduate School. The faculty committee that supervised and approved the dissertation consisted of James R. Hosek (Chair), Eric L. Talley, and James N. Dertouzos.

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Abstract

My research conducts a broad, empirical study of the overlapping public and private mechanisms that enforce federal securities laws. I use two original datasets to provide a descriptive analysis of federal enforcement actions, initiated by the Securities Exchange Commission, and private class actions, filed on behalf of aggrieved investors, between 1998 and 2004. My study also examines how the Sarbanes-Oxley Act of 2002 has perturbed the balance of joint litigation of securities suits, and discusses the role of public and private litigation in disciplining self regulatory organizations, in particular the national stock exchanges, since 1990. A final contribution of this study is an analysis of the corporate governance reforms that both public and private litigators have required defendant firms to adopt, as part of their settlement agreements, together with an analysis of the market reaction to these reforms.

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I would like to dedicate this dissertation to my family. My parents, Anand and Rita Ramphal whose love, support, clarity and wisdom were a *sine qua non* of this accomplishment; my fiancée, Arti, for her unyielding belief in me and in our dreams; my sister, Raveena, for offering her love, guidance and mettle through this arduous journey; my brother, Neal, for offering light in bygone, darker times; and John and Pauline Vance for giving me a home and a family away from home.

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Chapter 1: Introduction

The civil enforcement of securities laws in the United States has traditionally occurred within a system of sometimes overlapping public and private litigation, resulting in wrongdoers facing a potentially wide array of sanctions. The Securities and Exchange Commission (SEC) is the regulatory agency that has been tasked with ensuring that investors are protected, and that fair, orderly and efficient capital markets are maintained. The work of the SEC in punishing securities law violations has been complemented by private actions directed against the company and/or its directors. Although private shareholder actions can take one of three forms - viz. a direct shareholder action, a derivative suit and an investor class action - the strong monetary incentives for aggrieved investors combined with the ability to bring a direct, unencumbered suit makes class actions the primary mechanism via which shareholders seek compensation and, on occasion, corporate reform. The SEC also shares supervision of the financial markets with self-regulatory organizations (SROs), most notably the national exchanges. SROs enjoy rulemaking and enforcement authority comparable to the SEC, although their powers are limited to the financial market that they police.

Understanding the nexus between private and public enforcement mechanisms has taken on added significance in recent years after the spate of corporate scandals and bankruptcies at several leading companies, including Enron, WorldCom and Tyco. The failure of regulatory authorities to detect wrongdoing, enforce ethical business practices, and obtain adequate investor restitution has been of great concern to policymakers. Investor losses dent investor confidence and lower the overall willingness of the public to invest. This, in turn, hinders the formation of capital in the economy leading ultimately to lower levels of economic growth than could otherwise have been achieved. In the context of joint securities enforcement, encouraging a return to ethical corporate behavior can be achieved by an improvement in quality and effectiveness of regulation or more effective punishment of wrongdoing, with the latter taking the guise of more stringent civil and criminal penalties and adequate compensation to harmed investors.

The migration towards private actions in recent years has brought into sharp focus the need for government, the private sector and civil society to effectively coordinate their efforts and resources in order to protect the investors, who now number more than half of the nation. The greater policy question that presents is whether the complete system of overlapping civil enforcement is welfare maximizing. Unfortunately, empirical research in this field is nascent. As Grundfest notes "… [while] praise for private party litigation is well-deserved in many situations, the relationship between private and federal enforcement of securities laws has not been subject to rigorous analysis." This study aims to narrow this gap by making four empirical contributions to the joint enforcement literature:

1. A descriptive analysis of the mix, balance, and outcomes of securities litigation undertaken by the SEC and investor class actions between October 1998 and October 2003
2. Discerning the effect of Sarbanes-Oxley and the contemporaneous funding increases at the SEC on the balance of litigation in the subset of jointly enforced suits
3. A comparison of how public and private litigators have reformed the corporate governance structures of defendants for whom a settlement is observed
4. An analysis of the historical interplay between the SEC, class actions and internal SRO enforcement mechanisms within the context of the national exchanges, and the potential disciplining effects of demutualization on the behavior of the exchanges

The objectives among the three civil enforcement mechanisms (SEC, private investor class actions and SRO enforcement) differ, suggesting systematic differences in the wrongdoers targeted and the remedies sought.

In choosing its enforcement actions the SEC acts according to the dictates of its own internal policy, with no regard to the potential liability that the defendant may face from other civil enforcement mechanisms. Limited resources constrain the SEC's pursuit of all viable enforcement actions. Accordingly, the SEC prioritizes its actions depending on the "message delivered" to industry and the public about the efficacy of its enforcement efforts, the extent of investor harm, the anticipated deterrence value of the suit, and the Commission's desire to actively target and police particularly serious offences such as insider trading and financial fraud. The Commission's stated policy is also to review a broad cross-section of regulatory filings by issuers, so as to maximize the breadth and deterrence effects of its enforcement activities. As a consequence of its broad enforcement mandate the defendants pursued by the SEC range from individuals (70.5%), to small businesses and partnerships (20.9%), to publicly traded companies (8.6%). The spectrum of infringements pursued by the Commission is as diverse with 31 different legal causes of action, although six primary violations of securities laws constitute approximately 75% of all cases filed. Most notable among these violations are false financial disclosure, securities offering violations and insider trading.

The majority of the SECs enforcement actions (and civil securities actions generally) are resolved by settlement with the defendants, who typically consent to judicial or administrative orders requiring defendants to take remedial actions and refrain from further violations of securities laws. Approximately 46% of the enforcement actions studied imposed a monetary sanction, either in the form of disgorgement of illegal profits or civil penalties (fines), while in over 95% of cases at least one form of non-monetary sanction (injunction, cease and desist order, suspension, or bar) was levied against the defendant. Although the SEC has civil enforcement authority only, in instances of egregious violations of securities law the Commission will cooperate closely with the Department of Justice (DOJ) to litigate criminal cases.

A recurring theme in the governance of a diffusely-held public company is the collective action problem that arises as a result of no single shareholder having the necessary incentive to invest the resources in monitoring management. Allen and Kraakman note that "[a]s a consequence, the large majority of shareholder suits against the directors and officers of public companies are initiated by the plaintiff's bar. Attorneys are the real parties of interest in these actions, and attorneys' fees are the principal incentive to bring suit … In form, these attorneys are the economic agents of their shareholder-clients. In substance, they are the legal entrepreneurs motivated by the prospect of attorneys' fees."

It is unsurprising, then, that 84.2% of class action defendants are public corporations, in contrast with SEC enforcement actions where just 8.6% of defendants are publicly traded companies. “Entrepreneurial” behavior by revenue maximizing plaintiff attorneys may have also resulted in less meritorious class actions being filed when compared with pre-SOX filings. In this context, a second key difference between SEC actions and class actions lies in their dismissal rates. The overwhelming majority of SEC actions reach settlement and only 0.06% of all cases filed are dismissed on appeal. In stark contrast, 35% of all class actions that have reached finality have been dismissed.

A direct comparison between SEC enforcement actions and class actions against the same defendant based on the same cause of action is revealing. Class actions are more effective in obtaining investor restitution recovering on average almost four times more than the corresponding enforcement action. Jointly enforced suits are also fairly rare, constituting just 4.1% of all SEC enforcement actions and 8.25% of all class actions. However, they represent 56.79% and 47.33% of *total* recoveries by public and private enforcement mechanisms respectively. The class period in class actions with parallel SEC proceedings is also significantly longer than in instances where only a private action is filed. A longer class period implies that more shares have been traded during the interval of alleged fraud, and this will typically lead to a greater damage claim for the plaintiffs. Private suits also settle more quickly when there is a parallel SEC investigation than they ordinarily would, most likely because of the superior information flowing from the SEC proceeding.

A recent landmark development in the sphere of securities law has been the passing of the Sarbanes-Oxley Act (SOX or “the Act”) in 2002 in response to the spate of corporate scandals at the turn of this century. Although SOX did not affect private securities litigation in any direct manner, a central tenet of SOX was the strengthening of the SEC enforcement mandate by improving the Commission’s ability to detect, investigate and prosecute securities fraud. Investigators are now in possession of more complete business records and financial statements; have wider access to auditors’ reports of the firm’s financial health and internal controls; are better able to protect corporate whistleblowers; and may punish firms admitting wrongdoing by imposing a wider array of penalties than before. This statutory fillip was allied to a substantial, almost contemporaneous increase in the Commission’s funding that enabled the hiring of quality, specialist investigatory staff during the largest recruitment drive in the seven decade history of the Commission. As a result, SEC enforcement in the post-SOX period has meant more, highly skilled staff, armed with substantially greater investigative powers, working on relatively fewer enforcement actions relative to the increase in resources.

In seeking to discern the effects of SOX on joint litigation, a theoretical model is developed to explore the strategic interaction between private and public enforcers in suits against common defendants. A key, empirically testable prediction flowing from the theoretical model is that an exogenous increase in the volume of evidence collected by the SEC during a joint enforcement proceeding will reduce the quantum of evidence proffered by the investor-plaintiff during the subsequent class action litigation. This prediction holds provided that the evidence collected by the SEC is "substitutable" between federal and class action litigation proceedings.

This prediction is supported by consistent empirical findings. Plaintiffs in jointly enforced actions have delayed their filings in the post-SOX era, relative to the SEC filing date. The most plausible reason for this shift is ostensibly the benefit that the private plaintiffs are able to glean from the SEC's superior powers of investigation. Furthermore, consistent with the plaintiff bar making greater use of the evidence obtained from the investigative efforts of federal regulators weaker private suits have been filed at the margin, as evidenced by the higher dismissal rates of jointly filed class actions in the post-SOX era.

Private enforcement of the securities laws through class action litigation is costly, both to the litigants and to the public. Thus, the increase in dismissal rates, inasmuch as they reflect the filing of non-meritorious suits, should be of concern to policymakers. On the other hand, in assessing the overall effect on social welfare, the costs of these dismissed suits must be measured against the deterrence of fraud and the increase in public confidence in the securities market that more robust private securities litigation, indirectly encouraged by SOX, has fostered. It is plausible to believe that after the recent corporate scandals the idea of effective joint enforcement is appealing to investors, with the potential for (limited) restitution at least providing some level of comfort to harmed investors wishing re-enter the investments arena.

The third chapter of this dissertation tackles the issue of how public and private litigators addressed the reform of the corporate governance structures of settling defendants. Corporate reformers face the challenge of tailoring governance reforms to enhance social welfare. Welfare is enhanced by corporate governance reforms (and civil and criminal penalties generally) if they efficiently deter future violations of securities laws that damage investors. However, a fine balance must be struck with over-deterrence, which chills decision making consistent with profit maximization. As a general proposition governance reforms enhance welfare if the legal costs of obtaining reforms and losses incurred as a result of more cautious behavior by managers, taken together, are less than the damage to investors in absence of such reforms.

In general, governance reforms are rarely pursued by either public or private enforcers. While the SEC has had its rulemaking authority over governance matters limited by restrictive legal precedent, the Commission, of its own accord, has usually sought to limit governmental intervention in internal affairs of the corporation. Private enforcers, on the other hand, have been reluctant to negotiate costly governance reforms, for which they ostensibly receive no additional compensation.

Nevertheless, in the most egregious violations of investor protection, consent decrees in enforcement actions may specifically alter the corporate governance structures of settling defendants. As Schwartz (1984) has noted "…[such] settlements give the Commission an influence in the boardroom far beyond that allowed under any specific provision in the statutes or rules, or under any court decisions."

There are also a limited number of instances where private plaintiffs have used the class action mechanism to coerce defendant firms into reforming their corporate governance structures. Notably, 81% of the private plaintiffs in governance suits were institutional investors suggesting that they had the resources and economic incentive to monitor both management and their class action attorney. The enhanced monitoring capacity of institutional investors stands in stark contrast to the traditional collective action problem attendant with diffuse, public ownership of most public corporations.

Where governance reforms are pursued by public and private enforcement mechanisms, private investors have been successful in obtaining a wider range of reforms from settling defendants than the SEC. Furthermore, public and private enforcers are equally likely to pursue more stringent governance reforms. It would appear as if private governance cases are highly selected subset of class actions, in which plaintiffs have taken their role as custodians of all shareholder interests very seriously. There is evidence to suggest that plaintiffs may have been willing to personally absorb the time and costs associated with negotiating severe or substantial settlements, as 25% of governance suits settled without any settlement fund being created.

Settlements requiring corporate governance reforms and, in particular SEC governance actions, have turned out to be more wide ranging, or stringent, than the markets have expected. A plausible explanation for this result is that the markets had acquiesced to prior firm behavior which, although consistent with profit maximization, had bordered on illegality. The governance settlements subsequently constrained management discretion to a greater extent than the market had expected, leading to a significant fall in share prices.

As outlined in Chapter 4, a primary concern of SROs is maintaining the integrity of their respective financial markets, via the regulation of the activities of member organizations. Operating under federal oversight, SROs are responsible for promulgating standards, conducting inspections, and undertaking enforcement actions against members who fail to comply with their standards. Ideally, self regulation allows market participants to harness their collective knowledge to adopt and enforce standards that give due consideration to the complexities of the securities industry. The pitfalls of ill-tailored and invasive statutory regulation are avoided, while the government benefits from being able to leverage its scarce resources via oversight of the SROs by the Commission. Nevertheless, a system of self regulation bears some risks. Self-regulators are not disinterested but may be biased by their industry affiliation. Poor management of these clashing interests by SROs may lead to lackluster rulemaking, a lack of vigilance during surveillance of market operations and inadequate enforcement in instances of wrongdoing.

This chapter argues that the relative paucity of enforcement actions between 1990 and 2005 reveals a major concern for policymakers. In a view that finds favor with SEC and NYSE insiders, it is contended that constrained resources have resulted in the SEC lacking the expertise to properly detect all but the most blatant violations by SROs. This has resulted in the likely under-deterrence of trading infractions at SROs.

Moreover, exchanges have historically been organized as non-profit mutualized companies with ownership vesting in no more than several dozen tightly knit members, making the organization of a plaintiff class virtually impossible. In recent years, however, the overwhelming national trend has been towards “demutualized” exchanges that are listed as public companies. Demutualization has thrown another stakeholder into the mix, namely public shareholders. This chapter charts the possible effect of demutualization on self regulation and the extent to which the process may fuel private class actions, as ownership of exchanges begins to diffuse into the wider investment community.

The added dimension of conflict between effective SRO functioning and shareholder wealth maximization has required a serious reconsideration by policymakers on the role and efficacy of self-regulation. One on hand, it is in the interest of public shareholders to ensure that SROs properly regulate their internal markets. Institutional investors, with substantial financial resources are especially capable of monitoring the conduct of SROs. Nevertheless the profit motive of demutualized exchanges may also have led to a possible decrease in costly self-regulation, behavior that would be equally consistent with the objectives of private investors. To the extent that the profit motive may have further hindered the SEC’s oversight of the national financial markets, this chapter proposes outsourcing the surveillance of financial transactions to a private exchange-auditor as the most effective means of regulating SRO behavior.

Chapter 2: An Overview of Joint Enforcement of Securities Suits by Public and Private Plaintiffs

1. Introduction

The enforcement of securities laws has historically occurred within a framework of overlapping public and private litigation. Understanding the link between private and public enforcement mechanisms has taken on added significance in recent years following the corporate scandals and bankruptcies at a host of leading companies, beginning with Enron in 2001. Regulatory authorities were roundly condemned for failing to detect the wrongdoing, and subsequently to obtain adequate investor restitution. The result has been a substantial growth in private investor class action attorneys, as shareholders turn have turned to private litigation for relief. The challenge for policymakers has been to shape the landscape of securities enforcement to develop and fortify the public-private partnership in a manner that enhances the overall welfare of society.

This chapter may be divided into 3 parts viz. a policy background and literature review; a descriptive analysis of public and private actions; and an examination, with the help of a theoretical model, how the Sarbanes-Oxley Act of 2002 (SOX) has perturbed the balance of public and private litigation.

The **first** part of this chapter (Section Two) examines the academic literature to delve into the history of the public-private partnership in securities litigation. It attempts to discern the basis of the legal authority of both private and public enforcement mechanisms, the nature of the incentives facing each of these parties in their decision to file suit, and the range sanctions that each may impose on wrongdoers. With regard to private suits, the legacy of the forceful expansion of legal remedies for disaffected investors established by the federal courts towards the middle of last century has largely endured. This well developed legal basis combined with the substantial investor restitution that class actions promise and the procedural advantage of bringing a direct, unencumbered suit make class actions the primary mechanism via which shareholders seek compensation and reform.

The **second** part of this paper (Sections 3 to 6) details and compares the actual mix, balance, and outcomes of securities litigation undertaken by the SEC and investor class actions. To the detriment of policy makers there has been little empirical evidence or systematic, rigorous analysis, that has compared and contrasted the breadth and efficacy of these parallel enforcement mechanisms. This study aims to fill this gap in the literature by providing a factual, empirical, and theoretical foundation to help structure the debate surrounding the joint enforcement of securities statutes.

The **third** part of this paper (Sections 7 and 8) examines, with the aid of a theoretical model, how SOX has perturbed the balance of public and private litigation. It argues that the enactment of SOX reinvigorated the SEC's enforcement mandate via a host of provisions that fostered the Commission's ability to investigate and prosecute securities fraud. This statutory encouragement was allied to a substantial, almost contemporaneous increase in the Commission's funding that enabled the hiring of quality, specialist investigatory staff. Linking these arguments with the theoretical predictions it is argued that the statutory and funding encouragement, acting in tandem, have provided the exogenous increase in the amount of evidence typically collected by the SEC during its investigative process. Empirical evidence is then introduced to show how SOX has encouraged the plaintiff bar to make greater use of the evidence obtained from the investigative efforts of federal regulators.

PART A: BACKGROUND AND LITERATURE

2. Background

2.1. A Brief Legal History of Public and Private Enforcement Actions

Three major mechanisms of securities enforcement may be discerned – viz. regulatory actions by the SEC, private suits that most often take the form of investor class actions, and criminal enforcement by federal authorities. The historical and legal roots of each of these mechanisms are discussed in great detail below.

2.1.1 Federal Enforcement by the Securities and Exchange Commission (SEC)

The SEC is the regulatory agency that has been tasked with ensuring that investors are protected, and that fair, orderly and efficient capital markets are maintained. The enabling statute of the Commission is the Securities Exchange Act of 1934, which was passed by Congress in the wake of the stock market crash of 1929.

The SEC achieves its objectives by exercising its authority in three broad areas. First, the SEC requires extensive public disclosure by reporting companies of all important and relevant financial information, in accordance with the provisions of the Securities Act of 1933 and the Securities Exchange Act of 1934. Secondly, by virtue of the general provisions of its creating statute, the SEC maintains an important rulemaking authority. The Commission exercises its rulemaking discretion in a staged, public process that seeks to solicit a diversity of opinions from stakeholders before the final adoption of a rule.

Finally, and most importantly for the purposes of this chapter, the SEC is also responsible for investigating potential violations of the securities statutes and initiating enforcement actions either in federal court or before an administrative law judge. The choice of forum depends most often on the seriousness of the allegations, the complexity of the legal issue at hand, and the type of punishment sought. The SEC has the authority to impose a variety of sanctions on wrongdoers including disgorgement of illicit gains, civil penalties (fines), injunctions against future violations of the securities laws, and orders barring an offender from participation in the brokerage industry or from acting as an officer or director of a public company.

2.1.2 Private Enforcement of Securities Legislation

The work of the SEC in punishing securities law violations has been complemented by private actions directed against the company and/or its directors. Private shareholder actions can take one of three forms viz. a direct shareholder action, a derivative suit and an investor class action. A direct shareholder action is a suit brought by a shareholder to recover losses that are separate and distinct from those suffered by other shareholders. The very narrow and specific scope of the direct action, which is targeted at achieving monetary restitution for an *individual* shareholder, renders these suits unimportant for the purposes of this study.

Derivative suits are filed by shareholders to enforce a right of action belonging to the company and which the company has failed to enforce. In contrast, investor class actions are usually driven by the plaintiff bar and involve a representative shareholder suing on behalf of other shareholders having a similar interest in the outcome.

There are two unattractive characteristics of derivative suits to investors which result in class actions being the more likely vehicle by which disaffected shareholders will seek redress.

Firstly, and most importantly, any monetary recovery that results from a derivative suit will usually accrue to the corporation itself, while recoveries from class actions are distributed to the class members via a settlement fund. Secondly, a variety of procedural hurdles exist in initiating derivative suits which make litigating even meritorious claims a burdensome process. Chief among these is the requirement that the plaintiff first "make demand" on the board to sue on the corporate claim which, in practice, tends to have little effect since the suit itself usually alleges wrongdoing by the officers or directors of the company. The reluctance of the board to institute a suit against itself usually results in the plaintiff having to make an application to court in which he must plead either that demand was (unsuccessfully) made or that demand should be excused since making demand would be futile. The stringency of the demand requirements is designed to limit the court's interference with the internal affairs of the corporation until all intra-corporate remedies have been exhausted. In so doing, it furthers a basic principle of corporate organization that the management of a corporation is entrusted to its board of directors.[1]

In sum, then, strong monetary incentives for aggrieved investors combined with the ability to bring a direct, unencumbered suit makes class actions the primary mechanism via which shareholders seek compensation and reform.

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[1] Cramer v. General Tel. & Electronics Corp., 582 F.2d 259, 274-275 (3rd Cir. 1978) cert. denied, U.S. 1129 (1979)

The role of private litigation in enforcing ethical corporate behavior and obtaining restitution for harmed investors has on the whole been supported by the courts, government, and legal academics.

The federal district court recognized for the first time in *Kardon v. National Gypsum Company (1947)*[2] implied private causes of action under the antifraud provisions of Rule 10(b)(5)[3] of the Securities and Exchange Act of 1934. The Supreme Court entrenched the private right of action in *J.I. Case v. Borak (1964)*[4]; a judgment that represented a high water mark for the model of a public-private partnership in the enforcement of corporate and securities laws. The Warren Court provided a substantial impetus to the plaintiff bar in its hearty approbation that "implied private actions are a most effective weapon in the enforcement of securities laws."

The significance of *Borak* began to wane in the mid-1970's under the more conservative Rehnquist court. In *Cort v Ash*[5] the Supreme Court defined a more restrictive three-prong test for implying a private right of action under federal securities laws … "First is the plaintiff one of the class for whose *especial* benefit the statute was enacted? … Second, is there any indication of legislative intent, explicit or implicit, either to create such a remedy or deny one? …And finally, is the cause of action one traditionally relegated to state law … so that it would be inappropriate to infer a cause of action based solely on federal law." Since the landmark decision in *Cort* the Supreme Court has been reluctant to imply further private rights of action under the federal securities laws.

Nevertheless, the legacy of the forceful expansion of remedies for disaffected investors established by the federal courts towards the middle of last century has largely endured so that today the majority of suits for director liability are brought under federal law, and in particular under Rule 10(b)(5). State courts play an important, supplementary role in the litigation of director liability, as the limits and substance of the troika of fiduciary duties - namely obedience, care and loyalty - are all determined by state law. Fiduciary duties are usually invoked by investors to challenge the quality of information

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[2] 69 F. Supp. 512 (E.D. Pa. 1946)
[3] Rule 10b(5) was promulgated by the SEC under S10(b) of the 1934 Act
[4] 377 U.S. 426 (1964)
[5] 422 U.S. 66 (1975)

disclosed by the firm, or to recover illicit gains that have accrued to directors whom, by virtue of their office, have been able to appropriate corporate opportunities for themselves.

2.1.3 Criminal Sanctions

The SEC may also recommend to the Department of Justice (DOJ) that it file criminal charges in instances of particularly egregious infringements of securities laws. Criminal actions are intended to deliver a strong message to the industry and public about the reach of the SEC's enforcement efforts and are an important mechanism of deterrence to future violations. During the 1990's for example the SEC assisted in obtaining, on average, approximately 83 criminal indictments and 77 criminal convictions annually. More recent trends are unclear as the SEC has stopped making information available in its Annual Reports.

2.2 An Overview of the Academic Literature on the Enforcement of Securities Statutes

The relevant empirical and theoretical literature on investor class actions may be classified as falling within one of five broad themes[6] viz. quantitative estimates of class action settlements and filings using of a variety of datasets[7]; analyses of the deterrent effect of class actions on defendant conduct[8]; the nature and strength of the incentives

[6] The next chapter, which examines the propensity and efficacy of each of these three enforcement arms in insisting on corporate governance reforms as part of their settlement agreements with defendant firms, will review, in greater detail, the extensive literature surrounding private class actions generally.
[7] See Elaine Buckberg et. al "Recent Trends in Class Action Litigation: Bear Market Cases Bring Big Settlements" (NERA Consulting, 2005) at http://www.nera.com/image/Recent_Trends_Final_2.28.05.pdf; Laura Simmons and Ellen Ryan " Post-Reform Act Securities Settlements: 2005 Review and Analysis: (Cornerstone Research, 2005) available at http://securities.cornerstone.com/pdfs/settlements_2005.pdf; Willard T. Carleton et al., "Securities Class Action Lawsuits: A Descriptive Study", 38 Ariz. L. Review 491; Marcia Kramer Mayer, Best-Fit Estimation of Damage Volume in Shareholder Class Actions: The Multi-Sector, Multi-trader Model of Investor Behavior (available on file with the author)
[8] See for example Coffee, John C., "Reforming the Securities Class Action: An Essay on Deterrence and its Implementation" (October 2006). Columbia Law and Economics Working Paper No. 293 Available at SSRN: http://ssrn.com/abstract=893833; An Economic Analysis of Consumer Class Actions in Regulated Industries by Ingo Vogelsang, Nishal Ramphal, Stephen J. Carroll, and Nicholas M. Pace (forthcoming in the Journal of Regulatory Economics); Kenneth W. Dam, "Class Actions: Efficiency, Compensation, Deterrence, and Conflict of Interest, 4 J. Legal Studies

facing class actions plaintiffs and their attorneys in their decision to file suit[9]; the relative merits of class action suits[10]; and empirical estimates of the effectiveness of the Private Securities Litigation Reform Act (PSLRA).[11]

Comparable literature on the characteristics of SEC enforcement actions is sparse. When requested to do so by Congress the SEC will sometimes release reports on particular aspects of its enforcement activities, as it did in 2003 when the Commission published a study pursuant to Section 308(c) of the Sarbanes-Oxley Act (SOX).[12] This study analyzed the Commission's enforcement actions during the five years preceding the enactment of SOX on 31 July 2002, with a view to identifying how regulatory actions could be best tailored to provide restitution for injured investors. The Commission examined a random sample of 513 defendants and noted that a small number of defendants were responsible for a disproportionately large share of the overall collections. In its conclusions, the SEC endorsed the appointment of an outside Receiver

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[9] Coffee has authored several of the leading articles in this area. See John C. Coffee "Understanding the Plaintiff's Attorney: The Implications of Economic Theory for Private Enforcement of Law Through Class and Derivative Actions, 86 Columbia L. Review 669 (1986); John C. Coffee "Rescuing the Private Attorney General: Why the Model of Lawyer as Bounty Hunter is not Working" 42 MD. Law Review (1983); Jonathan R. Macey & Geoffrey P. Miller "The Plaintiff's Attorney's Role in Class Action and Derivative Litigation: Economic Analysis and Recommendations for Reform", 58 U. Chicago Law Review (1986)

[10] Joseph A. Grundfest, "Disimplying Private Rights of Action Under the Federal Securities Laws: The Commission's Authority", 107 HARV. L. REV. 963 (1994); Janet C. Alexander, "Do the Merits Matter? A Study of Settlements in Securities Class Actions, 43 STAN. L. REV. 497, 501 (1991)"; Joel Seligman, Commentary, "The Merits Do Matter: A Commentary on Professor Grundfest's Disimplying Private Rights of Action Under the Federal Securities Laws: The Commission's Authority" 108 Harvard Law Review 438 (1994); James D. Cox, "Making Securities Fraud Class Actions Virtuous, 39 Arizona Law Review 497 (1997); Romano, Roberta. (1991) "The Shareholder Suit: Litigation without Foundation," 7 Journal of Law, Economics and Organization; Helland, Eric, "A Secondary Market Test of the Merits of Class Action Securities Litigation: Evidence from the Reputation of Corporate Directors" (February 2004). CORI Working Paper No. 04-05. Available at SSRN: http://ssrn.com/abstract=517183

[11] Johnson, Marilyn F., Karen K. Nelson and A. C. Pritchard, (2004) "Do the Merits Matter More? Class Actions under the Private Securities Litigation Reform Act" (Working Draft available on file with Author); Pritchard, A.C. and Sale, H.A., 2003, "What Counts as Fraud?" Working Paper, University of Michigan Law School 9 (available on file with Author); Beatty, R. P., P. P. Drake and C. E. Hogan, 2001," The Impact of the 1995 Private Securities Litigation Reform Act on Litigation Risk and Auditor Compensation in the IPO Market", Working Paper, University of Southern California; Bajaj, Mukesh, Sumon C. Mazumdar and Atulya Sarin. (2000) "Securities Class Action Settlements: An Empirical Analysis. Working Paper Securities Class Action Clearinghouse, Stanford University"

[12] US Security and Exchange Commission Report Pursuant to Section 308(c) of the Sarbanes-Oxley Act of 2002 (2003)

to maximize collections for aggrieved investors. A second, related SEC report[13] was conducted pursuant to Section 704 of SOX in which the Commission identified areas of company financial reporting that were most vulnerable to fraud.

This study is broader and more comprehensive than the earlier SEC reports. Instead of a random sample of settled cases, this study analyzes a specially constructed dataset of the *population* of SEC enforcement actions, consisting of 2,787 SEC suits, brought against securities law violators between October 1998 and October 2003 and which had settled by 30 June 2005. The period spanned by the data also enables an analysis of the effect of SOX on federal filing and settlement patterns, and includes the majority of high profile SEC settlements in the wake of the corporate scandals at the turn of the century that saw, among others, the demise of Enron and WorldCom. Finally, a central theme that will be explored is a comparison of, and the interaction between, public and private mechanisms of enforcement; a topic that the SEC has avoided addressing.

In one of the few papers[14] on SEC enforcement actions, the Committee of Sponsoring Organizations of the Treadway Commission (COSO)[15] analyzed a random sample of 200 instances of fraudulent financial reporting to the SEC between January 1987 and December 1997. The report reached several notable conclusions. It found that relative to public companies those firms that committed financial statement fraud were relatively small, with total assets typically amounting to less than $100 million and 78% of these companies not listed on a national exchange. Warning signs of financial distress

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[13] US Security and Exchange Commission Report Pursuant to Section 704 of the Sarbanes-Oxley Act of 2002 (2003)

[14] There is nevertheless some tangentially related literature that analyzes the effect of an announcement of an SEC enforcement action, or a restatement of company earnings, on the offending firm's market capitalization. See for example: Feroz, E. H., K. Park, and V. S. Pastena. "The Financial and Market Effects of the SEC's Accounting and Auditing Enforcement Releases." Journal of Accounting Research 29 (1991), 107-148; Dechow, P., A. Hutton, and R. Sloan. "Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC." Contemporary Accounting Research 13 (2006), 1-36; Gerety, M. and K. Lehn. "The Causes and Consequences of Accounting Fraud." Managerial and Decision Economics 18 (1997), 587–599; Palmrose, Z-V., V.J. Richardson, and S. Scholz. "Determinants of Market Reactions to Restatement Announcements." Journal of Accounting & Economics 37 (2004), 59-89

[15] Mark S. Beasley et al., Fraudulent Financial Reporting 1987-1997, An Analysis of U.S. Companies (COSO 1999)

were also fairly apparent as the median company had net income of only $175,000 in the year preceding the beginning of the fraud. In 83% of the cases either, or both, the CEO or CFO were associated with the fraud, and audit committees were either non-existent or met only once annually. Boards of directors were dominated by insiders or those with little business experience, while in nearly 40% of the companies sampled there were family relationships between directors and/or officers of the company. Furthermore, when fraud was detected it tended to be substantial. By way of comparison, the median company committing fraud had assets of approximately $16 million while the median financial misstatement amounted to $4.1 million. Moreover, most frauds were not isolated to a single fiscal period, with the median fraud period extending to 21 months. Companies found guilty of financial misstatements suffered severe penalties. Over 50% of the firms studied were either bankrupt or defunct, or had experienced a significant change in ownership following disclosure of the fraud. Twenty-one percent of the companies were delisted by a national stock exchange. Although a significant number of individuals associated with the fraud were terminated or forced to resign from their executive positions, relatively few of these executives explicitly admitted guilt or eventually served prison sentences.

This study is broader than the COSO report as it considers *all* types SEC enforcement actions, including the six most important enforcement programs viz. securities offering fraud, fraudulent financial reporting, broker-dealer fraud, insider trading, investment advisor infringements, and market manipulation. In some respects, though, this analysis may be considered as a supplement to the COSO findings. The COSO report describes the company and individual defendant characteristics in greater detail than this study which reports firm and defendant characteristics only for public companies.

In a recent contribution, broadly related to the themes explored in this chapter, Karpoff et al.[16] analyze the penalties imposed on a population 585 defendant firms facing SEC enforcement actions for financial misrepresentation between 1978 and 2002. The

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[16] Karpoff, Jonathan M., Lee, D. Scott and Martin, Gerald S. "The Cost to Firms of Cooking the Books" (January 4, 2007). Available at SSRN: http://ssrn.com/abstract=652121

authors find that the average total penalty imposed on offending firms by the legal and regulatory system is approximately $23.5 million, once account has been taken of the settlements with both the Commission and class action plaintiffs. The market, however, has been rather more unforgiving of financial fraud than the legal system. Reputational penalties, defined by the authors as the expected loss in the present value of future cash flows due to lower sales and higher contracting and financing costs, are assessed at greater than 7.5 times the sum of all penalties imposed through the legal and regulatory system. This finding leads the authors to reject the pervasive notion that financial misrepresentation is disciplined too lightly by regulatory authorities.

Although this is a seemingly persuasive study it uses a rather indirect, abstruse methodology, quite unfamiliar to the literature, to assess reputational loss. Their metric has been adapted from analyses of reputational loss of firms after product recalls and environmental violations. Reputational loss is defined as the *residual* loss in market capitalization following exposure of the fraud, after account has been taken of the class action settlements, regulatory penalties, and the decrease in book value of the firm (resulting from correcting the false accounting) during the enforcement period. The central problem with the use of the implied book value is that valuation of the assets of a company may have little relationship to the share price, so that discounting the share price on a *pro rata* basis as the fall in book value may be misleading. Moreover, the authors measure the fall in market capitalization on the day of the enforcement action announcement. This narrow timeframe is at odds with empirical evidence that suggests that markets often overreact to public announcements and that stock prices reach their equilibrium over a longer period of time. Hence, it is possible, that much of the observed effect is a "knee-jerk" reaction of the market that bears little resemblance to the markets' long term assessment of the firm's viability.

There is a notable paucity of academic literature, or systematic policy analysis, examining the nexus between public and private enforcement of securities claims. In the ensuing decade or so since Grundfest's observations, there have been only two empirical contributions to the literature that have attempted to detail and compare the actual mix, balance, and outcomes of litigation between the SEC and investor class actions.

In an important, recent article Cox and Thomas[17] ("Cox 2003") find that private suits with parallel SEC actions settle for significantly higher amounts and more quickly than other private actions (without parallel SEC proceedings). Furthermore, SEC actions tend to target, on average, significantly smaller companies than private actions. The authors also find that SEC fair funds, established by SOX for purposes of investor restitution, have had limited success - when measured in terms of the amounts collected and distributed - as well as the despite the statutory Congressional encouragement.

Despite its originality, the Cox (2003) study suffers from serious data deficiencies, and econometric and methodological problems. The authors appear to have compiled two datasets. The first consists of 265 *settled* private class actions that reached finality between 1990 and 2001. The second dataset examined 515 enforcement actions during the five years preceding the enactment of SOX on July 31, 2002, making up about 20% of all SEC actions filed during this period. Using this data, the authors' construct a third dataset consisting of a sample of jointly litigated cases (n = 37). Using these three datasets the authors attempt to draw conclusions about the *universe* of filed public and private enforcement actions and jointly litigated suits. There is little reason to assume, as the authors sometimes do, that *settled* cases share the same characteristics as all *filed* cases, especially as my study finds that 35% of all class actions filed are dismissed as lacking merit. Secondly, the Cox (2003) sample of 265 settled private class actions from 1990-2001 does not appear to constitute a population of settlements, or even a random sample for that matter, since my study suggests that a population of settlements over this period would exceed 1,000 suits. Neither does the sample of 37 jointly litigated cases appear to constitute a population, or a random sample, of jointly litigated cases. Again, this study was able to uncover over 77 jointly litigated suits over the time period spanned by the Cox (2003) study. Thirdly, the comparison of the SEC enforcement actions settled between 1997 and 2002 to the sample of 265 class actions settling between 1990 and 2001 is misleading for want of contemporaneousness in the filings. In particular, the enactment of the Private Securities Litigation Reform Act (PSLRA) in December 1995

[17] James D. Cox AND Randall S. Thomas. SEC Enforcement Heuristics: An Empirical Inquiry 53 Duke L. J. 737

constituted a major upheaval in the landscape of securities litigation.[18] This statute attempted to thwart the filing of frivolous class action securities lawsuits by raising the substantive and procedural prerequisites for filing a securities suit under federal law. Thus, class action suits that settled after December 1995 are in many respects different than prior suits with the result that pooling of the class action data masks important heterogeneity among the suits.

This study, for the first time, provides a complete, detailed, empirical analysis of the recent history of joint securities enforcement. By doing so, it is hoped that this study will provide the factual foundation to help structure and inform the policy debate on the topic of joint litigation. Instead of a non-random sample of settled cases, as per Cox (2003), this study analyzes two specially constructed datasets consisting of the *population* of SEC enforcement actions and investor class actions filed between mid-1998 and late 2003, and which had settled by late 2005. The common timeframe during which the data is collected minimizes the effect of outside factors on the data.

In a subsequent paper Cox and Thomas (2004) extend the scope of their earlier study to include class actions that settled between 1990 and 2003 (vis-à-vis their earlier study which spanned from 1990 to 2001). Beginning in 2002, the authors find a shift in the SEC's enforcement actions towards detecting and prosecuting larger frauds at firms with higher market capitalization. The article posits that the change in SEC enforcement strategy could be the result of both the election of a new national administration, which took power in early 2001, as well as public concern over the (then) recent exposure of widespread corporate malfeasance. Like their previous offering, the Cox (2004) study appears to suffer from deficiencies in data that compromise the external validity of their findings. Their sample of class action suits, SEC enforcement actions and jointly litigated cases is neither a complete population nor a random sample of these respective suits. Furthermore, the "change" in SEC enforcement strategy that the authors' document could equally plausibly stem from the fact that corporate scandals seen at the beginning of the century were the largest in decades, and followed a period of sustained 'irrational exuberance' in the capital markets. Seen in this light the higher settlements imposed against larger companies could ostensibly be the result of the egregious nature of the

[18] See the previous chapter for an extensive discussion of PSLRA and its efficacy.

frauds, prosecuted by the SEC via standard mechanisms and procedures, rather than any independent shift in SEC strategy.

PART B: A DESCRIPTIVE ANALYSIS OF PUBLIC AND PRIVATE ACTIONS

3. Data and Methodology

3.1 A Note on the Detection of Securities Fraud

Not all instances of securities fraud are punished. With this in mind, filed private and public securities actions may then be viewed as a "sample" from the universe of all securities fraud. Important preliminary questions then arise as to the *total* incidence of securities fraud annually in the United States and the extent to which this fraud is prosecuted. While this is a very challenging question to answer definitively, there are nevertheless certain indicators that serve as useful guide to an empirical estimation of the total securities fraud in the United States annually.

A frequently cited study assessing annual monetary losses from securities fraud was conducted in 2000 by the North American Securities Administrators Association (NASAA). They estimated that losses from securities and commodities fraud exceeded $40 billion per year and losses from Internet-related stock fraud exceeded $10 billion per year.[19] Using the NASAA study as an estimate of investor losses annually would imply total losses from securities fraud between 1998 and 2002 of approximately $250 billion.

The table below describes the settlement and recovery rates for public and private actions filed between 1998 and 2002, and which had settled by the middle of 2005.

[19] Federal Bureau of Investigation. (n.d.) Securities/commodities fraud. Retrieved May 23, 2003, from http://www.fbi.gov/hq/cid/fc/ec/about/about_scf.htm

Table 1: Investor Losses Recovered by Private and Public Enforcers between 1998-2003

Year	Filing Party		Fraction of Completed Suits (as of 4/05)		Damages Recovered as of 5/05 (Millions of $)	
	SEC	*Private*	*SEC*	*Private*	*SEC*	*Private*
1998	526	338	0.85	0.91	605.48	5,379.43
1999	503	305	0.85	0.88	974.64	4,109.73
2000	481	326	0.83	0.83	619.41	3,467.65
2001	598	539	0.81	0.34	3,347.06	7,773.05
2002	678	287	0.74	0.58	2,010.04	9,203.52
Total	**2,786**	**1,795**	**0.83**	**0.67**	**7,556.63**	**29,933.38**

As of mid-2005 the total liability imposed on securities violators was nearly $37.5 billion, or 15% of aggregate losses as measured by NASAA. This liability could be expected to increase over time as 18% of SEC suits and 33% of investor class actions had yet to settle. These back-of-the-envelope results on recovery rates compare favorably with a more rigorous, case-by-case analysis by Cox and Thomas[20] that suggests that investor class action recover, on average, approximately 10% of the provable losses[21] of the class.

An alternative, non-monetary measure of the extent of securities fraud in the United States is to consider the number of complaints that the SEC receives annually, as shown in Table 2 below:

[20] James D. Cox and Randall S. Thomas. SEC Enforcement Heuristics: An Empirical Inquiry 53 Duke L. J. 737

[21] The usual measure of damages of investor loss in securities class actions is the price at which the investors purchased or sold the security and the price of the security but for the misrepresentation ("provable loss"). In calculating provable losses account must be taken of the amount of trading that occurred during the period of the misrepresentation ("class period"). A more complete exposition of provable losses lies beyond the scope and aims of this chapter. See for example Willard T. Carleton et al., "Securities Class Action Lawsuits: A Descriptive Study", 38 Ariz. L. Review 491; Marcia Kramer Mayer, Best-Fit Estimation of Damage Volume in Shareholder Class Actions: The Multi-Sector, Multi-trader Model of Investor Behavior (available on file with the author)

Table 2: Number of Complaints Filed with SEC as a Fraction of Cases Prosecuted

Year	Complaints	Prosecuted	Percent
1999	25159	525	2.1
2000	28345	503	1.8
2001	20431	484	2.4
2002	21613	599	2.8
2003	19587	679	3.5

The very small percentage of cases that reach final prosecution may reflect, to some extent, the frivolous nature of some complaints, or causes of action that are not clearly justiciable. For the most part, however, the reason for the low enforcement rates was summed up by the Enforcement Division Director of the Commission when he noted before Congress that the Commission "does not have the resources to investigate every instance in which a public company's disclosure is questionable … [and] [t]his would continue to be the case even if the Commission's resources were substantially increased.[22]" The impact of resource constraints[23] on enforcement rates is underlined by the unprecedented growth in the number of corporate filings. For example, between 1991 and 2000 the number of corporate filings increased 60 percent, while fraction of all corporate filings that received some type of review by the SEC decreased from about 21 percent to 8 percent.

3.2 Data Sources

This study relies on three original, individually constructed datasets consisting of firm-level observations of securities suits brought as a private class action or a public SEC enforcement action.

[22] Grundfest (1994) quoting "*Private Litigation Under the Federal Securities Laws: Hearings Before the Subcomm. on Securities of the Senate Comm. on Banking, Housing & Urban Affairs",* 103d Cong., 1st Sess. 280 (1993)
[23] The question of resource constraints at the SEC is addressed more fully in the next chapter on corporate governance

3.2.1 SEC Enforcement Actions

The first dataset consists of 2,787 SEC actions brought against securities law violators between October 1, 1998 and September 30, 2003. The list of enforcement actions undertaken by the SEC over this five-year period was obtained from the SEC Annual reports. This data was supplemented by information obtained from the litigation releases posted on the SEC website which referenced the cases listed in the annual reports.[24] As of June 30, 2005, 2316 of these enforcement actions had reached completion, representing a settlement rate of 83.1%. A further 268 suits, or 9.6% of actions filed between 10/98 and 9/03, were still being litigated as of 7/05. A final group of 203 suits, comprising 7.3% of the population of actions, could not be properly classified. In an overwhelming number of these suits (191 of the 203 actions) the Commission had either failed to assign an action number to the suit, or had listed an action in their Annual Report of which no record could be found after an exhaustive search of both the SEC site and other web resources.

3.2.2 Private Class Actions Dataset

The private suits dataset is drawn primarily from the Securities Class Action Alert Service (SCAA) database and includes 2,169 class actions, principally filed within federal court by private plaintiffs against individual(s) and/or a firm(s) between January 1998 and June 2004. Of these actions, 851 suits or 39.2% of all suits filed, had reached final settlement as of 1 August 2005. A further 472 actions, or 21.8% of suits filed, were dismissed. The remaining 39% of suits filed, totaling 846 actions, were being actively litigated as of 1 August 2005 when the dataset was compiled.

3.2.3. Joint Private-Public Enforcement Dataset

The final dataset consists of suits that have been litigated by both the SEC and private investor plaintiffs, and was composed using the SEC and private actions datasets discussed above. The dataset consists of 114 unique SEC actions filed by private plaintiffs against individual(s) and/or a firm(s) between 10/98 and 9/03. These 114 federal actions corresponded with 179 private suits, based on the same cause of action,

[24] http://www.sec.gov/litigation.shtml

filed against the same defendant firm and/or individual. Thus, some defendants were the subject of more than one class action. The status of these jointly enforced suits is summarized in Table 3 below:

Table 3: Status of Jointly Enforced Suits

Case Status	SEC (n = 115)	Investor Class Actions (n = 179)
Settled	107 (93.4%)	103 (57.5%)
Active	8 (6.6%)	52 (29%)
Dismissed	0	24 (13.5%)

3.3 Key Data fields

Tables 4 and 5 below summarize the key fields contained in the datasets of public and private actions.

Table 4: Coded Variables in the SEC Dataset

Case Characteristics	Factual Allegations	Settlement Outcomes	Financial Characteristics of Publicly Traded Companies
Case categorization – Administrative Proceeding or Enforcement (Civil) Action	False financial disclosure; misrepresentations in financial statements, proxy materials, or prospectus	Total *monetary* settlement (including civil penalties, disgorgement, and prejudgment interest)	Total Assets
Filing and settlement dates	Fraud committed by broker dealer on customers; market manipulation	*Non-monetary* penalties - Cease & Desist Order, Injunction, Officer & Director Bar, Other Bar, Censure or Limitation on Activity, Trading Suspension, Registration Revocation	Operating Income
Details of Violation - Statute and Provision	Offering Violations	Fair Fund (established under Section 308 of SOX)	Share Price
	Investment Advisor Violations	Concurrent Criminal Action	Earnings per Share
	Other: e.g. insider trading		

Table 5: Coded Variables in the Private Actions Dataset

Case Characteristics	Factual Allegations	Outcome Variables	Financial Characteristics of Publicly Traded Companies
Filing and Hearing dates	Restated Earnings	Cash Settlement	Total Assets
Class Period	Accounting Violations	Non-cash Settlement	Operating Income
Jurisdiction – State or Federal Filing	Initial Public Offering Violations	Legal Fees	Share Price
	Violations of Sections 10b-5 or Section 11 of the Securities Act	Active/Settled/Dismissed	Earnings per Share

3.4 A Note on Methodology

Financial characteristics of publicly traded defendant firms, which appear throughout this chapter, were obtained from the Compustat database. The measures of total assets, operating income, and share price represent the respective averages of these variables, at year end, for the 7 year period 1998-2004 (inclusive). The purpose behind using an average value for these variables was to approximate their *true value* over the period of this study, rather than use a single, less reliable measure at a given point in time. The measures of total assets and operating income are intended to reflect the size and profitability of the firm respectively, while share price, inasmuch as it captures both these variables, also measures the relative attractiveness of the stock to average investors as well as investor expectations about the future profitability of the company.

It is assumed, for the purposes of this chapter, that companies for which financial data was unavailable were either private companies or public companies that had gone private before 1998 but after being sued. The possibility that there are public companies not covered by the extremely extensive, industry standard Compustat database is remote.

4. A Descriptive Summary and Analysis of SEC Enforcement Actions

This chapter now turns to a description of federal enforcement actions. The objectives of the SEC are presented together with a timeline of a typical enforcement action. Recent SEC settlements are then analyzed to help discern the key characteristics of these actions as well the efficacy and range sanctions that may be imposed on wrongdoers.

4.1. Objectives and Categories of SEC Enforcement Actions

The SEC is responsible for investigating potential violations of securities legislation and initiating enforcement actions either in federal court or before an administrative law judge. In recent Congressional testimony, Commission officials have testified that "[the] SEC generally prioritizes cases in terms of (1) the message delivered to the industry and public about the reach of the SEC's enforcement efforts, (2) the amount of investor harm done, (3) the deterrent value of the action, and (4) SEC's visibility in certain areas such as insider trading and financial fraud."[25] In deciding whether to pursue an enforcement action the Commission will seek to maximize the benefit to be gained from the action, bearing its objectives in mind, subject to its constrained resources. The resources challenges faced by the Commission are well documented and were discussed earlier in this chapter. The Commission's task is also becoming increasingly difficult given "the continued growth in the size and complexity of our securities market and the absolute certainty that persons seeking to perpetuate financial fraud will always be among us."[26]

The SEC's choice of litigation strategy (civil actions heard in federal court vis-à-vis administrative action) depends on the seriousness of the allegations, the complexity of the legal issue at hand, and the nature and severity of the sanctions sought. Since 1992, the Commission has brought more administrative actions than civil actions which, while lacking the punitive clout of civil actions, tend to be less resource intensive. (Fig. 1)

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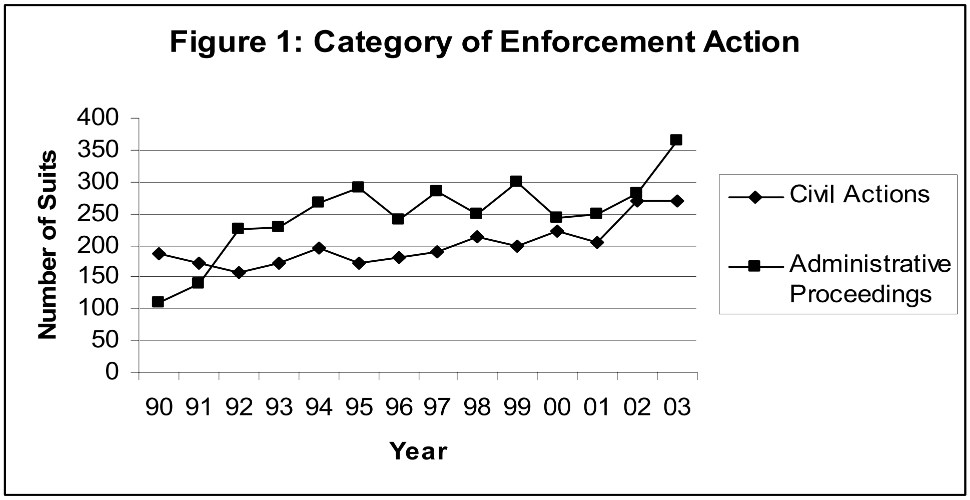
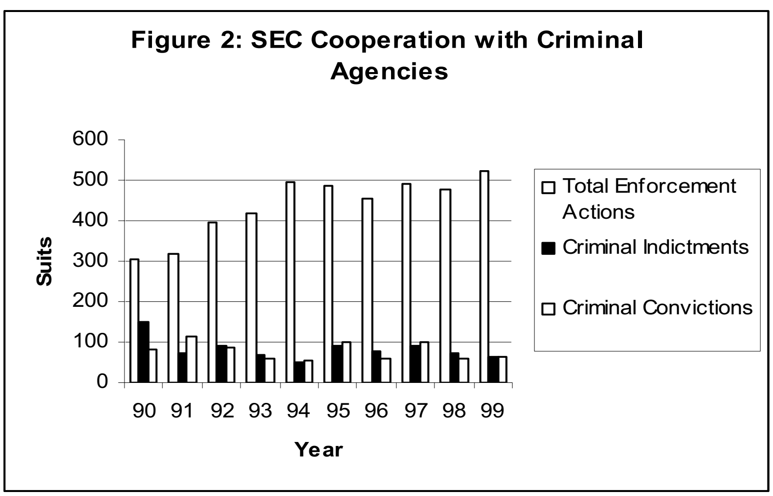
[25] Major Human Capital Challenges at SEC and Key Trade Agencies: 107th Cong. 6 (2002)

[26] Siegman quoting "*Private Litigation Under the Federal Securities Laws: Hearings Before the Subcomm. on Securities of the Senate Comm. on Banking, Housing & Urban Affairs",* 103d Cong., 1st Sess. 280 (1993)



Although the SEC has civil enforcement authority only, it cooperates closely with the criminal law enforcement agencies to litigate criminal cases where the misconduct warrants more severe action. Figure 2 below traces the success of the Commission during the 1990's in seeking criminal indictments and convictions when working in conjunction with criminal law agencies:[27]



When measured as a percentage of its total enforcement activity during the 1990's, the Commission actively assisted with criminal prosecutions (i.e. indictments

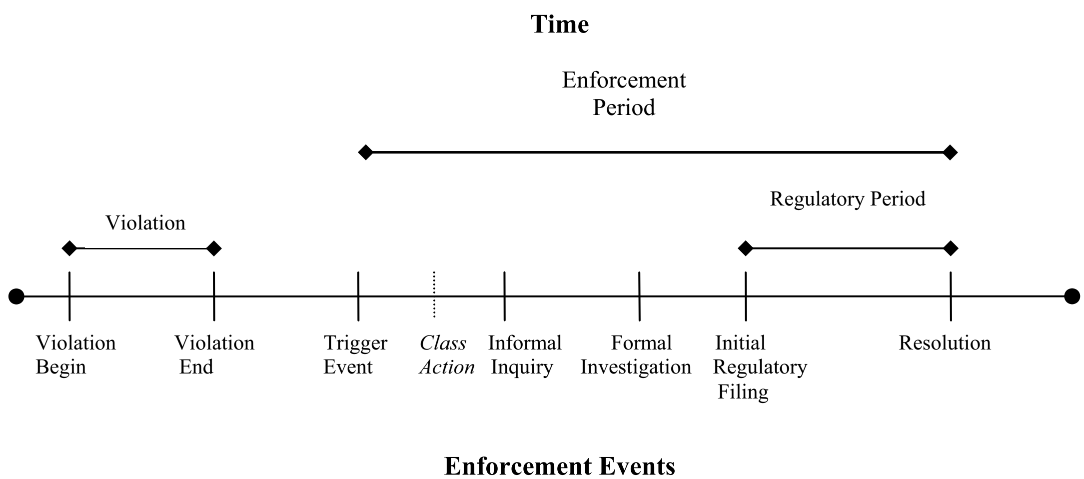
[27] Although this data is most instructive, the SEC chose to stop publishing data on its cooperation with other criminal law enforcement agencies after 1999.

combined with convictions) in approximately 39% of its annual workload. From 1990-92, for example, the SEC cooperated with other agencies in suits numbering, on average, 60% of its total annual workload. The support provided in prosecutions had diminished somewhat by the end of the decade, though, and in the second half of the 1990's the SEC's assistance had declined to roughly 32% of its annual workload.

4.2 The Enforcement Timeline

Figure 3 below depicts the usual sequence of events in a SEC enforcement action.

Figure 3: Anatomy of an Enforcement Action



Source: Karpoff (2007)

An enforcement action is typically triggered by an event that draws the attention of the SEC to the firm. Trigger events commonly include financial restatements, complaints from the public or by corporate informants, departures of auditors or legal counsel, or suspicious trading activities. With its interest piqued, the Commission begins an informal inquiry shortly after the trigger event. News of the "informal" inquiry is usually a poorly kept secret and the class action bar has historically been quick to file suit if the federal charges support a private cause of action. Clear evidence of wrongdoing at the early stages of the investigation will usually result in the SEC launching a full, formal investigation of the alleged malfeasance. Once the formal investigation is complete, the

Commission will either drop the case or proceed with administrative, civil, or criminal proceedings.[28]

4.3. Selected Characteristics of Enforcement Actions

In its role as the "public watchdog" and in discharging its mandate to protect investors and maintain fair, orderly and efficient capital markets the SEC pursues a wide range of defendants. In the population of 2,787 suits studied, 822 defendants (29.4%) were companies or limited partnerships, of which 240 (8.6%) were publicly traded. The remaining 1965 defendants (70.5%) were individuals. The spectrum of infringements pursued by the Commission is equally diverse. Although the SEC targeted six primary violations of securities laws, which constituted approximately 75% of all cases filed, the remaining 25% of suits actually encompassed some 31 different causes of action. Table 6, below, presents a breakdown of enforcement actions by mutually exclusive allegation.

Table 6: Common Allegations made in Enforcement Actions

Cause of Action	Frequency (N=2787)	Typical Infringement
Financial Disclosure	22 %	"Defendant (Δ) materially overstated its income and other financial results in periodic filings made with the Commission and in press releases issued to the public."
Securities Offering Violations	20.5 %	"Δ participated in the public distribution and sale of Pay Pop stock, notwithstanding the fact that there was no registration statement filed with the Commission in violation of Section 5 of the Securities Act of 1933"
Insider Trading	9.4 %	"Burns, then an in-house attorney with Neurex, learned of the possible acquisition of his company on the morning of April 27, 1998. Later that day, Burns tipped Pandolfi about the acquisition and recommended that Pandolfi's father purchase Neurex stock"
Fraud Against Customers by Brokers or Dealers in Securities	9 %	"UBS Warburg published exaggerated or unwarranted research. For example, one of UBS Warburg's telecom analysts issued positive recommendations on an investment banking client, Interspeed, notwithstanding his privately expressed view that the stock should be shorted."
Violations by Investment Advisors	8.3 %	"Δ deceived its clients and prospective clients by concealing a massive decline in the value of assets under their management, by providing clients with false and misleading account statements, and taking over $1.2 million in undisclosed management fees"
Market Manipulation	6.4 %	"Δ acquired control of three shell corporations; created artificial trading markets in the stocks of those corporations; artificially inflated the prices of the stocks by fraudulent statements; and then profited from his fraud through the unregistered sale of the stocks into the public markets ('pump and dump' scheme)"
Other	24.4%	

[28] Karpoff (2007)

Like federal enforcers, private plaintiffs are most concerned with fraudulent financial disclosure and securities offering violations. Approximately 27.6% of private actions listed violations of Generally Accepted Accounting Principles (GAAP) or restated earnings by firms as their primary cause of action. Offering violations (particularly initial public offerings) were cited in a further 18.5% of suits.

4.4. Settlement Outcomes in Enforcement Actions

The majority of the SEC's enforcement actions are resolved by settlement with the defendants, who typically consent to the entry of judicial or administrative orders without formally admitting or denying the allegations against them. SEC enforcement suits appear to be grounded in firm merit with just 19 litigated actions, or 0.06% of suits in the enforcement population, having been subsequently overturned on appeal.

On average, enforcement actions take approximately six months (183 days) to settle, with 90% of suits settling in just under 2 years (700 days).

With regard to punishment, the Commission has recently enunciated a set of guidelines governing the imposition of civil penalties. There are two primary considerations that render the imposition of a civil penalty more likely:

1. The accrual of a direct and material benefit to the corporation from the offense, for example from reduced expenses or increased revenues
2. The likelihood that the penalty will be used as a meaningful source of compensation when weighed against the detriment to potentially innocent shareholders

Other factors considered by the Commission when imposing civil penalties include:

- The need to deter that particular type of offense
- The extent of injury to innocent parties
- The extent of complicity in the violation across the corporation
- The level of intent of the perpetrators
- The degree of difficulty in detecting the particular type of offense

- The presence or lack of remedial steps by the corporation
- The extent of cooperation with the SEC and other law enforcement agencies

Approximately 46% of the enforcement actions studied levied monetary sanction, either in the form of disgorgement of illegal profits or civil penalties (fines). However, in 8.2% of these cases the Commission took into account the financial status of the defendant and lowered the monetary award in order to reach an "adjusted" settlement amount. The most notable instance of the Commission exercising this discretion was during enforcement proceedings against WorldCom when a $2.25 billion settlement award was reduced to $750 million actually payable.

The table below describes selected monetary settlement outcomes of enforcement actions.

Table 7: Monetary Settlements Enforcement Actions

	N	Total	Mean	Median[29]
Settlement ($)	2337	$7,948,314,612	$3,401,076	$193,462
Adjusted Settlement	2337	$5,984,680,743	$2,560,839	$163,747
Mean Civil Penalties (|civil penalties awarded)	860	$3,936,337,820	$4,577,137	$82,832

In over 95% of cases *at least* one form of non-monetary sanction was imposed on the defendant. Table 8 below summarizes some of the SEC's favored disciplinary devices and the relative frequency of their use:

[29] The median settlement award is reported conditional on an monetary settlement having been awarded.

Table 8: Non-monetary Sanctions imposed by SEC

Sanction	Freq. (N=2316)	Description
Injunction	38.5%	Δ agrees not to commit any violations of securities laws in the future
Bar	37.8%	Usually a barring or suspension of professionals, including accountants and lawyers, from appearing before the Commission.
Cease & Desist Order	29%	Administrative proceeding against someone who "is violating, has violated, or is about to violate" the securities statutes[30]
Censure/Limitation on Activity	13.4%	Δ is censured or is restricted in the type of activities that may lawfully conduct in the future (and may include requiring Δ to adopt corporate governance reforms)
Office & Director Bar	6.3%	Bars or suspends a Δ who has violated the antifraud provisions of the securities laws from serving as an officer or director of an SEC reporting company
Trading Suspension or Registration Revocation	3.8%	License of public company or broker-dealer to trade or practice is suspended or revoked

4.5 The "Fair Fund" Provision of Sarbanes-Oxley

Investor restitution was given a major boost by the establishment of the Federal Account for Investor Restitution ("Fair Fund") under Section 308 of SOX. It provided a

[30] Securities Act § 8A(e), 15 U.S.C. § 77h-1(e); Securities Exchange Act § 21C(e), 15 U.S.C. § 78u-3(e)

mechanism to help the SEC to return disgorged profits and civil penalties to investors harmed by corporate wrongdoing in any suit in which *both* civil penalties and disgorgements had been levied against the defendant.

According to a GAO report, entitled *SEC and CFTC Penalties*[31], the Commission had, as of April 2005, successfully applied the Fair Fund provision in at least 75 cases since 2002. However, the SEC had only managed to distribute approximately $60 million in 3 of the 75 cases. As of October 2005, the SEC held approximately $1.976 billion in "Fair" funds for future distribution to harmed investors. In addition to identifying these severe distributional issues, the GAO also found that the SEC lacked a reliable method by which to identify and collect data on Fair Fund cases.

In its response, the SEC noted that distribution is often a lengthy process that can be further complicated by external factors such as a pending criminal indictment on the violator. Nevertheless, it is currently addressing these challenges through a multiyear effort to comprehensively upgrade its Case Activity Tracking System (CATS).

4.6. Tabulations and Regression Analysis of SEC Enforcement Actions

This section uses cross tabulations regression analysis to explore several research questions regarding the efficacy and extent of SEC sanctions. The sample consists of all SEC actions, filed between October 1998 and October 2003, which had settled by July 2004. This analysis is descriptive and attempts to find patterns in the data. As such, the regression analyses are not intended to find causal effects but rather explore partial correlations between the covariates and the dependent variables. The results are outlined in Table 9 and 10 *(below).*

Where a probit model is used in this chapter to address a research question, the relevant table reports the actual probit coefficients. However, for ease of explanation, the text reports the difference a unit change in the covariate makes in the cumulative normal probability of the dependent variable. In other words, the effect on the dependent variable

[31] See GAO Report (GAO-05-670) entitled "SEC AND CFTC PENALTIES Continued Progress Made in Collection Efforts, but Greater SEC Management Attention Is Needed" (August 2005)

is converted to a probability, assuming a one unit change in each covariate from its sample mean, holding the other covariates constant at their respective sample means. In the case of a binary covariate, the change in probability in the dependent variable reflects the impact of a change in that binary covariate from 0 to 1. Thus, for example, where a binary covariate codes a particular allegation then the change in probability in the dependent variable that is reported is computed is the impact of the allegation-binary variable as it changes from 0 to 1. The allegation covariates have been coded from the SEC's categorization of factual allegations found in their annual reports.

Table 9: Criminal Proceedings and Monetary Sanctions

Specification	**(1) (N=2316)**	**(2) (N=2316)**
Outcomes / **Covariates**	**Likelihood of Parallel Criminal Proceedings**	**Likelihood of Monetary Sanction**
Financial Disclosure	0.28* (0.14)	-0.63** (0.09)
Securities Offering Violations	0.59** (0.13)	-0.29** (0.10)
Insider Trading	0.55** (0.15)	0.60** (0.14)
Fraud Against Customers by Brokers or Dealers in Securities	0.32 (0.17)	-0.25 (0.13)
Violations by Investment Advisors	0.53* (0.16)	-0.02 (0.12)
Market Manipulation	0.45 (0.17)**	-0.06 (0.14)
Cease & Desist Order		0.97** (0.08)
Injunction		1.93** (0.08)
Office & Director Bar		0.52 (0.15)
Censure/Limitation on Activity		0.84** (0.09)
Log Total Award ($)	0.04** (0.006)	
Registration revocation		-0.65** (0.23)
Days to settle		0.0006** (0.0001)

** *Significant at the 1% level*

* *Significant at the 5% level*

Specification (1) addresses the question as to whether there are particular factual allegations or aspects of the SEC settlement that predict parallel criminal proceedings against the defendant. In line with the government's focus on protecting retail investors, it is reasonable to expect federal authorities – both the SEC and criminal prosecutors - to target investment advisor violations and market manipulation. Investment advisors have traditionally been regulated very closely by the SEC as advisors often have actual custody or discretionary management of retail investor funds. Market manipulation also has potential to cause widespread harm to retail investors, particularly where widely traded public companies are involved. Insider trading violations have also elicited special attention from federal authorities, beginning with the landmark enforcement action in *SEC v. Texas Gulf Sulphur* C*ompany* in 1968.[32] As Cox (2003) notes "… the SEC, through its path-breaking prosecutions on insider trading, not only established the boundaries of insider trading regulation, but also legitimized regulation of this phenomenon in the first place." Finally, exacting scrutiny of securities issuances has been a permanent landmark of securities regulation. The SEC was, after all, founded as a federal response to the stock market crash of 1929, an event that was precipitated by fraudulent issuing of securities. In sum, there is strong reason to believe that investment advisor violations, market manipulation, fraudulent securities offerings and insider trading are four areas in which the Commission and criminal prosecutors are likely to be especially vigilant. Specification (1) in Table 9 confirms that parallel criminal enforcement is approximately 10% more likely where insider trading, investment advisor, or securities offering violations have been alleged, where the omitted category consists of a composite of all other allegations. Parallel criminal enforcement is 8.5% more likely when market manipulation has been alleged.

Improper financial disclosure, which is the most common of all infringements, makes a parallel criminal prosecution 4.3% more likely. A 1% increase in the settlement increases the likelihood that a criminal prosecution will occur along with SEC enforcement by 0.6%. One possible driver of this result could be the severity of the infraction. More serious infringements warranting criminal actions are likely to have

[32] 401 F.2d 833 (2d Cir. 1968)

attracted both a higher settlement – either via harsher civil penalties or disgorgement of illegal gains.

Given that only 46% of enforcement actions result in the imposition of monetary sanctions, Specification (2) attempts to discern which types of allegations are more likely to result in solely non-monetary sanctions being imposed on the defendant.

In assessing monetary penalties the SEC will weigh the likelihood that the penalty will be used as a meaningful source of compensation to aggrieved investors against the detriment to potentially innocent shareholders. Allegations of financial fraud pose an interesting illustration of this policy. Despite the seemingly severe nature of these violations the SEC has equally compelling justification in keeping these companies financially viable so that innocent shareholders are not punished. Reasoning, perhaps, that smaller companies are likely to be bankrupted by the severe fines that should reasonably accompany financial fraud and that innocent public shareholders have probably already been punished by the drop in share price that accompanies disclosure of financial fraud, it is unsurprising that improper financial disclosure and offering violations are 23.6% and 11.1% (respectively) less likely to accompany a monetary sanction, relative to an omitted category consisting of a composite of all other allegations. By diligently levying criminal charges against financial fraudsters however, as revealed by Specification (1), the SEC is nevertheless able to achieve some level of deterrence. Monetary sanctions are approximately 24% more likely if insider trading violations are alleged, in keeping with the SEC's emphasis on deterring this class of violations. Moreover, financial penalties for insider trading are usually borne by individual violators, leaving shareholder unaffected.

Substantial non-monetary sanctions usually accompany the imposition of civil fines or disgorgement in enforcement actions. Cease and desist orders, injunctions against future violations of securities laws, officer and director bars and censures/limitations on activity are all more likely to accompany monetary sanctions against the defendant. Finally, a 1 day increase in the time to settlement is 0.02% more likely to accompany a financial penalty suggesting that it is more time consuming to investigate the more severe violations that warrant financial penalties.

The final set of research questions addresses the factors affecting the financial penalties imposed on defendants. This question is examined with regard to all enforcement action defendants as well as the subset of public company defendants. The results of the OLS regressions are reported in Table 10 below.

Table 10: Settlement Awards in Enforcement Actions

Specification	**(3) (N=2316)**	**4(a) (N=186)**	**4(b) (N=186)**
Outcomes **Covariates**	**(Log) Total Settlement ($) (All SEC Defendants)**	**(Log) Total Settlement ($) (Public Company Defendants Only)**	**(Log) Total Settlement ($) (Public Company Defendants Only)**
Financial Disclosure	0.14 (0.22)	-2.39** (0.85)	-1.80* (0.76)
Securities Offering Violations	1.39** (0.22)	-2.33 (1.78)	-3.56 (2.13)
Insider Trading	0.1 (0.23)	4.69 (3.48)	2.85 (2.36)
Fraud Against Customers by Brokers or Dealers in Securities	1.99** (0.29)	4.98** (1.77)	2.59 (1.68)
Violations by Investment Advisors	0.12 (0.26)	5.07 (2.6)	4.43 (2.87)
Market Manipulation	0.13 (0.27)	-1.04 (2.59)	-0.82 (.97)
Office & Director Bar	0.23 (0.22)	3.98** (1.42)	4.17** 1.23
Censure/Limitation on Activity	1.30** (0.20)	3.41** (0.9)	2.53** (0.84)
Cease & Desist Order	-0.67** (0.22)	-3.49** (1.15)	-3.26** (.06)
Injunction	0.70** (0.21)	3.61** (1.14)	4.23** (1.08)
Registration Revocation	1.38* (0.67)	-6.21** (1.37)	-4.33* (1.34)
Days to settlement	0.001** (0.0002)	0.002 (0.001)	0.004** (0.002)
Log total assets			0.30* (0.12)
Operating income			3.12e-10** (6.41e-11)
Share price			-0.01 (0.01)

** *Significant at the 1% level*

* *Significant at the 5% level*

Specification (3) fits the log of the total settlement award on allegations and non-monetary penalties for *all* enforcement action defendants. Given the SEC's historically stated objectives of protecting retail investors and visibly pursuing insider trading violations, it is unsurprising that securities offering violations and broker-dealer fraud on customers are strongly, positively linked with larger awards. A positive relationship generally exists between the imposition of non-monetary sanctions and larger settlements suggesting that the Commission favors using all punishments at its disposal when punishing larger frauds. The exception is the "cease-and-desist" order which may be the Commission's penalty of choice for infringements that involve smaller pecuniary losses; alternatively, the order may substitute for higher monetary awards in serious infringements.

Specification 4(a) fits Specification (3) – i.e., log of the total settlement award on allegations and non-monetary penalties in enforcement actions – against public company defendants only. Specification 4(b) adds as independent variables measures of firm size and profitability. The negative relationship between financial disclosure violations and settlement awards, explored in Specification (2), continues to hold. An important, additional finding, however, is that higher settlements are imposed on larger, more profitable companies. With regard to large public companies, the Commission may be persuaded that penalties will be used as a more meaningful source of compensation when weighed against the detriment to potentially innocent shareholders. Moreover, it may be difficult for the Commission to overlook the greater damages to harmed investors that accrue when public companies, which boast liquid markets for their securities and higher market capitalizations, commit fraud. From a more cynical perspective, the Commission may be seeking to curb the propensity of more powerful firms to commit larger frauds.

The superior resources that public companies enjoy enable them to hire reputable investment banks and law firms to handle their complex securities offerings. In this context, as a comparison of Specifications 1 and 4 reveals, it follows that public firms are less likely to be penalized for offering violations vis-à-vis private companies. Such a comparison also reveals that public companies are also less likely to be punished for insider trading violations (which remain largely an individual transgression).

5. A Descriptive Summary and Analysis of Investor Class Actions.

This chapter now turns to a description and analysis of private class actions. Although the SEC has made significant recent strides in addressing concerns of investor restitution, class actions remain the primary mechanism via which shareholders seek compensation and reform. Their appeal stems from the strong monetary incentives they offer to aggrieved investors and their attorneys, as well as the opportunity that class actions grant to bring a direct, unencumbered suit (vis-à-vis derivate suits).

5.1 Selected Characteristics of Class Actions

The overwhelming majority of class actions studied (87.7%) were filed in federal court, with the remaining filings in state court. In contrast to the SEC, which pursues a wide range of defendants ranging from individuals to the largest public companies, the vast majority of class action defendants consisted of public companies.[33] According to the Standard & Poor's Compustat database 84.2% of class action defendants were publicly traded corporations, compared with 8.6% of public company defendants in SEC enforcement actions.

The table below summarizes some of the key financial characteristics (operating income, total assets, and share price) of all public company defendants:

Table 11: Financial Characteristics of All Public Company Defendants

	Public Company SEC Defendant (1998-2004)	Public Company Class Action Defendant ('98-'04)	Fortune 500 Median Firm (2004)
Operating Income	$ 2.47 B	$ 897 M	$ 442 M
Assets	$ 62.5 B	$ 16.7 B	$ 14.2 B
Share Price	$ 21.41	$ 19.26	

[33] According to the Compustat database, approximately 84.2% of the class action population consisted of publicly traded companies

Although the Commission pursued a public company in the fewer than 1 in 10 enforcement actions, the mean public company enforcement action defendant was substantially larger and more profitable than the mean class action defendant. This finding adds some empirical backing to the Commission's assertion that the primary factor that it takes into account when filing a suit is the message delivered to the industry and public about the reach of the SEC's enforcement efforts.

Unlike the Commission, private class action plaintiffs are limited in the suits that they may bring under the securities statutes. Causes of action available to the Commission are frequently unavailable to the private plaintiff, although two notable exceptions exist in the form of "Rule (10)(b)(5)" and "Section 11" infringements (discussed in detail below). If barred from a statutory remedy, class action defendants must turn to the common law in order to state a claim. The most frequent, and non-mutually exclusive, allegations made against class action defendants are summarized in Table 12 below:

Table 12: Common Allegations made in Enforcement Actions

Allegation	Freq. (N=2169)	Description
Rule10(b)(5) Violation	57.1%	Rule 10(b) of the Securities Act prohibits "any manipulative or deceptive device or contrivance" in connection with the purchase or sale of any security.
Accounting Violations	22.8%	Improper accounting practices such as improper revenue recognition, misclassification of balance sheet items, and errors in outstanding share measurements, all violate of Generally Accepted Accounting Principles (GAAP)
Initial Public Offering Violations	18.5%	Abuses of the IPO processes that include allocating shares in "hot" IPO's: 1. To purchasers willing to buy shares in the aftermarket ('laddering') 2. To executives of companies from which the underwriters wish to obtain future business ('spinning') 3. To buyers willing to pay a higher than normal commission ('quid pro quo')
Restated Earnings	14.8%	Publicly announced restatement of earnings, most commonly done in SEC-filed annual reports (10K reports)
Violation of Section 11 of the Securities Act	8.4%	A material misrepresentation or omission in a registration statement subjects the issuer, and a variety of others associated with the issuer or with the distribution of the securities, to damages by anyone who purchased securities pursuant to that registration statement
Other	20.4%	Other allegations include misrepresentations by management about business operations and conditions, breaches of fiduciary duties, challenges to merges and acquisitions, and illegal behavior by the company or its officers

5.2 Settlement Outcomes of Private Class Actions

A key difference between SEC actions and class actions lies in their dismissal rates. The overwhelming majority of SEC actions are settled and only 0.06% of all cases filed are dismissed on appeal. In stark contrast, 35% of all class actions that have reached completion have been dismissed. Table 13 compares settled SEC enforcement actions and class actions across several important outcomes:

Table 13: Characteristics of Settlement

	Class Action (N=732)	**SEC Enforcement Action (N=2316)**
Time to Settle	933 days	183 days
Mean Settlement Amount	$41.9M	$ 3.4M
Class Period	464 days	

A comparison in the mean settlement outcomes between the populations of enforcement actions initiated by the SEC and class actions yields some interesting findings. Firstly, class actions settle for twelve times more than enforcement actions, where the value of the total settlement in enforcement suits includes disgorgement of illicit gains, prejudgment interest and punitive civil penalties. This difference in recoveries may be explained by the Commission's stated policy of reviewing a broad cross-section of regulatory filings, so as to maximize the breadth and deterrence effects of its enforcement activities. In contrast, the great majority of class actions pursue publicly traded companies. The resulting higher settlements may consequently be the result of greater harm to investors in liquidly traded public companies or, equally, deep pockets of the defendants.

Second, although enforcement suits on average settle more than two years earlier than class actions this result is driven in large part by the fact that 66.1% of SEC actions are filed and settled on the same day compared with only a single instance (0.1%) in class actions. This result suggests that many Commission prosecutions entail more "behind-the-scenes" maneuverings between the SEC and the defendant firm hinting, perhaps, at a serious infraction requiring more complex settlement negotiations or, alternatively, an awareness by both parties of the substantial negative impact of an adverse finding.

Finally, the average class period in class actions, which measures the period over which the infringement is alleged to have occurred, is a little more than a year and a quarter.

5.3 A Regression Analysis of Class Actions

In contrast to SEC enforcement actions, the dismissal rates of class actions are high – approximately 35%. Thus, an important initial question is to identify the factual allegations and characteristics of defendant companies that predict whether a class action is more or less likely to be dismissed prior to the class certification stage of litigation.

We explore this question using a probit model. Table 14 reports the actual probit coefficients. However, as described earlier, the discussion reports the difference a unit change in the covariate makes in the cumulative normal probability of the dependent variable. The dependent variable is binary and takes on a value of 0 if the suit has been dismissed and value of 1 if it has reached monetary settlement. The allegation covariates follow from the SEC's categorization of factual allegations in their annual reports. The key results are summarized in the table below:

Table 14: An Analysis of Settlement and Dismissal of Class Actions

Specification	**(5)** **(N = 1302)**	**6(a)** **(N = 992)**	**6(b)** **(N = 992)**
Outcomes **Covariates**	**Likelihood of Settlement (v. Dismissal) for *All* Defendants**	**Likelihood of Settlement (v. Dismissal) for *Public Company* Defendants**	**Likelihood of Settlement (v. Dismissal) for *Public Company* Defendants accounting for size and profitability**
Accounting Violations	0.62** (0.10)	0.63** (0.11)	0.66** (0.12)
Initial Public Offering Violations	0.06 (0.17)	0.04 (0.18)	-0.005 (0.20)
Restated Earnings	0.06 (0.11)	0.1 (0.12)	0.04 (0.13)
Rule 10(b)(5) Violation	-0.38** (0.08)	-0.45** (0.09)	-0.48** (0.1)
Section (11) Violation	0.57** (0.16)	0.53** (0.17)	0.47** (0.18)
Class Period (Days)	0.0003** (0.00009)	0.0004** (0.0001)	0.0004** (0.0001)
Log of Total Assets			-0.57* (0.02)
Operating Income			1.09e-12 (1.52e-11)
Share Price			-0.00005 (0.002)

** *Significant at the 1% level*

* *Significant at the 5% level*

The liability firm of a firm violating Section 11 of the Securities Act – publication of misrepresentations in a registration statement - is "strict," i.e., the defendant is liable without the need to prove intent, negligence or fault provided that it is shown that it was the defendant's misrepresentation that caused the damage. Section 11 suits can thus be expected to reach settlement (rather than be dismissed), given the reduced evidentiary onus on the plaintiff. Specification 5 confirms that Section 11 suits are 18.1% more likely to settle relative to the omitted category of a composite of all other alleged violations.

Proof of accounting violations is often equally clear-cut. In most instances the firm either confesses to wrongdoing, particularly after the fraud has reached an "unmanageable" scale, or accounting inaccuracies are detected by the SEC or shareholders in the firm's public filings. In both cases the evidence of wrongdoing becomes a matter of permanent record, easing the burden of evidentiary production of the plaintiffs. Unsurprisingly, then, class actions alleging accounting violations are 20% more likely to settle, relative to the omitted category of a composite of all other alleged violations.

Rule 10(b)(5) violations are the most common cause of action pleaded by private plaintiffs in securities suits. Nevertheless, the burden of proof in a Rule 10b-5 pleading is onerous. In order reduce the frequency of frivolous Rule 10b-5 lawsuits that survive motions to dismiss the Private Securities Litigation Reform Act (1995) raised the pleading standards for plaintiffs in three ways. First, false statements made by the defendant must be pleaded with particularity. Second the there must be a strong inference of scienter - i.e. the defendant knew the challenged statement was false at the time it was made, or was reckless in not recognizing that the statement was false. Finally, the plaintiff bears the burden of proving that the defendant's misrepresentation caused the loss for which the plaintiff seeks to recover damages. In this context, it is reasonable to expect that Rule 10b-5 suits, involving deceptive practices in the sale of securities, are less viable than Section 11 or accounting violations to reach settlement. Specification 5 confirms this with Rule 10b-5 violations 13.5% more likely to be dismissed (relative to the omitted category of a composite of all other alleged violations).

Finally, each additional day in the period over which the alleged violation occurred (class period) increases the probability of dismissal by 0.01%. It would appear that a failure to definitively pin down the exact length of time over which the wrongdoing occurred arouses the court's suspicion as to the merits of the suit.

The analysis of all completed class actions in which there was a public company defendant (Specifications 6(a) and 6(b)) mirror the results in Specification 5 with an important additional finding. Although the defendant's profitability and share price appear unrelated to the court's decision to dismiss the suit, a 1% in increase in the log of assets is associated with a 2.1% decline in the probability of settlement. Thus, suits against companies with deep pockets have a slightly lower probability of settlement.

Turning now to class action suits that have yielded a monetary settlement Table 15 (below) shows the simple correlations between the log total settlement imposed on class action defendants against factual allegations and firm characteristics.[34]

Table 15: A Correlation Matrix of Settlement Awards in Enforcement Actions

	Matrix 1	**Matrix 2**
	Log Total Settlement ($) [for *all* class action defendants] (N = 732)	**Log Total Settlement ($) [for *public company* class action defendants] (N = 530)**
Accounting Violations	0.13	0.15
Initial Public Offering Violations	0.003	0.01
Restated Earnings	0.09	0.08
Rule 10(b)(5) Violation	0.11	0.13
Section (11) Violation	0.11	0.13
Time to Settle (Days)	0.13	0.15
Class Period (Days)	0.19	0.25
Log of Total Assets		0.53
Operating Income		0.33
Share Price		0.21

[34] A correlation matrix is preferred to regression analysis for the purposes of this analysis as the actual damage to investors is an important, but omitted, variable which significantly impacts the total settlement award. Consequently, the use of regression analysis would result in an endogenous specification with misleading coefficients.

Matrix 1 shows the correlation between the log of the total settlement fund and factual allegations, the class period, and the time to settlement for *all* class action defendants. The results aver only to a mildly positive relationship between a larger settlement award and a longer class period.

Matrix 2 narrows the correlations to *public* company defendants only. A mildly positive relationship is observed between award size and both accounting violations and time to settlement. More importantly, this analysis also reveals that higher settlements are imposed on larger, more profitable companies – a finding that mirrors SEC enforcement actions. There are several explanations that are consistent with this result. Greater harm to investors may result when larger companies (with very diffuse public ownership) commit fraud, either by virtue of the liquid market for their securities or higher market capitalization. There may be also a propensity of more powerful firms to commit larger frauds. On the other hand, the profit-seeking class action bar may be more adept at squeezing settlements from larger companies with deeper pockets wishing to rid themselves of the specter of litigation. Finally, as far as public companies are concerned, a longer class period is again correlated with greater damages.[35]

[35] The private suits dataset consists of 2,169 class actions filed between January 1998 and June 2004. Of these actions, 1323 suits or 61% of all suits had reached final settlement as of 1 August 2005. The remaining 39% of suits filed, totaling 846 actions, were being actively litigated as of 8/1/2005 when the dataset was compiled. The large percentage of active suits (39%) raises the specter of censored data. In particular, an econometric issue arises as to whether the active suits somehow differ systematically from settled suits, so as to affect the external validity of this analysis. For example, complicated cases that allege particular fact patterns, or cases that involve higher monetary settlements, may take longer to settle so that the population of settled cases observed does not represent a random sample of all cases filed. In order to test for the presence of censoring a first set of specifications were run that regressed time to settlement (measured in days) on allegations, settlement amount, and defendant size and profitability. In the most complete specifications, the only allegation covariates significantly related to time to settlement were Section 10(b)(5) claims (at 1% significance) and restated earnings (at 5% significance). The actual size of the effect of is small however – Section 10(b)(5) violations settle on average 126 days later than other cases while suits based on earnings restatements settled on average 98 days sooner than other suits. Suits alleging GAAP infringements, offering violations, and Section 11 liability were not significantly related to time to settlement. Of greatest import to the regressions run in Specifications (7) and (8), the log of settlement fund was found to be not significantly related to time to settlement. Company profitability and share price were also unrelated to time to settlement, although the size of the company (measured by the log of total assets) was significantly related to time to settlement at the 1% level. However, as with Section 10(b)(5) violations and earnings restatements, the actual size of the effect is small – each 10% increase in the assets of the company increases the time to settlement by 3.3 days. A second set of ordered logistic regressions was also run as a further test for time censoring of the data. The dependent variable, days to settlement, was parsed into 4 quartiles and regressed on allegations, settlement amount, and defendant size and profitability. The results of the ordered logit mirrored the first set of regressions (where the normally distributed time to settlement was regressed as a continuous, dependent variable). The single exception was that restated earnings ceased being significantly related to time to settlement. In sum, the small effect of the few

6. An Analysis of Jointly Enforced Actions

Having described and analyzed enforcement suits and class actions separately in the preceding two sections, the emphasis of this chapter now turns to sub-population of suits that have been pursued by *both* public and private enforcers of securities laws ("jointly enforced suits"). This section uses tabulations and regression analysis to explore several research questions centering on jointly enforced suits. In particular, this analysis aims to:

1. Discern the factual allegations or defendant characteristics that are associated with a higher likelihood of joint litigation
2. Analyze the sub-population of jointly enforced suits for distinguishing features relative to their respective (public or private) populations
3. Compare the effectiveness of private versus public enforcement mechanisms in jointly litigated suits, using investor recovery and time to settlement as metrics

It is important to note again that this analysis is descriptive and attempts to discern patterns in the data. The regression analyses are thus not intended to find causal effects but rather explore partial correlations between the covariates and the dependent variables. The results are outlined in Table 16 and 17 *(below)*.

6.1 Characteristics of Enforcement Actions that Favor the Filing of a Class Action

Public companies are statutorily obliged to report their financial condition to the SEC on a quarterly and annualized basis. As a consequence of this informational advantage, allied with the expertise of its highly skilled staff, the Commission is usually the first to uncover and investigate allegations of securities malfeasance at reporting companies. This study has uncovered no instance where Commission initiated an investigation after a successful prosecution by private plaintiffs.

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covariates that are related to time to settlement leads to the conclusion that the time censoring of data is not a problem in this study and does not affect the external validity of the findings. Particularly, in Specifications (7) and (8) where time censoring could have proven of major concern, the log of settlement fund was found to be not significantly related to time to settlement.

Thus, an important, initial avenue of investigation is to discern the allegations and defendant characteristics in the *population* of enforcement actions that predict subsequent class actions – a question that is explored in Specification (7) below.

An interesting finding from Specification (7) is that a company's status, as either public or private, is significantly related to the likelihood of a subsequent class action. This finding is explored in greater detail in Specifications 8(a) and 8(b). Specification 8(a) repeats the analysis in Specification (7) for the subset of public companies only. Additional variables pertaining only to the subset of public companies viz. total assets, operating income, and share price are then added in Specification 8(b) so as to avoid distortions when comparing and interpreting these results.

Specifications (7) and (8) make use of a probit model. The dependent variable is binary and takes on a value of 1 if the enforcement action has subsequently been litigated by an investor plaintiff in a class action and value of 0 if it has not. The allegation covariates follow from the SEC's categorization of factual allegations in their annual reports. The key results are summarized in Table 16 below[36]:

[36] Note that in Specification 8(a) and 8(b) "Offering Violations" was dropped as a variable due to perfect co-linearity as it predicted "failure" perfectly i.e. no subsequent class action

Table 16: Characteristics of Jointly Enforced Suits

Specification	(7) (N = 2316)	8(a) (N = 209)	8(b) (N = 209)
Outcomes / **Covariates**	**Likelihood of a Subsequent Class Action *(all defendants)***	**Likelihood of a Subsequent Class Action *(public company defendants***	**Likelihood of a Subsequent Class Action *(public company defendants controlling for firm size and profitability)***
Fraud Against Customers by Brokers or Dealers in Securities	0.34 (0.31)	0.57 (0.79)	1.94** (0.66)
Financial Disclosure	0.92** (0.17)	1.03** (0.22)	0.8** (0.27)
Offering Violations	-0.22 (0.32)		
Market Manipulation	0.27 (0.36)	0.36 (0.7)	0.43 (0.65)
Total Award (Specification 7) Log Total Award (Specification 8)	1.22e-08** (2.58e-09)	1.89e-08* (8.2e-09)	0.03 (0.02)
Days to Settle	0.0003* (0.0001)	0.0003 (0.0004)	0.0003 (0.0006)
Public Company Indicator	1.91** (0.14)		
Log Total Assets			0.09 (0.05)
Operating income			-0.00003 (0.00002)
Share Price			-0.01 (0.008)

** *Significant at the 1% level*

* *Significant at the 5% level*

As noted earlier, proof of accounting violations is often clear-cut. In most instances the firm either confesses to wrongdoing, particularly after the fraud has reached an “unmanageable” scale, or inaccurate accounting is detected by the SEC or shareholders in the firm’s public filings. In both cases the evidence of wrongdoing becomes a matter of permanent, public record. The discovery of false public records filed with the SEC or a public announcement by the firm that it will be restating its earnings will often trigger closer scrutiny of the company's actions by the plaintiff bar. An analysis of the *population* of federal enforcement actions (Specification 7) confirms that allegations of irregular financial disclosure significantly increase the likelihood of a subsequent class action, by 3.9%.

Although a prime target for federal enforcers, insider trading violations and fraud committed by investment advisors were never subsequently pursued by class action plaintiffs. One plausible explanation for the lack of interest of the plaintiff bar is the absence of an economic incentive to pursue these suits, since they remain essentially transgressions of securities laws by *individuals*. Moreover, in the case of investment advisors, the courts have recognized only very limited private causes of action, which has limited the scope for investor class actions in this sphere.

Specification 7 reveals that a higher settlement amount – either via harsher civil penalties or disgorgement of illegal gains – is associated with an increased likelihood of a subsequent class action. One plausible explanation for this finding is that higher settlements attract the profit-maximizing class action bar. In the case of public companies, however, this effect disappears in once firm size and profitability has been controlled for (as in the more complete Specification 8(b)). Thus, it cannot be said that infringements by larger, or wealthier, public companies (with ostensibly deeper pockets) are more likely to attract the attention of the class action bar; in reality, the crucial factor is the private/public status of the company and the profitability of the company.

Specification 8(b) reveals that broker-dealer fraud perpetrated by public companies, most notably large financial institutions, is more likely to attract subsequent investor class actions. One possible reason for this outcome could lie with the large class of retail investors that are affected by fraudulent activities at broker dealers, as for example when spurious "buy" or "sell" recommendations are issued to the public. The existence of widespread harm is an important prerequisite for the formation of an investor class action, as they promise higher recoveries to the plaintiff bar responsible for organizing the class. In Specification 8(b) we further investigate the initial finding, following from Specification 7, that public companies sued by the SEC are 24.3% more likely than other defendants to face a subsequent investor class action. After restricting the subset of enforcement action defendants to public companies only it appears that the size, profitability or share price of a company is not related to the private plaintiff's decision to sue. This might reflect that the defendant public companies may be relatively homogeneous with respect to size, profitability, and share price, which would tend to make these variables not statistically significant. The dollar value of the settlement with federal enforcers is also not significantly related to the decision of private plaintiffs' to file suit. However, financial fraud i.e. broker-dealer fraud and irregular financial disclosure is associated with an increased in the likelihood of a subsequent class action (55.7% and 29.8% respectively). As with irregular financial disclosure broker-dealer fraud is sometimes a matter a public record, as when an analyst issues a strong buy recommendation on a security that he privately expresses doubts on.

6.2. The Relative Efficacy of Private versus Public Enforcement in Jointly Filed Actions

The overlapping public and private securities enforcement mechanisms has meant that aggrieved investors may recover some fraction of their losses using either, or both, of these avenues. Thus, an important question arises as to the relative efficacy of these mechanisms in obtaining restitution for aggrieved investors. While this problem cannot be fully explored in this paper due to the unavailability of data on the size of the investor loss in each filed (private or public) suit, a comparison of the settlement outcomes between the enforcement actions and class actions in jointly enforced suits does shed some light on this topic. Investors in jointly enforced suits have suffered a *single* loss, which allows for a direct (albeit limited) comparison between private and public enforcers using the metric of investor recovery.

In a given, jointly litigated suit, it is reasonable to expect that the SEC's recovery would be lower than the corresponding private suit. The award sought by the SEC is heavily influenced by factors other than the extent of investor harm done, including the message delivered to the industry and public about the reach of the SEC's enforcement efforts, the deterrent value of the action, and the SEC's visibility in certain areas such as insider trading and financial fraud. Moreover, the SEC faces a binding budget constraint that may prevent it from litigating a suit so as to maximize investor recovery. Finally, in reaching a settlement, the SEC is also acutely concerned with the continued financial viability of the defendant firm so as minimize the impact on innocent shareholders. In contrast, the private attorney does not face the severely constrained budgets that the SEC does and acts so as to maximize the expected value of his recovery.

Table 17: A Comparison between Private and Federal Enforcement Mechanisms in Jointly Litigated Suits

	Jointly enforced suits Only		**All Suits**	
	SEC (N = 114)	**Private Class Action (N = 179)**	**SEC Population (N = 2316)**	**Private Population (N = 732)**
Time to Settlement	143*	1022	183 days	933
Mean Settlement	$37.8 M*†	$145 M§	$3.4 M	$41.9 M
Civil Penalties	$82,800,000†		$ 4,577,137	
Class Period		602 days§		464 days

**Significant difference of means at 1% to private (jointly enforced) suit*

† *Significant difference of means at 1% to SEC population*

§ *Significant difference of means at 1% to Class Action population*

First, class actions, on average, recover almost four times more than the corresponding enforcement actions, where the value of the total SEC settlement includes disgorgement of illicit gains, prejudgment interest and punitive civil penalties. This pattern suggests that aggrieved investors have very substantial incentives to organize themselves into a private class in order to recover losses, over the alternative of federal enforcement. Moreover, the limited capacity of the SEC to pursue any more than a handful of suits against well-funded public companies make the shareholder class action an even more compelling vehicle with which to address investor grievances (given that the SEC has succeed in obtaining an award).

Second, jointly enforced suits are not particularly common, as these suits number just 4.1% of the population of SEC enforcement actions and 8.25% of all class actions (in this study). However the monetary settlements emanating from these actions constitute 56.79% and 47.33% of the *total* recoveries by public and private enforcement mechanisms respectively. A comparison of recoveries by the SEC and class action plaintiffs in jointly litigated suits to the mean recoveries of each of these enforcement mechanisms in other suits reveals that this small subset of cases represents the most harmful infractions of securities laws. Moreover, accepting the premise that civil penalties are assessed as a means of deterring future errant conduct and to punish particularly severe infractions of the law, entrenches the conclusion that jointly enforced suits on average involve substantially more serious allegations than usual enforcement actions.

Third, class actions generally settled in a little under three years versus the five months of SEC actions. However, this difference, as has already been noted, can be explained in large part by the SEC policy of frequently filing already "settled" cases in order to mitigate the damage to the company that would otherwise result from a protracted investigation. Furthermore, although enforcement suits that are subsequently pursued by public plaintiffs on average settle 40 days sooner than other enforcement actions, this result is driven in large part by the fact that 83% of jointly litigated suits are filed and settled on the same day compared with 66% of usual enforcement actions.

Fourth, the class period in cases with parallel SEC proceedings is significantly longer than in instances where only a private action is filed. An important implication of a longer class period is that more shares are likely to have been traded during the interval of alleged fraud, typically leading to a greater damage claim for the plaintiffs.

Finally, there are many reasons supporting the hypothesis that private settlements should occur more quickly when there is a parallel SEC investigation than would otherwise be the case. The additional enforcement efforts of the SEC are ostensibly more likely to yield evidence helpful to private class action lawyers. Superior information improves both parties assessment of the suit's likelihood of success so that settlement will be seen as the most efficient result for all parties. Furthermore, a parallel SEC action may create a climate in which the defendants wish to move beyond the specter of endless litigation. In theory, then, settlement of the SEC enforcement action is likely to hasten the settlement of the accompanying private suit than would otherwise be the case (when there has been no federal investigation). Weighing against this supposition, however, is the reality that jointly enforced actions involve more serious infractions as well as greater harm to investors. The complexity of these cases acts to lengthen the time to settlement despite the greater volume of evidence, leaving the question, as to whether a parallel federal action actually hastens the time to settlement, somewhat unresolved. The data Table 17 tends to support the latter argument, as private suits with parallel enforcement actions take approximately 89 days longer to settle that other private actions. Nevertheless, the strength of both sides of this argument is reflected in the marginal significance at the 5% level (*p=0.067*) of the hypothesis that private settlements settle more slowly when there is a parallel SEC investigation than would otherwise be the case.

PART C: THE EFFECT OF SOX ON THE BALANCE OF PUBLIC AND PRIVATE LITIGATION

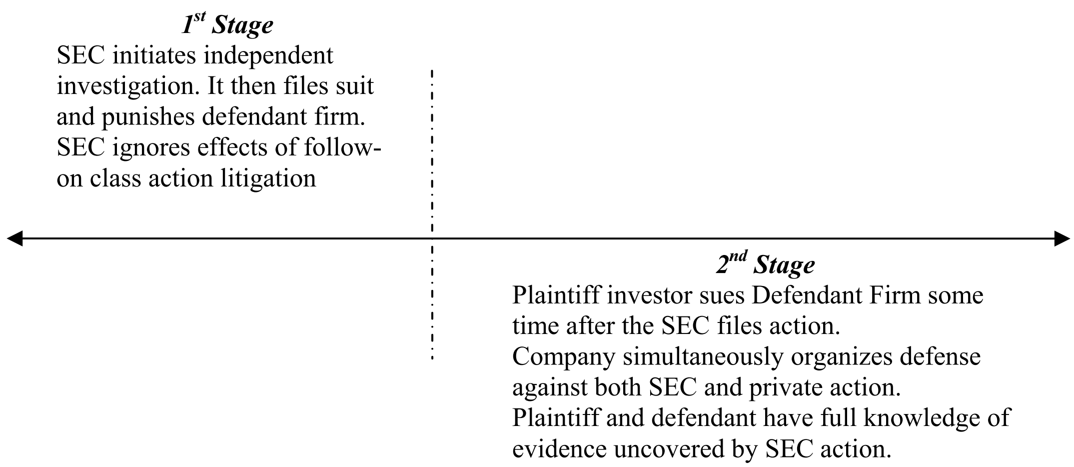
7. A Theoretical Model Describing the Interaction between Public and Private Enforcers of Securities Claims

The findings in Section 6 revealed that joint enforcement of securities suits was most likely in protracted SEC actions against public companies that alleged financial disclosure violations and heavily penalized the defendant firm. An original contribution of this study is modeling of the strategic interaction between private and public enforcement arms in jointly enforced suits. The model will be developed to act as a source of hypotheses, producing empirically testable implications describing how SOX and funding increases at the SEC have together disturbed the equilibrium of joint public-private enforcement.

7.1 Background and Timeline

This strategic interaction being modeled involves three parties, viz. the SEC, a defendant company, and an investor plaintiff seeking redress against the defendant company. The defendant company is sued first by the SEC and subsequently by a private plaintiff on the same cause of action. In defending the initial SEC enforcement action, the defendant firm organizes its defense fully anticipating a subsequent class action (see figure 4 below).

Figure 4: Timeline of Joint Enforcement



Throughout the analysis, it is assumed that all players are risk neutral. The defendant firm minimizes its costs, while the plaintiff class is profit maximizing. All players at all stages are assumed to have full information.

The choice and parametric variables used in the model are summarized in the table below:

Table 18: Definitions of Variables

Variable	Type	Definition
A	Parameter	Maximal Award sought by SEC against defendant firm (Δ) (in $)
Π	Parameter	Maximal Restitution sought by aggrieved investors against Δ (in $)
s	Parameter	Inculpatory evidence that SEC uncovers from its investigation
γ	Parameter	(Constant) marginal cost to Δ of producing exculpatory evidence in the initial SEC enforcement suit and subsequent class action (in $)
α	Parameter	Marginal cost to plaintiff of producing inculpatory evidence against Δ (in $)
λ	Parameter	Discount factor reflecting the substitutability of inculpatory evidence produced during SEC investigation in subsequent class action
d	Choice	Amount of exculpatory evidence produced by Δ
p	Choice	Amount of inculpatory evidence produced by plaintiff in investor class action against Δ

7.2 The Theoretical Framework

7.2.1. The Commission's Decision to File Suit

In choosing its enforcement actions it is assumed that the SEC acts independently according to the dictates of its own internal policy, and places no emphasis on the defendant company's potential for later liability to investors suing in private actions. The SEC's independent prosecutorial bent is clear from the Commission's public statements that the prioritization of its cases depends on the "message delivered" to industry and the public about the efficacy of the SEC's enforcement efforts, the extent of investor harm, the anticipated deterrence value of the action, and the Commission's visibility in certain areas such as insider trading and financial fraud.

Furthermore, public companies are statutorily obliged to report their financial condition to the SEC on a quarterly and annualized basis. This informational advantage allied with the expertise of its highly skilled staff, makes the Commission the first to uncover and investigate allegations of malfeasance at public companies in jointly enforced actions. It is exceedingly rare for the Commission to initiate an investigation of a firm after exposure of alleged malfeasance by private plaintiffs. This study, for example, has uncovered no instance where Commission initiated an investigation after a successful prosecution (settlement) by private plaintiffs. Congress has also clearly signaled, via the enactment of Section 308 of SOX which established investor restitution funds, its preference that the Commission aggressively pursue investor restitution as one of its primary goals rather than rely on private actions for redress.

In reality, then, the SEC acts independently in its choice and punishment of offending firms.[37] Any downstream legal liability of the defendant firm to its investors, who may rely on evidence produced during the SEC's initial investigation, is of no concern to the Commission.

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[37] This short discussion steers clear of discussing possible regulatory capture of the SEC as such an exposition is beyond the scope this chapter. Suffice to say that even the most cynical observers have acknowledged the SEC's sterling efforts. See, for example, Susan E. Woodward who notes that "[d]espite the various complaints here regarding SEC decision making, I must join the rest of the world in acknowledging that the securities markets of the United States have been dazzling in their effectiveness at raising capital and supporting in the creation of value" . [Susan E. Woodward (1998) "Regulatory Capture at the U.S. Securities and Exchange Commission" www.sandhillecon.com/pdf/RegulatoryCapture.pdf]

Guided by these practical considerations, the SEC's decision to file an enforcement action is modeled as being entirely independent of any subsequent private action that may follow against the defendant firm. The SEC's investigation reveals total inculpatory evidence, $s \geq 0$, which represents all the evidence of wrongdoing against the defendant firm that usually follows from an assiduous prosecution. After the Commission has evaluated the complex and varied objectives that it considers when filing and punishing a suit, and which have been detailed in the discussion above, the SEC will seek a maximal damages award, A, consisting of civil penalties and disgorgement.

Because the SEC's decision to file suit, collect evidence (s), and seek an award (A) is not dependent on how the other players will react, some of the complexity of the SEC's decision process and its exact objective function in the first stage of the game is suppressed. This simplification allows us as to look at more interesting aspects of the plaintiff's and defendant's decisions in as simple a way as possible.

7.2.2. Response by the Defendant Firm to the SEC Enforcement Action

After the SEC has filed suit the defendant firm now finds itself having to produce exculpatory evidence, d, in order to reduce the fraction of the damages award, A, being sought by the Commission. Should the SEC's enforcement suit trigger a plaintiff class action, the optimal level of d chosen by the defendant must also reflect its decision to minimize the damages settlement it pays in the subsequent class action. Hence, should a class action follow, the overall objective of the defendant firm is to minimize the total costs flowing from these two suits.

Before proceeding with formally modeling the defendant's objective function, mention must be made of the objective of the private plaintiff. In line with assumptions usually made in the literature,[38] the plaintiff is modeled as seeking to maximize his expected restitution, π, by choosing the amount of evidence, $p \geq 0$, that he presents.

Importantly, in making his decision about the optimal level of p to gather, the plaintiff enjoys the benefit of the evidence uncovered by the Commission, s, in the initial, exogenous stage of the litigation.

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[38] See Section 2 above

However, not all the evidence, s, collected by the SEC will be of use to the plaintiff in the subsequent class action.

The SEC and private plaintiffs have different objectives. The plaintiff bar is concerned solely with restitution for investors harmed by corporate malfeasance. While this objective is of some concern to the SEC, the Commission also aims to protect innocent investors by ensuring the continued financial viability of the firm, maximizing the deterrence value of the suit, and maintaining its visibility among investors and industry. It is assumed that the SEC and private plaintiffs will gather evidence consistent with their objectives and, given the divergence in objectives, it is reasonable to assume that the Commission's evidence, s, may not substitute perfectly for plaintiff's evidence, p. Moreover, given the complexity, duration, and confidentiality of enforcement actions it is not clear that all the evidence uncovered in an enforcement action will be made available to private plaintiffs via public records. Finally, the SEC has plethora of statutory causes of action not available to the private plaintiff, so that evidence collected by the SEC in furtherance of legal liability on one cause of action may be quite irrelevant for a private cause of action based on another theory of liability.[39]

In order to capture the possibility of imperfect substitutability between s and p, the value of s is discounted by a parameter, $\lambda \in [0, \infty)$, in the plaintiff's optimization function. Although λ will usually take on values $\lambda \in [0, 1]$, indicating imperfect [$\lambda = 0$] and perfect substitution [$\lambda = 1$] between the SEC and plaintiff's evidence, there will be instances where the SEC's evidence takes on greater import in the class action than it did in the initial enforcement action. To account for this possible amplification effect λ may assume values greater than 1.[40]

[39] For example, consider the case where the defendant firm is charged with delinquent filings submitted to the SEC regarding the sale of its securities. Although the allegations may aver to some irregularities, punishable by statute, the extent of the wrongdoing may fall short of the "deceptive device" required by a Rule 10b-5 action, which is the only cause of action available to the private plaintiff.

[40] By way of example, consider the case in which the SEC has punished a defendant firm for negligent accounting after discovering an "isolated" instance of business expenses being written of as capital expenditure. Suppose, however, that during discovery proceedings in the subsequent class action the private plaintiff is able to unearth email exchanges among company executives, which document two other instances of improper expensing. Taken together, the defendant firm is now on the hook not for mere negligence (as it would be for an instance or two of improper accounting), but for a pattern of intentional,

7.2.3 A Clarification on SEC Evidence (*s*), Defendant's Evidence (*d*) and Plaintiff's Evidence (*p*)

The litigation choices (s, p, d) summarize the evidence that the litigants (viz. SEC, plaintiff-investor, and defendant-company respectively) routinely gather and present, either to a court during litigation or during settlement proceedings occurring in the shadow of litigation. Such evidence would usually include eyewitness testimony, expert opinions, documentary evidence, and the like. It is important to note that no assumptions are made about the inherent truthfulness of any of the evidence; consequently, it maybe genuine or contrived. All that is required is that the evidence be costly on the margin for all parties to produce and that, once produced, the evidence has an effect on the outcome.

It is important to clarify the links between s, p, and d and the liability ("guilt") of the defendant and the final award of damages in both SEC suits and class actions.

Since the "guilt" of the defendant in SEC civil enforcement suits and investor class actions is judged on a "preponderance of evidence" standard, any suit in which s and/or p exceeds d will result in the defendant being found "guilty" (or, more correctly, liable) should either of these suits ever be tried in court. Typically, the SEC will uncover evidence sufficient to establish the liability of the defendant firm on a preponderance of evidence. Thus, a scenario in which ($s > d$) is the norm. This supposition finds support from the corporate law academic Joseph Grundfest who notes that "… it was my experience as a Commissioner that the agency consistently sought to avoid instituting an enforcement action if it did not in good faith believe that the action would likely prevail on the merits." His experience of *bona fide* prosecutions by the Commission is supported empirically by the minute percentage (0.06%) of filed SEC actions that are dismissed on appeal to a higher court, suggesting that the SEC is usually very successful at trial.

In reality only a small subset of filed public and private actions eventually reaches litigation. Thus, the more important link for the purposes of this study is the connection between s, p, and d and the (exogenous) damages award sought by the SEC suit (A) and the class action (Π). As explained in greater detail below, this model adopts the assumption that, in settlement, the damages award (A or Π) sought by the filing party is

fraudulent accounting. In this way, the SEC's evidence amplified the evidence produced by the plaintiff in the subsequent class action.

discounted by the quantum of exculpatory evidence *(d)* that the defendant firm produces in mitigation of its liability.

7.2.4 Specification of Functional Forms

In order to understand why the parties actually gather and present evidence, it becomes important to specify how the evidence presented affects the recovery of the SEC and the private plaintiff and the payment made by the defendant firm. Two general functions may be specified:

1. $q_A(s, d)$: This function maps the evidence produced by the SEC *(s)* and defendant firm *(d)* to the fraction of the maximal damages amount, *A*, that the SEC seeks
2. $q_\pi(s, d, p, \lambda)$: This function maps the evidence produced by the plaintiff *(p)* and defendant *(d)* to the fraction of the maximal investor restitution, π, that the plaintiff seeks.

To help develop more concrete intuitions, while remaining consistent with the related conflict theory literature (e.g. Hirschleifer (1995), Bernardo, Talley, Welch (1998))[41], a particular functional form, is adopted for $q_i(.)$.

$$q_A \equiv q_A(s,d) = \frac{s}{s+d} \qquad (1)$$

$$q_\Pi \equiv q_\Pi(s,d,p,\lambda) = \frac{p+\lambda s}{p+\lambda s+d} \qquad (2)$$

These functional forms exhibit two useful and intuitive properties. First, both functions (1) and (2) are increasing in *s* and *p* respectively, and decreasing in *d.* Thus, greater evidence produced by any of the parties *ceteris paribus* increases their share of the total, potential damages (either A or π). Moreover, it is possible for any party, holding

[41] Hirschleifer, Jack. 1995. ''Theorizing about Conflict,'' working paper, UCLA. (Available at http://www.econ.ucla.edu/workingpapers/wp727.pdf); Antonio Bernardo, Eric Talley & Ivo Welch. A Theory of Legal Presumptions, 16 J. Law Econ. & Org. 1 (2000)

constant their opponent's action, to choose a level of litigation effort that realizes the entire range of success probabilities between (0, 1).

After the SEC has taken the exogenous decision to file suit, the defendant firm now finds itself having to produce exculpatory evidence, *d*. It is assumed that the firm produces exculpatory evidence *(d>0)* that minimizes its total costs incurred in defending the action, which consists of:

1. The total award, *A*, being sought by the SEC in the enforcement action
2. The total restitution, π, sought by the investor-plaintiffs in the event that a subsequent class action is filed
3. The cost of producing exculpatory evidence, *d*, at a marginal constant cost γ

Thus, the defendant's optimization problem solves the following:

$$\min_{d>0} A\left(\frac{s}{s+d}\right) + \gamma d + \beta\left[\Pi\left(\frac{p^* + \lambda s}{p^* + \lambda s + d}\right)\right] \qquad (3)$$

In this specification, the binary variable β takes a value of 1 if a class action is subsequently filed, while p^* is the optimal value of *p* as determined by the plaintiff in (4) below. Assuming that no class action is filed (β = 0) the defendant's objective reduces to choosing *d* to minimize its total litigation costs:

$$\min_{d>0} A\left(\frac{s}{s+d}\right) + \gamma d \qquad (3a)$$

However, as this analysis focuses on jointly filed actions, it is assumed that β=1 and that the defendant firm solves:

$$\min_{d>0} A\left(\frac{s}{s+d}\right) + \gamma d + \Pi\left(\frac{p^* + \lambda s}{p^* + \lambda s + d}\right) \quad (3b)$$

7.2.5 The Plaintiff's Litigation Strategy

For the purposes of this analysis, it is assumed that the investor plaintiff now files suit against the defendant firm after the announcement of an SEC investigation. The private plaintiff is armed with crucial evidence against the firm, gleaned from the SEC's action, although not all the evidence uncovered by the SEC may be useful to the private plaintiff. The defendant is assumed to have full information about the subsequent class action filing. As noted earlier, the plaintiff seeks to maximize his expected restitution, π, by choosing the amount of evidence, $p \geq 0$, he wishes to present, in addition to the earlier evidence uncovered during the course of the SEC investigation and enforcement action (λs). Thus, the plaintiff's optimization problem solves the following:

$$\max_{p>0} \Pi\left(\frac{p+\lambda s}{p+\lambda s+d}\right)-\alpha p \qquad (4)$$

7.3. Equilibrium Behavior

In this theoretical abstraction, the SEC's decision to file suit and its subsequent punishment of the malfeasance are exogenous decisions. Although evidence produced during the investigation is later made available to the public, in its decision calculus the Commission is unconcerned with any downstream litigation involving the plaintiff or defendant. As discussed earlier, this "abstraction" resembles reality rather closely.

The effect of the exogenous SEC filing, enforcement, and punishment decisions is to reduce the analysis to a strategic interaction between the defendant and private plaintiff. The defendant chooses the level of inculpatory evidence to lead, d, as a function of both s and p. The investor plaintiff simultaneously observes both s and d before choosing his own quantum of exculpatory evidence to produce, p. The model equilibrium occurs as a fixed point in d and p given s.

7.3.1. The Plaintiff's Optimal Production of Evidence

Following from equation (4) above, the plaintiff's optimal choice of p will generally be interior, and satisfies the first order condition:

$$\frac{d\Pi}{(p+\lambda s+d)^2}=\alpha \qquad (5)$$

This first order condition states that the plaintiff gathers and presents new evidence until the marginal private benefits of the evidence are just equal to the marginal private costs, α, of obtaining the evidence.

Solving for p^* from (5):

$$p^* = -d - \lambda s + \sqrt{\frac{d\Pi}{\alpha}} \qquad (6)$$

$$(p^* \geq 0)$$

7.3.2 The Defendant's Optimal Production of Evidence

We now step backwards to analyze the defendant's decision regarding its production of exculpatory evidence, *d*. Substituting the optimal value, p^*, from (6) into the defendant's objective function in (3b), yields:

$$\frac{As + (d+s)(d\gamma - \sqrt{d\alpha\Pi} + \Pi)}{(d+s)} \qquad (7)$$

The defendant's optimal choice of *d* will generally be interior, and satisfies the first order condition:

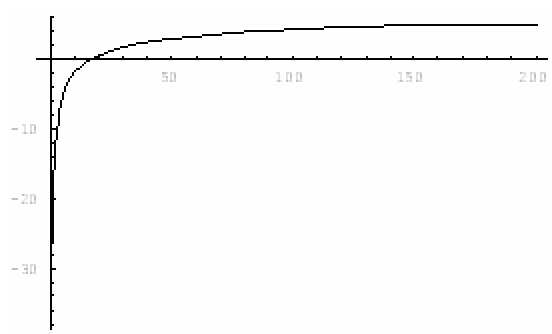
$$\frac{As}{(d+s)^2} + \frac{\sqrt{\alpha\Pi}}{2\sqrt{d}} = \gamma \qquad (8)$$

This first order condition represented in equation (8) [let (8) = G(.)] states the defendant gathers and presents new evidence until the marginal private benefits of the evidence are just equal to the marginal private costs, γ, of obtaining the evidence. The solution for d^*, from solving (8), is an involved calculation, although it will suffice for these purposes to demonstrate that for certain parameter values an equilibrium solution for d^* exists, which minimizes the defendant's costs in accordance with its objective function given in equation (3b).

In order to illustrate more concretely the equilibrium value of d^* consider, as an analytic baseline, the case in which A = 150, s = 100, $\gamma = 7$, $\alpha = 1.5$, $\lambda = 1$, and $\pi = 1600$ (with *A*, γ, α, and π measured in $). The figure below plots the value of *d* against the function H''(d), where H''(d) is merely the second order condition of the defendant's cost function represented by equation (8) evaluated at the point where the first derivative equals zero.

Figure 5: Graphing the optimal value of d***

H''(d)



The optimal (minimum) value $d^* = 17$ is obtained where H'(d) = 0, with the changing sign of H''(d) from (+) to (–) indicating that $d^* = 17$ minimizes the defendant's costs in accordance with its objective function in equation (3b).

7.3.3. Equilibrium Values

Substituting $d^* = 17$ into (6) reveals an optimal value of $p^* \sim 18$.[42] Further substitution of d^*, p^*, and A = 150, s = 100, $\gamma = 7$, $\lambda = 1$ and $\pi = 1600$ (the parameter values assumed above in calculating d^*) into the plaintiff's objective function in (4) and the defendant's objective function in (3b) reveals that:

1. The profit maximizing plaintiff can expect an award value of $1,371
2. The cost-minimizing defendant incurs costs of $1,646 in defending against both the SEC enforcement action and the plaintiff's class action.

[42] $p^* = -17 - 1(100) + [17(1600)/1.5]^{0.5} = \sim 18$

7.4. Extensions of the Model and Comparative Statics

The model presented in the previous section is a useful tool in considering the consequences of policy decisions that involve increasing the investigative powers of the Commission on the efforts of defendants' and plaintiffs' to gather exculpatory and inculpatory evidence respectively.

7.4.1 The Effect of an Exogenous Change in the Quantum of Evidence Uncovered during the SEC Investigation on Inculpatory Evidence Proffered by the Plaintiff

Proposition 1: *Whether an exogenous increase in the amount of evidence, s, collected by the SEC during its investigation will, at the margin, reduce the quantum of evidence collected by the investor-plaintiff during the subsequent class action litigation, p, will depend on the degree of substitutability between s and p.*

Proof: Maximizing the plaintiff's objective function in (4) with respect to *p* and setting it to 0 yields:

$$G(.) = \frac{d\Pi}{(p + \lambda s + d)^2} - \alpha = 0 \qquad (9)$$

In general form plaintiff's optimization function in equation (9) [G(·)] may be written as:

$$G = G[d(s), p(d(s),s), s] = 0 \qquad (10)$$

Invoking the Chain Rule and the Implicit Function Theorem, the total differential of (10) then be written as:

$$\frac{\partial G}{\partial d}\frac{\partial d}{\partial s} + \frac{\partial G}{\partial p}\left(\frac{\partial p}{\partial d}\frac{\partial d}{\partial s} + \frac{\partial p}{\partial s}\right) + \frac{\partial G}{\partial s} = 0 \qquad (11)$$

The effect of interest (d*p*/d*s*) is contained in the bracketed term in equation (11) above. A change in the amount of evidence collected by the SEC during its investigative process affects the class action plaintiff via two avenues. In gathering his evidence, *p,* there is a direct effect as the plaintiff now has more (or less) evidence garnered by the SEC to add to his own "basket" of evidence. The change in *s* also affects the defendant's choice of *d* as the firm organizes its defense during the initial SEC action. This change in *d* results in a second, indirect effect on *p* as the plaintiff must consider the (new) level of *d* in deciding on his optimal p^*. Consequently, the full effect of an exogenous change in *s* on *p* is given by:

$$\frac{\mathrm{d}p}{\mathrm{d}s} = \frac{-\frac{\partial G}{\partial d}\frac{\partial d}{\partial s}\Big|^{F_s^*} - \frac{\partial G}{\partial s}}{\frac{\partial G}{\partial p}} \qquad (12)$$

In the general case, represented by equation (12), the sign of (d*p*/d*s*) is ambiguous. If an increase in *s* did not affect *d*, then an increase in *s* would always cause a decrease in *p* assuming that the partial derivate of G with respect to *s* is positive. Thus, the ambiguity in the sign of the total derivative of *p* with respect to *s* comes from the indirect effect of *s* on *d* and *d* on *G*. In other words, the strength (or weakness) of defendant's defense in the SEC suit affects the plaintiff who, after observing this, may decide to garner less (or more) costly evidence in pursuing his claim.

Turning to the specific case, by invoking the Implicit Function Rule and substituting the specific functional forms for G(·) and F(·) derived in equations (9) and (15) respectively, equation (12) reduces to:

$$\frac{\mathrm{d}p}{\mathrm{d}s} = -\frac{(d+p+\lambda s)^2(A(d+p+\lambda s)[(d-p)(d-s)+s(3d+s)\lambda]+(d+s)^3\Pi\lambda)}{2d[2As(d+p+\lambda s)^3+2(d+s)^3(p+\lambda s)\Pi]} \qquad (13)$$

Condition: (d*p*/d*s* < 0) if ($d^2 + ps + 3ds\lambda + s^2\lambda > dp + ds$) (14)

The inequality in (14) reveals that free riding by the plaintiffs on the evidence from the SEC investigation (i.e. $\partial p/\partial s < 0$) is most likely to hold when ($\lambda \rightarrow 1$), where λ represents the degree of substitutability between s and p. When $\lambda = 1$ then ($\partial p/\partial s < 0$) if ($d^2 + ps + 2ds + s^2 > dp$). As discussed below s is typically greater than d, implying that ($\partial p/\partial s < 0$). For ($\partial p/\partial s > 0$) implies that ($s \rightarrow 0$); in other words the SEC would be bringing a frivolous suit which is an almost unheard of scenario.

As the value of ($\lambda \rightarrow 0$), the value of ($\partial p/\partial s$) becomes more ambiguous. When ($\lambda = 0$) the condition under which ($\partial p/\partial s < 0$), as expressed in equation (14), reduces to ($d^2 + ps > dp + ds$). Inspection reveals that either ($\partial p/\partial s < 0$) or ($\partial p/\partial s > 0$) are both quite possible. Thus as the substitutability between s and p decreases an exogenous increase in the amount of evidence uncovered by Commission during an enforcement action gradually increases the incentive of the plaintiff to search for evidence of his own.

Consider the case of perfect substitutability between s and p. Should this exist then ($\partial p/\partial s$) is *always* negative if ($s > d$) i.e. the SEC is able to establish liability of the defendant firm on a preponderance of evidence. As noted in the discussion in the following section, a scenario in which ($s > d$) is the norm given the Commission's policy to initiate only *bona fide* enforcement actions that would prevail on the merits. Effective implementation of this policy is evidenced by the minute percentage (0.06%) of SEC actions that are dismissed on appeal to a higher court.

In sum, an exogenous, increase in the amount of evidence collected by the SEC during its investigative process will reduce the burden on the private plaintiff to produce evidence, provided that a relatively high degree of substitutability exists between SEC and plaintiff's evidence. In economic terms, the class action plaintiff is able to free ride of the SEC's efforts, as the evidentiary largesse uncovered by an enforcement action will include allegations that support a class action complaint.

7.4.2 The Effect of an Exogenous Change in the Quantum of Evidence Uncovered during the SEC Investigation on Exculpatory Evidence Proffered by the Defendant

Proposition 2: An exogenous increase in the amount of evidence, s, collected by the SEC during its investigation will, at the margin, reduce the overall quantum of exculpatory evidence produced by the defendant firm (subject to a single, limited exception).

Proof: Minimizing the defendant's objective function in (3b) with respect to d and setting it to 0 yields:

$$F(.) = -\frac{As}{(d+s)^2} + \gamma - \frac{(p+s\lambda)\Pi}{(p+\lambda s+d)} = 0 \qquad (15)$$

In general form defendant's optimization function in equation (15) [*F()*] may be written as:

$$F = F[p(s), d(p(s),s), s] = 0 \qquad (16)$$

Invoking the Chain Rule and the Implicit Function Theorem, the total differential of (16) may be written as:

$$\frac{\partial F}{\partial p}\frac{\partial p}{\partial s} + \frac{\partial F}{\partial d}\left(\frac{\partial d}{\partial p}\frac{\partial p}{\partial s} + \frac{\partial d}{\partial s}\right) + \frac{\partial F}{\partial s} = 0 \qquad (17)$$

The effect of interest (d*d*/d*s*) is contained in the bracketed term in equation (17) above. A change in the amount of evidence collected by the SEC during its investigative process (∂s) affects the defendant firm via two avenues. In gathering his evidence, there is a direct effect as the defendant now has more (or less) inculpatory evidence garnered by the SEC to defend against ($\partial F/\partial s$). The change in *s* also affects the plaintiff's choice of *p*, as he decides on the optimal amount of evidence p^* that he should "add" to that uncovered by the Commission. This change in *p* results in a second, indirect effect on *d,* as the defendant must consider the plaintiff's (new) level of p^*, when deciding on his optimal d^*.

The full effect of an exogenous change in *s* on *d* may be obtained by rearranging (17) to isolate the effect of interest, (d*d*/d*s*):

$$\frac{\mathrm{d}d}{\mathrm{d}s} = \frac{-\frac{\partial F}{\partial p}\frac{\partial p}{\partial s}\Big|^{G_p^*} - \frac{\partial F}{\partial s}}{\frac{\partial F}{\partial d}} \qquad (18)$$

In the general case, represented by equation (18), the sign of (d*d*/d*s*) is ambiguous. If an increase in *s* did not affect *p* (i.e. there was no substitutability between the SEC's and plaintiff's evidence implying $\lambda = 0$), then an increase in *s* would always cause a decrease in *d* assuming that the partial derivate of *F* with respect to *s* is positive. Thus, the ambiguity in the sign of the total derivative of *d* with respect to *s* comes from the indirect effect of *s* on *p* and *p* on *F*. In other words, the expected strength (or weakness) of plaintiff's subsequent suit affects the defendant who, after observing this, may decide to garner less (or more) costly evidence in defending both suits.

Turning to the specific case, by invoking the Implicit Function Rule and substituting the functional forms for G(˙) and F(˙) derived in equations (9) and (15) respectively, equation (16) reduces to:

$$\frac{\mathrm{d}d}{\mathrm{d}s} = -\frac{A(s-d)}{(d+s)^3\left(\frac{2As}{(d+s)^3} + \frac{2(p+s\lambda)\Pi}{(d+p+s\lambda)^3}\right.} \qquad (19)$$

Condition: (d*d*/d*s*) < 0 iff. *(s>d)* (20)

All the terms in equation (19) are (+), save one *(s-d)* in the numerator. Thus, ($\partial d/\partial s$) is *always* negative if (*s > d)* i.e. the SEC is able to establish liability of the defendant firm on a preponderance of evidence. A scenario in which (*s > d)* is typical, at least according to the corporate law academic Joseph Grundfest who notes that "… it was my experience as a Commissioner that the agency consistently sought to avoid instituting an enforcement action if it did not in good faith believe that the action would likely prevail on the merits." His experience of *bona fide* prosecutions by the Commission is supported empirically by the minute percentage (0.06%) of SEC actions that are dismissed on appeal to a higher court.

In other words, an exogenous, increase (decrease) in the amount of evidence collected by the SEC during the course of an enforcement action will typically lead to a decline (increase) in the overall amount of exculpatory evidence proffered by the defendant.

It is nevertheless important to examine equation (19), for the condition under which the equation is negative. Equation (19) is (-) only when ($d > s$). An imbalance of inculpatory and exculpatory evidence during an enforcement action (i.e. d exceeds s) would imply either a substandard investigation or an ill-conceived and poorly executed federal prosecution. In such an exceptional situation, the defendant would fancy its chances against an ill-prepared Commission, despite the latter's improved investigatory powers.

In the typical enforcement action, where ($s > d$), one would expect that policy measures, such as SOX, which expand the investigatory powers of the Commission, to act as a disincentive to the gathering of exculpatory evidence by the defendant, as predicted by equation (19). This tendency of the defendant to protect itself less vigorously underscores the importance of an impartial and rigorous investigation and clearly defined standards and procedures to guide prosecutions by federal regulators.

7.4.3 Explicit Illustrations of the Comparative Statics

In order to lend more concrete intuition to the preceding discussion, this section signs the comparative statics derived in Equations (13) and (19) for $\lambda \epsilon [0.005, 1, 1.5]$, assuming values [$A = 150$, $\Pi = 1600$, $d = 17$, $s = 100$, $p = 8$]. Although λ will usually take on values $\lambda \in [0, 1]$, indicating almost imperfect [$\lambda = 0.005$] and perfect substitution [$\lambda = 1$] between the SEC and plaintiff's evidence, there will be instances where the SEC's evidence takes on greater import in the class action than it did in the initial enforcement action. To account for this possible amplification effect we allow λ to assume a value [$\lambda = 1.5$].

Table 19: Numerical Evaluation of the Comparative Statics

	$\lambda = 1$	$\lambda = 0.005$	$\lambda = 1.5$
$\frac{dp}{ds}$	(-)	(+)	(-)
$\frac{dd}{ds}$	(-)	(-)	(-)

These results underscore that, in general, an exogenous increase in the SEC's evidence, *s*, will result in a decrease in the both the amount of inculpatory evidence unearthed by the plaintiff, *p*, and exculpatory evidence offered by the defendant, *d.* The exceptional case arises when there is very little substitutability between *s* and *p*, at which time the plaintiff decides on how much evidence to gather independent of the SEC's efforts.

An important question arises as to the effect an increase in the evidence uncovered during the SEC investigation on the total evidence *(p+s)* wielded by the plaintiff against the defendant. This question can be explored with a simple extension of Propositions 1 and 2. The total evidence uncovered by the SEC and the plaintiff is *(p+ s)* so that:

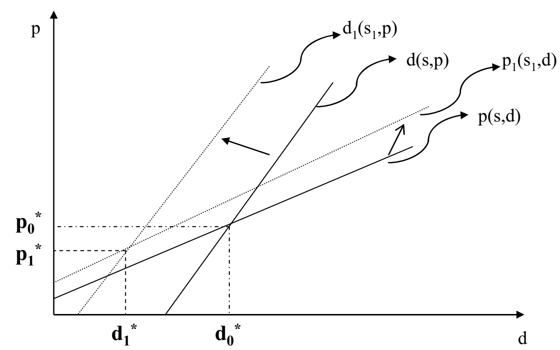
$$\frac{d(p+s)}{ds} = \frac{dp}{ds} + 1 \qquad (21)$$

Assuming a value of ($\lambda = 0.5$), if $\frac{dp}{ds} = -1$ then $\frac{d(p+s)}{ds} = 0$ and there is no change in the plaintiff's total evidence. However, the total evidence proffered by the plaintiff against the defendant will increase for all values of $\frac{dp}{ds} = [0,1)$, implying that the plaintiff will increase his share of the maximal damages award, Π, in this range.

7.5. A Graphical Representation of the Interaction between Private Plaintiff and Defendant as the level of *s* changes

Figure 6a, below, is a simplified graphical representation of the general effect of an increase in *s*, the Commission's evidence, on the optimal values of p^* and d^*.

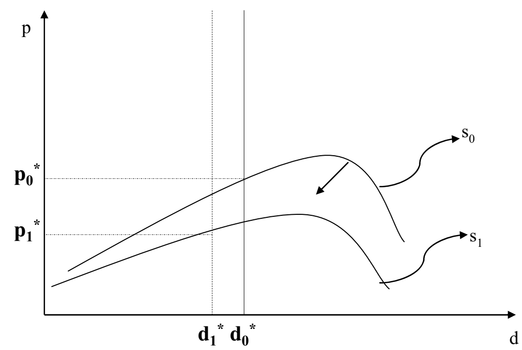
Figure 6a: A Graphical Representation of the Reaction Functions of Private Plaintiff and Defendant



The curves *p(s, d)* and *d(s, p)* are the reaction functions of the plaintiff and defendant respectively, given an initial level of SEC evidence, *s*. The initial equilibrium occurs as a fixed point in *d* and *p* shown by (d_o, p_o). The preceding analyses (and the more detailed discussion below) suggests that these initial reaction curves shift inward when *s* increases, leading to the lower equilibrium values of *p* and *d* shown by (d_1, p_1).

Figure 6b, below, graphs the relationship between *p* and *d* with greater specificity. The locus of values for *p* and *d* was from substituting a range of values for $d \in [10, 400]$ into Equation (6), using the parameter values specified earlier (A = 150, s = 100, γ = 7, α = 1.5, λ = 1, and π = 1600).

Figure 6b: A Graphical Representation of the Effect of an increase in *s* on *p* and d*



The optimal values of $(p^*=18,\ d^*=17.2)$, for the specified parameter values [A = 150, s = 100, γ = 7, α = 1.5, λ = 1, and π = 1600], are shown as $(p_0^*,\ d_0^*)$. A 10% increase in *s* shifts the graph s_0 downward and to the left to s_1, and new equilibrium values of $(p^*=7,\ d^*=16.7)$ obtain. This decrease in *p* accords with the Proposition 2 which states that an increase in the amount of evidence collected by the SEC during its investigative process will generally reduce the burden on the private plaintiff to produce evidence, provided that a high substitutability of evidence between private and public enforcers (i.e. $\lambda \rightarrow 1$) exists. The slight decrease in d^* (that results from an increase in *s*) accords with Proposition 1 asserted that in the face of a bona fide SEC prosecution the defendant will tend to protect itself less vigorously, underscoring the importance of an impartial and rigorous investigation. Under the assumptions of this model, an increase in *s* thus leads to a decrease in the amount of evidence $(p + d)$ advanced by the defendant and plaintiff as well as a fall in the total evidence presented by all parties to the litigation.

It must be noted that the precise effect on d^* from an increase in *s* is an empirical question that, unfortunately, lies beyond the offerings of the data in this study. With this in mind, a plausible argument could be made that the defendant is more likely to increase the exculpatory evidence that it produces in response to an exogenous increase *s*, and that the result stated in Proposition 1 merely obtains from the modeling decisions. The defendant's choice to increase *d* in response to an exogenous increase in *s* may accord with its cost-minimizing objective since, depending on the marginal cost of obtaining *d*, an increase in *d* may help minimize the expected award payments to both the SEC and private plaintiffs. Should an increase in *s* elicit a higher d^* the overall effect on total evidence $(p + d)$ advanced by the defendant and plaintiff, as well as the total evidence presented by all parties to the litigation $(p + s + d)$, will depend on the specific assumptions made regarding their relative marginal costs of producing evidence.

8. An Empirical Examination of the Implications of the Model

This chapter now considers two recent changes in the SEC regulatory landscape viz. the enactment of Sarbanes-Oxley in July, 2002 and the substantial increases in Congressional funding for the SEC during the 2002 fiscal year. This section will argue using the language of Propositions 1 and 2 (above) that taken together these changes have generated a uniform, exogenous increase in the quantum of evidence (*s*) that the Commission is able to gather during its enforcement actions.

8.1. The Sarbanes-Oxley Act of 2002

The Sarbanes-Oxley Act became effective on July 31, 2002 and is the most important and expansive securities legislation since the enactment of the Securities Act of 1933 and the Securities Exchange Act of 1934.

One of the strongest features of SOX has been its emphasis on efficacious corporate governance and, in particular, on the role of independent directors on the board of publicly held companies. SOX has also addressed the independence of auditors, and the level of financial expertise required by Audit Committee members of the Board of Directors.

A second, central tenet of SOX, directly related to the themes explored in this chapter, has been the strengthening of the SEC's enforcement mandate by improving the Commission's ability to detect, investigate and prosecute securities fraud. In particular, under the Section 401(a) of SOX, the Commission has sought to improve the financial reporting of companies by adopting rules requiring disclosure of all material off-balance sheet transactions. Regulation G, adopted under Section 401(b), stringently governs the use of financial measures not falling within the ambit of Generally Accepted Accounting Principles (GAAP), including disclosure and reconciliation requirements of financial statements. On the enforcement front, the Commission is now obliged to review the Exchange Act reports of each company no less frequently than once every three years. Section 106 gives the SEC access to foreign audit workpapers, while auditors are also required to retain workpapers that form the basis of the audit or review for five years after the completion of the audit. The SEC has adopted rules that have accelerated deadlines and mandated the electronic filing of disclosures of insider transactions in company stock. One of the most controversial provisions of SOX, Section 404, is intended to provide an early warning to regulators of financial malfeasance by requiring an annual management report on, and auditor attestation of, a company's internal controls over financial reporting. Congress has also clearly signaled, via the enactment of Section 308 of SOX that established investor restitution funds, its preference that the Commission aggressively pursue investor restitution as one of its primary goals rather than rely on private actions for redress. The likely effect of this Congressional encouragement will arguably be a more thorough investigation and prosecution of securities violations, as the Commission will doubtless have to justify the heftier civil penalties and disgorgement that it imposes on companies. With regard to punishment, the Act expands the Commission's authority to impose sanctions on persons who have violated securities laws, while also affording the Commission the ability to fashion specific remedies for violations of the securities laws. The SEC's investigation of corporate fraud has also been aided by the additional statutory protections afforded to corporate whistleblowers. Insiders exposing corporate fraud now have remedies that cover reinstatement, back pay and benefits, compensatory damages, abatement orders, and reasonable attorney fees and costs.

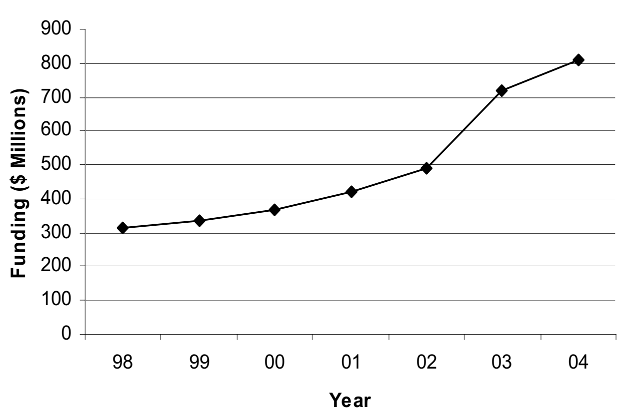
Taken as a whole, this raft of reforms has strengthened the enforcement arm of the SEC. Investigators are now in possession of more complete business records and financial statements; have wider access to auditors' reports of the firm's financial health and internal controls; are better able to protect corporate whistleblowers; and may coerce recalcitrant firms into admitting wrongdoing by imposing a wider array of penalties than before.

Finally, the passing of SOX was interpreted by many commentators as Congressional dissatisfaction with the perceived failure of the Commission to enforce ethical business practices and corporate responsibility. Thus, in addition to these tangible improvements in the Commission's ability to discover, investigate and prosecute securities fraud, the Act may well have been the spur to more diligent and effective enforcement of securities laws by the Commission. Career enforcement officials, in particular, are doubtless keen to salvage the once pristine reputation of the Commission.

8.2. Increased Congressional Funding of the SEC

Within six months of the effective date of SOX on July 31 2002, Congress acted decisively for a second time in a notable response to the corporate scandals of 2001. Funding for the SEC was increased by 46.2% for the fiscal year 2003, far outstripping the average annual budgetary increase of 12% during the period 1998 – 2004 (as shown in figure 6 below). The increased funding for 2003 was revealed at roughly the same time that SOX was wending its way through Senate in mid-2002, creating in effect a single, substantial change in securities policy.

Figure 7: SEC Funding 1998-2004



As a consequence of the funding windfall, the SEC hired more than 1,000 new employees during fiscal years 2002 and 2003, which represented the largest staffing increase in the agency's history. Much of the increased funding used to attract skilled accountants to the SEC staff.[43]

8.3 The Commission's Production of Evidence in Post-Sox Enforcement Actions

In the preceding two sections it has been argued that the enactment of SOX reinvigorated the SEC's enforcement mandate via a host of provisions that fostered the Commission's ability to investigate and prosecute securities fraud. This statutory fillip was allied to a substantial, almost contemporaneous increase in the Commission's funding that enabled the hiring of quality, specialist investigatory staff.

It is important to note that while SEC funding increased by 76.8% in 2003 relative to the mean annual funding for the 4 preceding years (from 1999 to 2002), the Commission's caseload increased by only 28.8% in 2003 relative to this 4 year period. On an annual basis, mean funding increased by 46.8% from 2002 while caseload increased 13.4%.

Consequently, SEC enforcement in post-SOX period has meant more, highly skilled staff, armed with substantially greater investigative powers, working on relatively fewer enforcement actions relative to the increase in resources. Drawing these facts together it is argued that the statutory and funding encouragement, acting in tandem, have resulted in a superior volume of relevant evidence being produced per enforcement action relative to "pre-SOX" investigations.

8.4 Linking the Theoretical Predictions with Empirical Evidence

A key prediction flowing from the theoretical model is that an exogenous increase in the volume of evidence collected by the SEC during an enforcement proceeding will reduce the amount of evidence advanced by the investor-plaintiff during the subsequent class action litigation. An equally important finding, following from the earlier illustration in Section 7.4.3, is that the total amount of evidence at the disposal of the plaintiff will also most likely be higher as result of SOX and the SEC budget increase. We now test three empirical hypotheses consistent with these theoretical predictions.

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[43] See for example the comments by James McConnell, the SEC executive director, in http://www.forbes.com/2003/02/04/cx_da_0204topnews.html (sited visited on 4/262006)

Hypothesis 1: *Plaintiffs in jointly enforced actions have delayed their filings in the post-SOX era, relative to the SEC filing date, in order to benefit from the SEC's superior powers of investigation (and so reduce the quantum of evidence they must uncover for their pleadings)*

The previous section developed the argument that SOX and funding increases, acting in tandem, have increased the volume of evidence collected by the SEC in enforcement proceedings relative to "pre-SOX" investigations. Furthermore, an important implication of the finding in 7.4.3 is that as the total amount of evidence available to the plaintiff increases so to does the fraction of the maximal damages award (Π) and the probability that the plaintiff would prevail on the merits; consequently, there is further reason for class action litigators to await the SEC's evidence.

If these arguments are true, we can expect to see changes in the filing patterns of class action plaintiffs that reflect the SEC's enhanced enforcement vigor and mandate. In deciding on the timing of the filing of their suit, in joint actions, private plaintiffs have conflicting incentives. On one hand, they would prefer to file their suit earlier in order to reap the financial benefits that flow from an earlier settlement. These include the potential to build a larger class while enhancing the probability of an actual recovery while the defendant firm is still solvent. On the other hand, the plaintiff bar would prefer to free ride off the SEC's investigation and so minimize the substantial costs associated with obtaining their own (costly) evidence to serve as a basis for their pleadings. The crucial assessment that the plaintiff bar must make is whether the SEC investigation is sufficiently assiduous and revealing to compensate for the added risk, and potentially lower expected value, associated with a later filing. If SOX and the funding increases have increased the quantum of evidence uncovered by the SEC in joint enforcement actions then private plaintiffs can be expected to delay their filings, relative to the SEC filing, so as to lower their costs of obtaining evidence.

To test whether there has been a lag in the filing of private suits post-SOX we calculate the amount of time (in days) given by (Class Action File Date – SEC File Date). The SEC filing date is crucial to this analysis because it is the first time that the fruits of the SEC investigation are made public (in the pleadings). The results of this analysis are shown in Table 20 below:

Table 20: Timing of filing decisions of private plaintiffs' pre-and post SOX in jointly litigated actions

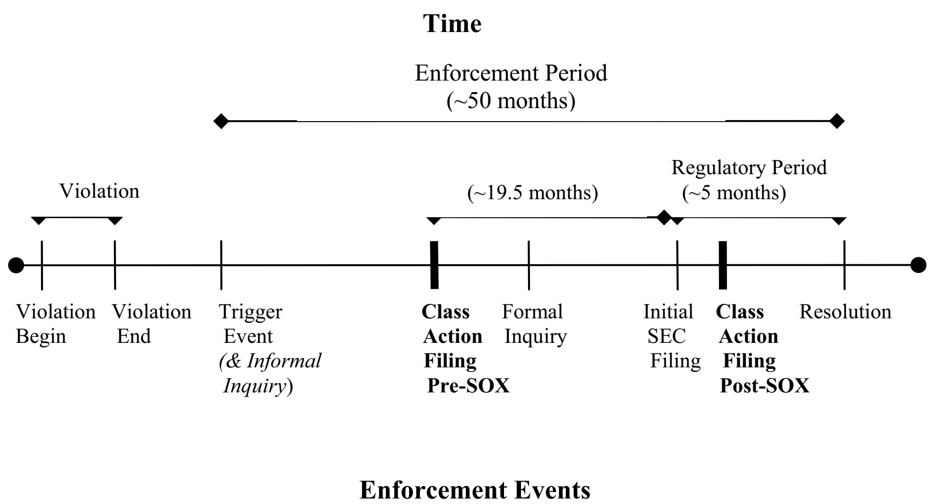
Time Period	**Sample size**	**(Class Action File Date – SEC File Date)***
Pre-SOX (before 7/31/2002)	146	- 580 days
Post-SOX	32	+ 37 days

**Difference of means significant at the 1% level*

In the pre-SOX era, class action plaintiffs filed suit approximately 1.6 years before the evidence gleaned from the SEC officially entered the public domain in pleadings (or a settlement agreement) filed at the initial regulatory proceeding (s*ee Figure 8 below*). According to Karpoff (2006) the average length of the enforcement period – lasting from the event triggering the investigation to the final resolution is approximately 50 months – implying that class action plaintiffs filed suit at the very early stages of a federal investigation and just after the announcement of an informal investigation. In so doing, in the pre-SOX era, the private plaintiffs appear to have discounted the value of the evidence that the SEC action would uncover in favor of their own investigative efforts and a more timeous, lucrative hearing.

As the Figure 8 below shows, the behavior of class action plaintiffs has changed markedly in the post-Sarbanes period.

Figure 8: Effect of post-SOX Reforms on the Timing of Class Action Filings



Plaintiffs have, on average, delayed their filing decision until 37 days *after* the SEC's initial regulatory proceeding which, crucially, is the first public airing of the allegations and evidence against the defendant. The initial regulatory proceeding most often takes the form of a settlement agreement or a pleading that marks the beginning of the litigation process. The advanced stage that Commission proceedings have reached at this point is clear when one considers that the mean regulatory period in jointly enforced actions is only 143 days. The changing filing patterns of private plaintiffs, vis-à-vis enforcement actions, in the post-SOX era suggests that the plaintiffs are sensing a more effective and diligent investigation by the SEC than was previously the case.[44] SEC investigations now appear to be yielding evidence crucial to their own complaint, justifying a delay in the private plaintiff filings. Thus, the improvement in the quality of human capital at the SEC and statutory encouragement of an assiduous, probing investigation appear to have forced a change in the decision calculus of the plaintiff's bar result in a heavier reliance on the federal investigation.

[44] Recalling the theoretical model, this assertion is consistent with the notion that λ has increased since the enactment of SOX and the increase in the SEC budget.

Hypothesis 2: *An unintended consequence of "free-riding" by private plaintiffs is to encourage, at the margin, the filing of weaker private suits, resulting in higher dismissal rates of jointly filed class actions in the post-SOX era*

Free-riding by private plaintiffs on evidence produced by SEC investigations may encourage, at the margin, the filing of class actions that would not otherwise have made it to court but for the additional evidence unearthed by the SEC's investigation. Plaintiffs, excited by the prospect of a settlement requiring little effort on their parts, may be lulled into believing that all of the evidence collected by the SEC is perfectly substitutable in their own pleadings. For a variety of reasons this impression may be fallacious. The SEC – which is concerned with deterrence, visibility, and the continued financial viability of defendant firms – has very different enforcement goals to the profit-seeking plaintiff bar, and will seek to collect evident consistent with its own objective. Furthermore, given the complexity, duration, and confidentiality of enforcement actions it is not clear that all the evidence uncovered in an enforcement action will be made available to private plaintiffs in public records. Finally, investors are limited in the statutory provisions under which they may sue so that not all the evidence uncovered by federal investigators will be relevant to them.

Another plausible explanation for a possible increase in the filing of weaker suits, grounded in the earlier theoretical discussion, relates to the cost of producing evidence. If the Commission produces a copious amount of evidence that is effectively available at no charge then the plaintiff bar may find it profitable to gather only a small amount of their evidence, p. An increase in s may then be sufficient to alter the decision calculus of the private plaintiff, as the case may now have a (marginally) positive expected value, even though the case itself is a weak one due to the low degree of substitutability of evidence (λ).

Should weaker private suits be filed there are nevertheless three reasons to believe that these suits, once filed, will subsequently fail to overcome judicial scrutiny. First, upon the motion to certify the class the defendants may object to whether the legal issues are best handled as class litigation. The court will also examine the ability and resources of the firm to fully prosecute the claim, and whether due process requirements of notice have been complied with. Second, the Private Securities Litigation Reform Act of 1995 heightened evidentiary standards by requiring:

1. Pleadings to specify misleading statements and reasons for believing the statement was misleading
2. Specifying the facts that led the plaintiff to conclude that the defendant unlawfully acted with the requisite level of intention
3. Courts to delay discovery proceedings until they have decided on the merits of any motion to dismiss the complaint brought by the defendant and based on the sufficiency of the pleadings

The challenges that class action lawyers face in meeting their evidentiary burdens in their pleadings and with obtaining class certification are substantial, as witnessed by the 35% of all class action filings that were dismissed between 1998 and 2003.

If, in the post-SOX era, free-riding by the plaintiff bar in jointly enforced actions has increased, leading to the filing of less meritorious private suits, then one may expect to find a higher percentage of private suits being dismissed at later stages of litigation by the courts, for inadequate pleadings or lack of merit.

Table 21: Analysis of Settlement and Dismissal Rates of Jointly Filed Class Actions pre- and post Sarbanes Oxley

Case Status	**Pre-SOX**	**Post-SOX**
Active/Settled	131 (90.3%)	24 (72.7%)
Dismissed*	14 (9.7%)	9 (27.3%)
	145 (100%)	33 (100%)

*Dismissal rates significantly different at 1% (Pearson chi^2)

The results reported in Table 20 reveal that dismissal rates for private class actions among jointly enforced suits have increased significantly in the post-SOX era (relative to their pre-SOX levels). This empirical outcome is consistent with the theoretical prediction of increased free riding by the class action bar in response to the improvements to the SEC enforcement mandate wrought by SOX reforms and increased funding.[45]

Hypothesis 3: *An increase in the evidence yielded by an SEC enforcement action reduces the time to settlement of a jointly filed class action.*

In the post-SOX era the enhanced enforcement efforts of the SEC are ostensibly more likely to yield evidence helpful to private class action lawyers. Superior information improves both parties assessment of the suit's likelihood of success so that settlement will be seen as the most efficient result for all parties. Furthermore, the plaintiff has, to an even greater degree, been relieved of the time-consuming task of collecting and producing evidence in support of his plea.

This assertion is consistent with the earlier, theoretical proposition that the increase in s typical leads to an increase in the total amount of evidence wielded by the plaintiff i.e. an increase in $(p+s)$. This implies that the plaintiff enjoys a greater preponderance of evidence, making their case more compelling and leading to a speedier resolution.

Table 22: Time to Settlement of Jointly Filed Class Actions pre- and post Sarbanes Oxley

	Mean days to settlement Pre-SOX	Mean days to settlement Post-SOX
Time to Settlement* **(N=103)**	1052 days	538 days

*Time to settlement significantly different at 1%

[45] Although this conclusion is also consistent with enhanced, or more strictly enforced evidentiary standards, there is nothing in the literature to suggest either a changed judicial posture or statutory provisions that have further limited plaintiff causes of action (beyond the PSLRA that was passed in 1995)

The results reported in Table 21 confirms that the existence of a parallel SEC enforcement action in the post-SOX period hastens the time to settlement of the accompanying private suit relative to the pre-SOX period. The reduced time to settlement is quite substantial – 450 days. Thus, although private suits are filed later in the post-SOX period, they also settle sooner.

9. Conclusion

The existence of growing, parallel enforcement mechanisms have led to both significant similarities and differences in the securities suits being prosecuted by public and private litigators. A primary objective of this study has been to provide empirical estimates of the level of litigation by analyzing the nature, frequency, and impact of specific allegations made against defendant companies in both federal and private securities suits.

Only a handful of academic offerings have considered the scope and impact of federal enforcement actions, although a vast empirical and theoretical literature has examined private class actions. The SEC is most concerned with perceived impact of its litigation activity on industry and the public, and aims to maintain a visible presence in the capital markets so as to maximize its deterrent effect. The objectives of the SEC are constrained by scarce financial resources, which must be spread across the vast legal terrain covered by the securities statues and oversight of the myriad of SEC-reporting companies that the Commission is expected to police. Defendants pursued by the SEC range from individuals to small businesses and partnerships to the largest of public companies. The spectrum of infringements pursued by the Commission is as diverse, although six primary violations of securities laws constitute approximately 75% of all cases filed. Most notable among these violations are false financial disclosure, securities offering violations and insider trading.

If levied, the actual size of the monetary penalty is positively related with the imposition of certain non-monetary sanctions, allegations of insider trading and fraud on customers by broker dealers, and time to settlement. In the subset of public company defendants, the actual size of the monetary penalty is positively related to financial disclosure violations, the imposition of certain non-monetary sanctions, the length of the prosecution, and the size and profitability of the company.

Although the SEC has civil enforcement authority only, it cooperates closely with the criminal law enforcement agencies to litigate criminal cases where the misconduct warrants more severe action. The probability of a parallel criminal action against the defendant increases with the imposition of particular non-monetary sanctions, the length of the prosecution, insider trading, investment advisor or offering violations, and with the size of the settlement.

In comparison to SEC enforcement actions, in which just 8.6% of defendants are publicly traded companies, 84.2% of class action defendants are public corporations. However, the mean public company enforcement action defendant was substantially larger and more profitable than the mean class action defendant. A second key difference between SEC actions and class actions lies in their dismissal rates. The overwhelming majority of SEC actions reach settlement and only 0.06% of all cases filed are dismissed on appeal. In stark contrast, 35% of all class actions that have reached completion have been dismissed. The mean class action recovery ($41.9 M) is more than twelve times more than the mean enforcement action settlement ($3.4 M); although enforcement suits on average settle more than two years earlier than class actions.

In an analysis of all completed class actions allegations of accounting violations and Section 11 infringements - misrepresentations in a registration statement - increase the probability of dismissal, as does the length of the class period i.e. the period over which the violation occurred. In contrast, suits alleging Section 10(b)(5) violations, involving deceptive practices in the sale of securities, are more likely to settle in favor of the plaintiff. The analysis of completed class actions in which there was a public company defendant mirrors these results, with an important additional finding. Although the defendant firm's profitability and share price appear unrelated to the court's decision to dismiss the suit, a 10% in increase in assets is associated with a 0.06% decline in the probability of dismissal. Higher settlements are also imposed on larger, more profitable companies, which mirror the findings for SEC enforcement actions.

Allegations of irregular financial disclosure in an enforcement action significantly increases the probability of a subsequent class action, as does the size of the settlement award, the time to reach final settlement, and whether the firm is a publicly traded company. However, after restricting the subset of enforcement action defendants to public companies only, it appears that the size, profitability or share price of the company is not related to the private plaintiff's decision to sue.

Several interesting findings emerge from a direct comparison between enforcement actions and class actions against the same defendant based on the same cause of action. First, class actions on average recover almost four times more than the corresponding enforcement actions. Second, jointly enforced suits are fairly rare, constituting just 4.1% of all SEC enforcement actions and 8.25% of all class actions. However, they represent 56.79% and 47.33% of *total* recoveries by public and private enforcement mechanisms respectively. Third, class actions generally settled in a little under three years versus the five months of SEC actions. Fourth, the class period in class actions with parallel SEC proceedings is significantly longer than in instances where only a private action is filed. A longer class period implies that more shares have been traded during the interval of alleged fraud, and this will typically lead to a greater damage claim for the plaintiffs. Finally, the hypothesis that private settlements should occur more quickly when there is a parallel SEC investigation than they ordinarily would, because of the superior information available, is only marginally statistically significant.

An economic model of the strategic interaction between private and public enforcement arms in jointly enforced suits generates three theoretical findings. The first theoretical proposition asserts that, in instances where a high degree of substitutability exists between the evidence uncovered by the SEC and that sought by the private plaintiff, an exogenous increase in the amount of evidence typically collected by the SEC during its investigative process will, almost without exception, reduce the burden on the private plaintiff to produce evidence. In economic terms, the class action plaintiff is able to "free ride" off the SEC's efforts, as the evidentiary largesse uncovered by an enforcement action will doubtless include allegations that support a class action complaint.

The second theoretical proposition flowing from the model asserts that, somewhat counter-intuitively, that an exogenous, increase in the amount of evidence collected by the SEC during the course of an enforcement action will typically lead to a decline in the overall amount of exculpatory evidence proffered by the defendant. From a policy perspective, this tendency of the defendant to protect itself less vigorously when faced with ascending federal investigatory and enforcement authority, underscores the importance of an impartial and rigorous investigation and clearly defined standards and procedures to guide prosecutions.

The third theoretical implication is that the total amount of evidence at the disposal of the plaintiff will also most likely be higher as result of SOX and the SEC budget increase. The advantage to the plaintiff is an increase in the expected value of his share of the maximal damages award, Π, as well as a greater likelihood that he will prevail on the merits should the suit reach trial.

The enactment of SOX reinvigorated the SEC's enforcement mandate via a host of provisions that fostered the Commission's ability to investigate and prosecute securities fraud. This was allied to a substantial, almost contemporaneous increase in the Commission's funding that enabled the hiring of quality, specialist investigatory staff. Linking these arguments with the theoretical predictions it is argued that the statutory and funding encouragement, acting in tandem, have provided an "exogenous increase in the amount of evidence typically collected by the SEC during its investigative process".

The effect of SOX on the SEC's investigative process is supported by consistent empirical findings. Plaintiffs in jointly enforced actions have delayed their filings in the post-SOX era, relative to the SEC filing date, ostensibly to benefit from the SEC's superior powers of investigation. Furthermore, consistent with the plaintiff bar making greater use of the evidence obtained from the investigative efforts of federal regulators weaker private suits have been filed at the margin, as evidenced by the higher dismissal rates of jointly filed class actions in the post-SOX era.

By providing a factual, empirical, and theoretical foundation to help structure the debate surrounding the joint enforcement of securities statutes, it is hoped that this study spurs a careful examination by policymakers of the tradeoffs that exist between private and public enforcement, so as to soften the rhetoric in what has become a very polarized debate between plaintiff trial lawyers and defendant companies. In so doing, it is hoped that this study has taken the early steps in reframing the analytical question from "which form of enforcement is better" to "how can these alternative enforcement mechanisms best work together."

Chapter 3: An Empirical Study of Corporate Governance Reforms in Private and Public Securities Actions

1. Introduction

The historical role of securities litigation in the United States has been to impose liability on negligent or fraudulent office bearers, to provide compensation to affected investors and, at least as far as policymakers are concerned, to use public actions as a means of deterring future violations of the securities laws. These ends may be achieved via a variety of mechanisms including regulatory enforcement, private investor suits and criminal liability.

This paper is novel in that, for the first time, differences in settlement outcomes between public and private enforcers of securities laws are examined from corporate governance perspective. The OECD defines corporate governance as the "… system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set and the means of attaining those objectives and monitoring performance."[46]

In contrast to fines which are levied after every instance of wrongdoing and which provide *ex post* deterrence to potential future violators, the adoption of corporate governance reforms offers an alternative *ex ante* mechanism to civil penalties as a means of ensuring lawful and ethical behavior by office bearers. The focus is not on monetary penalties as a means of achieving wider deterrence; rather, deterrence is achieved by requiring companies to adopt effective corporate governance structures that focus on the institutional and policy framework of corporations to ensure that the checks and balances exist to prevent a future abuse of power by officers of the corporation.

The paper is organized as follows. Section 2 delves into the history of the public-private partnership of securities litigation and examines the legal basis for private and

[46] OECD Governance Report 1999

public actions, as well as the incentives that each of these actors faces in bringing a suit. The type of sanctions public and private plaintiffs may levy against wrongdoers are also examined. It will be seen that while the SEC has a wider array of sanctions at its disposal than the private class action attorney, the Commission has been reluctant to enter the realm of corporate governance reforms, due to its arguably limited expertise in corporate governance as well as the effects of constraining legal precedent. In instances where the SEC has insisted on corporate governance reforms these have largely been focused on financial institutions rather than operating companies. This section will also consider the role that the SEC has played in assisting in criminal proceedings in an attempt to maximize the deterrence and retributive aspects of its investigations.

Section 3 discusses the data sources that this empirical study employs and outlines the seven major categories of governance changes that both private and public actions have sought to require.

A summary of the key empirical outcomes of public and private actions in which governance reforms have formed part of the settlement vis-à-vis the outcomes from the population of *all* public and private actions is detailed in section 4. It will be seen that private suits that require governance reforms are quite similar to all other private suits with regard to the value of settlement and the time to reach settlement. In contrast, the SEC reserves governance reforms for the most serious infractions that it investigates. Public financial institutions that engage in fraud or fail to adequately supervise their staff are most likely to have governance reforms foisted upon them.

Private and public corporate reformers must strive to tailor governance reforms in order to enhance social welfare. Thus, the reforms must strike a fine balance between efficiently deterring future violations of securities laws that damage investors without chilling corporate decision making that is consistent with profit maximization. With this in mind, Section 5 tests three hypotheses with regard to the stringency and breadth of the governance reforms required by public vis-à-vis private enforcers of securities laws. The first hypothesis tested suggests that the SEC is more likely to adopt stringent governance reforms as part of its settlement agreements than are private enforcers. The second hypothesis examines whether private enforcers are more likely to require a wider range of governance reforms than the Commission. The third hypothesis questions whether the passing of Sarbanes Oxley has affected the litigation strategy of the SEC with regard to the stringency of the corporate governance reforms that it assesses.

Section 6 examines the market reaction to companies that have adopted governance reforms as part of their settlement agreements, vis-à-vis non-governance settlements. Section 7 concludes.

2. A General Framework for the Public and Private Enforcement of Securities Violations

As noted in the previous chapter, securities legislation in the United States has historically been enforced by both private and public litigators. Acting in tandem, these mechanisms have resulted in wrongdoers facing a wide array of possible sanctions. In broad terms three major mechanisms of enforcement may be discerned – namely, regulatory actions by the SEC, private suits that most often take the form of investor class actions, and criminal enforcement by federal authorities.

2.1 The Objectives of SEC Enforcement and Constraints on its Exercise of Authority

In selecting which enforcement actions to pursue the SEC is concerned with its conviction and settlement rates and is thus more likely to prosecute claims with stronger evidence that hold greater promise of success. In pursuing a conviction the SEC is also very concerned with perceived social impact of the litigation in encouraging deterrence as well as the likelihood that the case will set an important legal precedent.[47]

The SEC has acknowledged its own inability to detect and fully prosecute all illegal behavior but they point to factors beyond their control, including inadequate

[47] Major Human Capital Challenges at SEC and Key Trade Agencies: Hearing before the S. Subcomm. on Oversight of Government Management., Restructuring and District of Columbia, Comm. On Government Affairs, 107th Cong. 6(2002)

funding and intense political pressure from a business-friendly Congress[48], as being primarily responsible for this unsatisfactory state of affairs. The Enforcement Division Director of the SEC has testified before Senate on this matter, noting that the Commission "does not have the resources to investigate every instance in which a public company's disclosure is questionable" [49], and that their task was becoming increasingly difficult given "the continued growth in the size and complexity of our securities market and the absolute certainty that persons seeking to perpetuate financial fraud will always be among us."

The table below shows the correlation between the SEC's budget and its level of enforcement activity from 1990-2003. The results support the Congressional testimony of the Divisional Director of the SEC by demonstrating the sensitivity of the level of SEC enforcement activity to changes in its budget. Additional dollars are evidently being used to increase the number of cases filed and to extract higher disgorgements for the benefit of investors suffering harm[50].

Table 1: Correlations of Funding and Litigation Activity

	Disgorgement	**Appropriated Funds**	**Total Cases**
Disgorgement	1		
Congressionally Appropriated Funding	.77	1	
Total Cases Filed	.73	.91	1

A further, legal constraint on the Commission's rulemaking authority arises from the historic tension between federal and state authorities over the extent of federal authority in matters of corporate law. In *Santa Fe Industries*[51] the Supreme Court

[48] See Arthur Levitt, former SEC chairman writing in Take on the Street—*What Wall Street and Corporate America Don't Want You to Know.*
[49] *Private Litigation Under the Federal Securities Laws: Hearings Before the Subcomm. on Securities of the Senate Comm. on Banking, Housing & Urban Affairs,* 103d Cong., 1st Sess. 280 (1993)
[50] For a graphical representation of SEC Funding against Litigation Activities, see fig.2 in the Appendix
[51] Santa Fe Industries, 430 U.S. at 479, 97 S.Ct. at 1304, quoting Cort v. Ash, 422U.S. 66, 84 (1975)

emphasized that "[c]orporations are creatures of state law, and investors commit their funds to corporate directors on the understanding that, except where federal law expressly requires certain responsibilities of directors with respect to stockholders, state law will govern the internal affairs of a corporation." Consequently, the SEC has been especially mindful of its rulemaking jurisdiction when negotiating the sometimes unclear boundaries of the federal preemption of state corporate law by securities law.

2.1.1 The Limitations on the Commissions Regulatory Authority over Matters of Corporate Governance

The legal constraints on Commission's ability to enact rules that impact the corporate governance of the firm provide an interesting counterpoint to its otherwise extensive rule-making authority. The extent to which market regulation, via the operation of federal securities laws, is able to interfere with the internal governance of a firm was the legal issue raised in *Business Roundtable v. Securities and Exchange Commission*[52]. The case concerned a plan by General Motors to issue a second class of common stock with a half vote per share. The NYSE, which has traditionally developed listing standards for companies listing on its exchange, permitted the issuance in violation of its own rule requiring one vote per share of common stock. The SEC responded by promulgating Rule 19c-4 that barred self regulatory organizations (SROs) from listing the stock of any corporation which undertakes an action that has "the effect of nullifying, restricting or disparately reducing the per share voting rights of [existing common stockholders]."

The court declined to validate the rule holding that "[i]f Rule 19c-4 were validated on such broad grounds, the Commission would be able to establish a federal corporate law by using access to national capital markets as its enforcement mechanism. This would resolve a longstanding controversy over the wisdom of such a move in the face of disclaimers from Congress and with no substantive restraints on power. It would, moreover, overturn or at least impinge severely on the tradition of state regulation of corporate law." The court held further that if Rule 19c-4 were to survive then "some kind of firebreak is needed to separate it from corporate governance as a whole" as the

[52] 905 F.2d 406 (D.C. Circuit 1990)

Exchange Act had an "intelligible conceptual line excluding the Commission from corporate governance."

The decision in *Business Roundtable* was a clear signal to the SEC that its discretion in the sphere of corporate law was not unfettered. By failing to appeal the verdict to the Supreme Court the SEC seems to have tacitly accepted that at times co-operation with Exchanges will be necessary if its will is to be effected and that it needed to tread carefully when proposing internal or corporate governance changes. The decision not to appeal could be seen as a strategic retreat by the SEC. An unsuccessful appeal risked not only a seemingly irrevocable erosion of its presumed powers but, in the process, would have challenged its general credibility and power to effect change by *threat* of enforcement.

2.1.2 Mechanisms used by the Commission to Circumvent the Decision in *Business Roundtable*

Despite the fairly emphatic language of the Court in *Business Roundtable*, this precedent has not proven to be an insurmountable challenge to the Commission's efforts to impose corporate governance reforms on public companies.

As alluded to earlier, the SEC may choose to adopt a more conciliatory stance towards self regulatory organizations, as exchange listing agreements give SROs explicit authority over the corporate governance standards of issuing companies. In essence, then, this strategy requires some degree of bargaining by the Commission. It is instructive to note that while the debate surrounding dual class stock has reverted to the SROs in the decade and a half since the *Business Roundtable* decision most SROs now have in place restrictions very similar to those mandated by Rule 19c-4[53]. In more recent times the SEC, despite wanting more stringent corporate governance standards than those imposed by Sarbanes Oxley with regard to a majority of independent directors on the board and the level of financial expertise required by the audit committee, chose not to use its rulemaking authority to achieve these ends. Instead it negotiated, or coerced, the SRO's

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[53] Howell E. Jackson & Edward L. Symons, Jr. *Regulation of Financial Institutions* West Group St. Paul, Minn (1999)

into adopting these higher standards. The chastening specter of *Business Roundtable* may have played into its choice of strategy, as might the Commission's natural reticence to propagate more extensive rules on a matter on which Congress has expressly spoken on.

A second mechanism by which the SEC effects corporate reforms among public firms is via the *consent* of companies to adopt corporate governance reforms. The reforms usually form part of the Commission's settlement agreement with the company after an investigation has adduced evidence of wrongdoing at the firm. Alternatively, the offending firm agrees to the appointment of an independent consultant who reviews the internal procedures and corporate governance standards of the company before suggesting improvements to which the firm binds itself. These mechanisms are discussed in much greater detail later in this paper.

2.2 Private Enforcement of Securities Claims by Investors

The work of the SEC in punishing securities law violations has been complemented by private actions directed against the company and/or its directors. Private shareholder actions can take one of three forms viz. a direct shareholder action, a derivative suit and an investor class action. A direct shareholder action is a suit brought by a shareholder to recover losses that are separate and distinct from those suffered by other shareholders. The very narrow and specific scope of these actions, which are targeted at achieving monetary restitution for an individual shareholder, make them less important for the purposes of this study, as they are *prima facie* unlikely to result in firm level corporate governance changes.

Derivative suits are actions by shareholders to enforce a right of action belonging to the company and which the company failed to enforce. Investor class actions, on the other hand, are usually driven by the plaintiff bar and involve a representative shareholder suing on behalf of other shareholders having a similar interest in the outcome. As the previous chapter described in greater detail, the strong monetary incentives for aggrieved investors combined with the ability to bring a direct, unencumbered suit makes class actions the primary mechanism via which shareholders seek compensation and reform

2.2.1 The Objectives of the Plaintiff Attorney in a Securities Class Action Suit

A recurring theme in the governance of a diffusely-held public company is the collective action problem that arises as a result of no single shareholder having the necessary incentive to invest the resources in monitoring management. In this regard Allen and Kraakman have noted that the vast majority of shareholder suits against the directors and officers of public companies are initiated by the plaintiff's bar. Thus, attorneys have taken center stage in these actions, with attorneys' fees being the principal incentive to bring suit. Although the attorneys remain nominally the agents of their shareholder-clients, in substance attorneys are little more than entrepreneurs motivated by a potential stake in the settlement.[54]

Economic theorists have usually assumed that revenue-seeking, risk-neutral private litigators file an action or base settlement decisions on some rational calculation of the expected economic value of the suit including the costs of litigation i.e. the probability of success in a case multiplied by the expected damages award[55] less legal costs. Thus, private attorneys may rationally pursue lucrative suits despite the possibility that they will be difficult to litigate successfully. A private litigator is also assumed not to face the tight budget constraint of their public counterparts nor is the public interest deemed to be a factor in the decision of a private litigant to file suit. With these assumptions in place, economic theorists have viewed private enforcers as able to make informed decisions on which cases to accept on a pure expected value basis resulting in an optimal allocation of their resources.

In general, and to the extent that allegations of serious misconduct - such as accounting, analyst, and initial public offering fraud – are correlated with higher expected settlements the objectives and filing decisions of private and public litigators can be expected to overlap, since the Commission would be interested in prosecuting these

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[54] William T. Allen and Reinier Kraakman. Commentaries and cases on the law of business organization (2003) (Aspen: New York) p. 351

[55] There is a vast literature that examines the incentives of class action lawyers. Most notably see Becker, Gary S., Stigler G. 1974. "Law Enforcement, Malfeasance, and Compensation of Enforcers," J. Legal Stud, 3 (1974), pp. 1-18; Polinsky, A. Mitchell. "Private versus Public Enforcement of Fines." The Journal of Legal Studies, Vol. IX, No. 1, (January 1980), pp. 105-127

damaging cases in order to seek redress for substantial negative impacts on both shareholder value and society. High-profile prosecutions also further the deterrence objective of the Commission. The tacit acceptance, by federal regulators, of the role that private litigation plays in securities actions was summarized most succinctly by Joseph Grundfest, a law professor and former SEC commissioner, who writes that "[t]he social value of private enforcement of federal securities claims has become an article of faith in the federal securities liturgy." [56]

On the other hand, public enforcers are less likely to pursue cases in which:

- The allegations have traditionally fallen within the domain of business judgment e.g. as merger and acquisition plans
- The allegations are by their nature are difficult to predict and can be considered to be an inherent risk of investment e.g. future trading conditions, revenues, earnings and profit, and company prospects
- The allegations are unrelated to securities actions e.g. actions concerning the regulatory status of the company

In reality, and contrary to the economists' vision of the plaintiff attorney outlined above, the plaintiff's bar has not been immune to the public and political disapproval that has followed their sometimes predatory behavior. The pursuit of corporate governance reforms as part of the settlement agreements of securities actions can be seen as an attempt to defuse these criticisms. Governance reforms, the plaintiff bar may argue, are enacted in the public good since the plaintiff attorney will not typically be compensated for the negotiation of corporate governance reforms. In our population the average remuneration of the plaintiff attorney in securities class actions that have resulted in corporate governance reforms is approximately 22.3% of the settlement fund. By way of comparison three studies quoted by the District Court in *Rite Aid Corp*.[57], and accepted by the 3rd Circuit on appeal, place the average attorney remuneration in securities class action settlements at between 25%-31% of the settlement fund. One study concluded that

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[56] Joseph A. Grundfest, *Disimplying Private Rights of Action Under the Federal Securities Laws: The Commission's Authority,* 107 HARV. L. REV. 963 (1994).
[57] In re Rite Aid Corp. Sec. Litig., 2005 WL 697461 (E.D. Pa. March 24, 2005).

in settlements of over $10 million the average recovery was 31%; a second study by the Federal Judicial Center estimated that the mean percentage recovery was in the range of 27-30%; while a third study concluded that recoveries in the range of 25%-30% were "fairly standard". Thus, class action suits that have resulted in corporate governance reforms seem to be associated with lower attorney fees, supporting the arguments of the plaintiff bar of the public interest nature of the suits.

A more cynical explanation of the decision by plaintiff attorneys to seek corporate governance reforms stems from the fact the plaintiff bar consists of repeat players. It is plausible that by incorporating costly, cumbersome corporate governance reforms into some fraction of their settlements the plaintiff bar will over time, and in the context of a repeated game, be in a position to extract higher settlements as the governance reforms signal their prowess to other defendants.

The empirical evidence is consistent with both these hypotheses. Bill Lerach[58], who is perhaps the leading securities class action attorney in the country, has been the lead plaintiff attorney in 18.1% of all class actions filed between 1998 and 2003 and has been the second or third plaintiff attorney in a further 31.5% of these actions. He has also been the lead plaintiff in 50% of the class actions that have resulted in governance reforms and second or third attorney in a further 12.5% of these suits. His deep involvement with securities class actions has resulted in his being the focal point of legal reform efforts. His role in securing public interest corporate governance reforms would provide him with grounds to answer to his critics, but could equally serve as a warning to future defendants.

2.2.2 Redistributive Consequences of Investor Class Actions

A prerequisite for an investor class action is an alleged harm suffered by a class of investors at the hands of the company or, more accurately, its office-bearers or employees. The class period is the span of time during which the wrongdoing occurred, and is decided by the court during the litigation. One major result of shareholder suits is an increase in costs for the defendant firm. Even an unsuccessful class action imposes

[58] Either as partner of Milberg Weiss Bershad & Schulman or as partner in his own firm Lerach Coughlin Stoia Geller Rudman & Robbins

some legal costs on the firm since, under the American system, each firm is required to bear its own costs.

A successful class action has the potential for very substantial increases in the firm's costs, as it must bear both its own legal expenses and those of the defendant (via the settlement fund), as well as the costs of compensation and corrective action, which may include extensive business restructurings consistent with the agreed corporate governance reforms. Even to the extent that the compensation to affected shareholders or the costs of corrective action are covered by insurance, the firm nevertheless faces future cost increases in the form of higher insurance premiums. Increases in costs impact the profitability of the firm and by extension shareholder wealth.

The party upon whom the burden of costs of settlement eventually falls is an important policy consideration since, as Coffee notes "[d]eterrence works best when it is focused on the culpable". He goes on to note that "… there is little evidence that securities class actions today satisfy this standard. Rather, because the costs of securities class actions – the settlement payments and the litigation expenses of both sides – fall largely on the defendant corporation, its shareholders ultimately bear these costs indirectly and often inequitably."

While Coffee's conclusion is correct he fails to give due consideration to the extent to which the negative effect on shareholder wealth may be mitigated by passing on cost increases to consumers of the firm's products, without a *pro rata* decline in revenue. The extent to which the "passing on" of costs can be sustained turns out to be a complex question.[59] The market concentration and barriers to entry to the industry in a given state (or nationally), the type and diversity of the products being offered by the firm, and the

[59] For the purposes of illustration I neglect the complicating factors introduced by the regulatory regime that the firm's product offerings are subject to. I also defer for another time the effects of an industry-wide class action on shareholder wealth (for example, the effects on shareholders that resulted from the recent post-Enron spate of research analyst and bank settlements). For a more comprehensive discussion of these issues see: An Economic Analysis of Consumer Class Actions in Regulated Industries by Ingo Vogelsang, Nishal Ramphal, Stephen J. Carroll, and Nicholas M. Pace (forthcoming in the *Journal of Regulatory Economics*)

extent of substitutability in supply and demand of the products all affect the competitive interaction among firms. The intensity of competition and the extent of price regulation will also vary by geographical location (state), industry and the product, and this variation will also potentially influence the determination of prices.

If a class action affects only a single competitive firm – which is the situation envisaged by Coffee - the resulting cost increase from legal defense, compensation payments and corrective actions cannot, by definition of perfect competition, be passed on to consumers, as competitive firms take the market price as given. In this case, if the subsequent increase in costs affects fixed costs only the firm is likely to exit the industry, while if the cost increase is marginal the effect is likely to be a reduction in the firm's size. All costs would be borne by the firm with the result remaining shareholders are effectively shouldering the entire burden of the settlement to the aggrieved class. As the market power of the firm increases, however, it develops the ability to pass a greater percentage of total costs to consumers of its product due to the decreasing price elasticity of the firms residual demand curve. Shareholders are increasingly less affected by compensatory payments and the costs of corrective actions so that the wealth transfer from current shareholders to the class diminishes.

From a policy perspective, however, the essence of Coffee's admonition remains in tact. The aim of deterring corporate malfeasance is not achieved when wrongdoers *ex post* do not suffer the ill-effects of the punishment.

Several empirical studies, like Coffee's contribution, have usually focused on the punitive effects of monetary settlement outcomes on curbing managerial abuses. This paper stands in contrast to past contributions in that for the first time differences in settlement outcomes between public and private enforcers are examined from an empirical corporate governance perspective, as opposed to a strict examination of their monetary settlements.

2.3 Criminal Enforcement of Securities Violations

The SEC may also recommend to the Department of Justice (DOJ) it file criminal charges in instances of particularly egregious infringements of securities laws. Criminal actions are intended to deliver a strong message to the industry and public about the reach of the SEC's enforcement efforts and are an important mechanism of deterrence to future violations. As was detailed in Chapter 2, during the decade of the 1990's the SEC assisted in obtaining, on average, approximately 83 criminal indictments and 77 criminal convictions annually.

2.4 The Relative Advantages of Public versus Private Enforcement of Securities Actions: Insights from the Literature

The value of private securities litigation and, in particular, its role in deterring unethical corporate behavior and providing compensation to prejudiced shareholders, came under serious fire during the early 1990's. There was a growing consensus among Congress, the Supreme Court and academics that private suits too frequently lacked merit and appeared to be designed solely to extract a settlement for the benefit of the plaintiff attorneys.

Several influential studies emerged in support of this view. Alexander (1991)[60] examined the settlement of suits flowing from nine computer-related initial public offerings that listed on NASDAQ during first half of 1983. Her study revealed that six of the actions had settled for an amount ranging between 20.60% and 27.35% of the "amount at stake", which she defined as "the difference between the price paid for each share and its price after the bad news is disclosed, multiplied by the total number of shares sold in the offering." From the lack of variance in the settlement amounts she surmised that the merits of the suit did not matter, since settlement theory would predict a variation of settlement outcomes in accordance with the merits of the allegations.

While influential, her study suffers from some serious flaws. Her small sample size implied that any statistical conclusions drawn would be insignificant at any commonly accepted level of confidence, implying that these conclusions could reasonably be the result of chance outcomes. Furthermore, her "amount at stake" calculation does not factor in movements of the market or the sector which, if properly accounted for, may have led to greater variance in the settlement outcomes that she

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[60] Janet C. Alexander, *Do the Merits Matter? A Study of Settlements in Securities Class Actions,* 43 STAN. L. REV. 497, 501 (1991)

examines. Her conclusions have also refuted been refuted by better designed studies with larger samples. For example, Drake & Vetsuypens[61] find, in a sample of 59 IPO settlements over a period of 21 years, a similar median settlement percentage to Alexander but a much greater variance in outcomes.

A second highly influential article on the value of private litigation was written in the early 1990's by Joseph Grundfest[62] who argued that excessive rates of private securities litigation were acting as a deterrent to capital formation. His solution to the problem was deceptively simple – the SEC should use its Congressionally granted rulemaking authority to "disimply", or at least limit, the private rights of action under Section 10b(5), which were first recognized in *Kardon* and affirmed by the Supreme Court in *Borak*. Grundfest's solution is elegant but it fails to carefully account for the "realpolitik" of SEC enforcement. Aside from the recent funding windfalls for the SEC, which followed in the wake of the recent corporate scandals, for most of its history the Commission has been plagued by poor funding and the political whims of all varieties of politicians. It has also tended to be poorly staffed with notoriously high rates of staff turnover. The burdening of such an institution with the weight of substantially all the enforcement actions in the nation hardly seems to be a pragmatic solution; even if its budget were increased several fold. This is also to neglect the question of fairness to investors who are not only denied a market solution to address their grievances but will also have to contend with a federal enforcement mechanism that recovers, on average, only 5-10% of the settlements that investor class actions achieve in suits that are jointly prosecuted. Grundfest's central economic argument that investor class actions were inhibiting capital formation cannot be considered to be any more than an unsubstantiated assertion. Indeed, the economy actually experienced record levels of capital growth during the 1990's. While it is possible that even higher capital formation may have been achievable it is nevertheless difficult to make the argument, without solid empirical evidence, that the existence of private litigation was having a significant negative impact on capital formation.

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[61] Philip D. Drake & Michael R. Vetsuypens. *IPO Underpricing and Insurance against Legal Liability,* 22 FIN. MGMT. 1, 71 (1993)

[62] See note 10 *supra*

Concerns over the perceived excessive and vexatious securities class action litigation eventually led to the passing of the Private Securities Litigation Reform Act of 1995 (PSLRA) which, in an attempt to thwart the filing of frivolous class action securities lawsuits, raised the substantive and procedural prerequisites for filing a securities suit under federal law. In particular, the PSLRA requires:

1. The representative plaintiff to have the most at stake, both in terms of holdings in the defendant company and interests in the outcome of the litigation
2. Pleadings to specify misleading statements and reasons for believing the statement was misleading
3. Specifying the facts that led the plaintiff to conclude that the defendant acted with the requisite level of intention
4. Courts to delay discovery proceedings until they have decided on the merits of any motion to dismiss the complaint brought by the defendant and based on the sufficiency of the pleadings
5. Companies be granted a "safe harbor" that allows them to make forecasts of future trading conditions and profitability without facing a lawsuit should those predictions not materialize.

In the aftermath of the PSLRA several studies employing a variety of analytical techniques have all found that the statute has had a significant impact on the allegations pleaded and the outcomes of securities class actions. Johnson *et al.* [63] employed a matched sample of sued and non-sued firms from the computer hardware and software industries and found that the Act has furthered the aims of Congress in deterring frivolous suits, while Prichard and Sale[64] reach similar conclusions based on their study of how judges in the second and ninth circuit deal with motions alleging securities fraud. Beatty *et al.* [65] conclude that the PSLRA reduced the attendant risks associated with IPO filings

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[63] Johnson, Marilyn F., Karen K. Nelson and A. C. Pritchard, (2004) Do the Merits Matter More? Class Actions under the Private Securities Litigation Reform Act (Working Draft)
[64] Pritchard, A.C. and Sale, H.A., 2003, What Counts as Fraud? Working Paper, University of Michigan Law School.
[65] Beatty, R. P., P. P. Drake and C. E. Hogan, 2001, The Impact of the 1995 Private Securities Litigation Reform Act on Litigation Risk and Auditor Compensation in the IPO Market, Working Paper, University of Southern California

while Bajaj[66] et al. (2000) find an increase in mean settlement amounts after the passing of the Act implying, perhaps, that more meritorious suits have been filed.

Romano offers a radical proposal to deal with the failure of federal securities regulation to curb frivolous lawsuits. She argues for the adoption of a market-oriented solution that would see issuers choosing their regulatory authority from among the federal government and the fifty states. The result would be an expansion of the role of state securities regulators in a system that would parallel state control of corporate law. Two central components of federal securities regulation - namely the registration of securities and the related continuous disclosure regime for issuers as well as the antifraud provisions that police that system – would now fall under the domain of states. Romano envisions that "[a]s a competitive legal market supplants a monopolist federal agency in the fashioning of regulation it would produce rules more aligned with the preferences of investors, whose decisions drive the capital market." She recognizes that her approach "is at odds with both sides of the debate over the 1995 Act, each of which has sought to use national laws as a weapon to beat down its opponent's position by monopolizing the regulatory field."

Romano's approach, while innovative, is little more than a thought-experiment. There remains a great deal of controversy over the ability of the mechanism that she relies on – viz. competition among states - to produce an optimal legislative solution in the sphere of corporate law. Many critics have cast doubt on the efficacy of this mechanism as well as on its outcomes in the case of corporate law[67]. Moreover, if a dominant regulatory system that favored issuers over investors were to emerge, in a manner akin to the manager-centric Delaware corporate law, then the express will of Congress to create a regulatory regime that was protective of investors would have been subverted. Finally, the sheer complexity of securities legislation and its direct capacity to

[66] Bajaj, Mukesh, Sumon C. Mazumdar and Atulya Sarin. (2000) Securities Class Action Settlements: An Empirical Analysis. Working Paper Securities Class Action Clearinghouse, Stanford University.

[67] For a more complete treatment of the welfare effects of competition among states for corporate law charters see: William Cary, Federalism and Corporate Law: Reflections upon Delaware, 83 YALE L.J. 663-705 (1974); Ralph Winter, State Law, Shareholder Protection, and the Theory of the Corporation, 6 J. LEGAL Stud. 251-292 (1977); Lucian Bebchuk, Federalism and the Corporation: The Desirable Limits on State Competition in Corporate Law, 105 Harv. L. Rev. 1437 (1992); Roberta Romano, The Genius of American Corporate Law (1993)

affect the depth of capital markets and hence economic growth militates against a chaotic state-wide “competition” and in favor of an orderly, centralized basis of power.

Unlike the extensive literature surrounding the efficacy of the PSLRA, and private class actions more generally, only a handful empirical papers have been published that have detailed and compared the actual mix, balance, and outcomes of litigation between the SEC enforcement actions and investor class actions. This strand of the literature was dealt with in great detail in the previous chapter.

Thus far, I have attempted to outline the legal, political and economic framework within which the public and private enforcement of securities claims operates. As has been described, the enforcement securities claims can be achieved via regulatory enforcement, investor class actions and criminal sanctions. This paper is a novel addition to the empirical literature dealing with the private-public partnership in securities litigation in that, for the first time, differences in corporate governance settlement outcomes will examined.

3. Data and Methodology

3.1 Data Sources

This study relies on two original, individually constructed datasets consisting of firm-level observations of securities suits brought as a private class action or a public SEC enforcement action. A pooled dataset was extracted consisting of 93 suits in which corporate reforms were part of the settlement agreement. There were no instances of a suit that was litigated by both the SEC and a private plaintiff which resulted in corporate reforms as part of the settlement agreement.

3.1.1 SEC Enforcement Actions

The first dataset consists of 2,787 SEC actions brought against securities law violators between October 1, 1998 and September 30, 2003. The list of enforcement actions undertaken by the SEC over this five year period were obtained from the SEC Annual reports. This data was supplemented by information gleaned from the litigation releases posted on the SEC website which referenced the cases listed in the annual reports.[68]As of June 30, 2005, 2316 of these enforcement actions had reached completion, representing a settlement rate of 83.1%. A further 268 suits, or 9.6% of actions filed between 10/98 and 9/03, were still being litigated as of 7/05. A final group of 203 suits, comprising 7.3% of the population of actions, could not be properly classified. In an overwhelming number of these suits (191 of the 203 actions) the Commission had either failed to assign an action number to the suit, or had listed an action in their Annual Report of which no record could be found after an exhaustive search of both the SEC site and other web resources.

3.1.2 Private Class Actions Dataset

The private suits dataset is drawn primarily from the Securities Class Action Alert Service (SCAA) database and includes 2,190 class actions, principally filed within federal court by private plaintiffs against individual(s) and/or a firm(s) between January 1998 and June 2004. Of these, 746 suits or 34.1% of all suits filed, had reached final settlement as of 1 August 2005. The SCAA dataset is enhanced with entries from the National Economic Research Associates (NERA) proprietary database which captures class action lawsuits that have required corporate governance reforms as part of the terms of settlement[69]. A dataset was then compiled from these two sources consisting of 17 class action suits in which corporate reforms have constituted some part of the settlement agreement.

3.2 Key Data fields

The table that follows distils some of the key data fields coded from the databases of public and private actions. The ambit of these fields will be defined in greater detail during the course of this paper.

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[68] http://www.sec.gov/litigation.shtml

[69] A detailed case-by-case summary of the NERA data, which was used for the purposes of this data, can be found at sbclasslaw.com

Table 1: Categories of Coded Variables

Corporate Reforms	**Factual Allegations**	**Other Variables**
Changes to board structure	Broker-dealer: Failure to supervise	Total monetary settlement (including civil penalties, disgorgement and settlements using awards of equity)
Independent consultant retained to review company controls and reporting structures	Broker Dealer: Fraud on customer	Filing and settlement dates
Major structural reforms including splitting of business units and appointment of a corporate monitor	False financial disclosure or misrepresentations in financial statements, proxy materials, or prospectus	Share price before and after settlement (for public companies)
Overhaul of internal controls and compliance	Investment Advisor Violations	Non-monetary penalties (other than governance reforms) - Cease & Desist Order, Injunction, Officer & Director Bar, Other Bar, Censure or Limitation on Activity, Trading Suspension, Registration Revocation
Limitations on executive compensation	Other – insider trading, self-regulatory organizations	
Improved disclosure	Breach of fiduciary duties	
Educational measures		

3.3 Methodology Adopted in the Coding of Corporate Reforms

Table 1 identifies the seven major categories of corporate governance reforms against which the settlement provisions of public and private actions were coded.[70] The major categories are outlined in greater detail below and are intended to be collectively exhaustive, although they are *not* mutually exclusive. Each of the seven major reforms contained several sub-categories of reforms and, for the purposes of empirical analysis, a major category of reform was considered to have been enacted if any of the sub-categories were satisfied.

[70] These categories of reforms were identified with the assistance of Prof. Mark Roe of Harvard Law School.

1. Changes to Board Structure and Functioning[71]

Reforms aimed at the board structure and functioning were adopted in 94% of the settlements agreements of private actions, and in 1.3% of SEC actions involving corporate governance reforms. In 53% of these actions two or more of the sub-categories of reform outlined below were adopted. While it is difficult to be certain of their intentions, the reluctance of the SEC to tinker with the board functioning may well be its respect for the notion that the board is a democratically elected institution that functions at the behest of shareholders. The most important sub-categories of governance changes include:

- Requiring a supermajority of independent directors
- Enhanced provisions for determining director independence and the appointment of a lead independent director
- Declassification of the board of directors
- Limitations on the tenure of independent directors, the number of outside directorships that can be held by independent directors, as well as the fulfillment of minimum experience and quality standards
- Alternative Director nominations by shareholders to be included on the company slate, or additional independent directors to be appointed by certain groups of shareholders as part of the settlement agreement
- Establishment of a Compensation, Governance, and Nominating Committee comprising independent directors (in accordance with the NYSE rules for directors)
- Board approval by majority of disinterested directors required for specified corporate transactions
- Prohibition on related party transactions

[71] A vast literature exists on the efficacy of independent directors and board committees. In order to maintain its focus, I have chosen to narrow the scope of the paper to the actual reforms that were adopted rather than making any judgment as to their efficacy in the long run. That perspective, perhaps in relation to the findings of this paper, is best left for another day.

2. Overhaul of Internal Controls

These onerous governance reforms were frequently adopted by both private and public enforcers as part of their settlement agreements. Private litigants generally favored the second and fourth of the measures listed below:

- Appointment of Officer or Director, or a committee consisting of officers and directors, to oversee compliance measures and prevent infractions of the securities laws. The director of compliance is generally given full access to the board of directors, and is subject to the direct supervision of, and reports to, the Chief Executive Officer. Alternatively, a compliance committee is established consisting of executive management including, among others, the chief operating officer, chief financial officer and director of operations
- Adoption of internal control and auditing procedures that are more stringent that those required by Sarbanes Oxley or the SEC
- Appointment of a CPA to conduct a stringent (forensic) audit. This includes annual audits of both the financial results of the firm as well as whether its policies, practices and procedures are reasonably capable of detecting and preventing statutory and common law infringements. The independent CPA reviews on a quarterly basis, prior to publication or dissemination, all notices issued by the company. The firm is obliged to adopt, implement, and maintain all policies, practices and procedures recommended by the CPA as well as compile a compliance manual.
- Rotation of External Auditor on a regular basis

3. The Independent Consultant

The hiring of an independent consultant in order to assess the internal workings of an offending firm and recommend improvements has been the chief instrument by which the SEC has sought to reform corporate governance across public and private companies and partnerships. Independent consultants have been retained in over 60% of SEC governance cases, with an assignment that is remarkably similar in scope. The most typical features of the independent consultant’s task are summarized below.

1. **Mandate**
   - The consultant is generally picked by the company, but the nomination must be agreeable to the SEC. A prerequisite is that the consultant be very knowledgeable in all aspects of the case at hand.
   - The consultant must conduct a review of and make findings regarding the internal controls, policies, practices, and procedures of the firm. This sometimes includes procedures regarding the collecting, recording, and reporting of information.
   - The consultant may also be asked to conduct a review of supervisory, compliance, and other policies and procedures designed to prevent and detect federal securities law violations of the nature involved in the case at hand.

2. **Report**
   - The Initial Report is drafted by the consultant and addresses:
     - The adequacy of the company's policies and procedures to detect and prevent federal securities law violations of the nature involved in the case at hand
     - Includes recommendations by the Consultant for policies and procedures to address these deficiencies
     - Presents an effective system for implementing such policies and procedures
   - With respect to any recommendation or proposal with which the company and the Independent Consultant do not agree both parties undertake to make a good faith effort to reach an agreement
   - In the event the parties are unable to agree on an alternative proposal, the company shall abide by the recommendation of the Independent Consultant.
   - The Independent Consultant then submits a Final Report usually within 9 months of the SEC settlement order

- The company is obliged to take all necessary and appropriate steps to adopt and implement all recommendations contained in the Independent Consultant's Final Report.

3. **Review of Implementation**
   - In some cases, the Independent Consultant is asked by the SEC to review the implementation of the recommendations at intervals ranging from one month to five years after the implementation of the proposals included in the final report
   - After each review, the consultant is expected to submit a written report to the SEC

4. **Maintaining the Independence of the Consultant**
   - The company does not have the authority to terminate the Independent Consultant, without the prior written approval of the Commission's staff
   - The company compensates the Independent Consultant, and persons engaged to assist the Independent Consultant, at their reasonable and customary rates
   - The relationship between the Consultant and the company is not to be an attorney-client relationship, and no other doctrine or privilege may be invoked to prevent the Independent Consultant from transmitting any information to the SEC
   - The consultant agrees not to be employed by the company in capacity for a period, usually two years, after the end of the engagement

4. Structural Reforms

This is a category reserved for the most far reaching reforms where it becomes apparent that effective corporate governance will only be possible via a fundamental restructuring within, or a reorganization of, the company's business units. Structural reforms have been required as part of the settlement agreement in both private and public actions. The most striking example of business reorganization reforms occurred in the wake of the "analyst settlements" in April of 2003, during which the SEC used its rulings on the culpability of research analysts and investment bankers to mandate broad range of new policies and procedures within the banking and investments industry. The most important structural reforms include:

1. Business reorganization
   a. Severing of links between different business units, including changes in reporting structure, evaluations and compensation. Included in this sub-category, for example, was the severing of links between research and investment banking, as required by the SEC in the analyst settlements of 2003.
   b. Prohibition on joint activities between different business units, including the creation of "firewalls"
   c. Undertakings to establish a broad range of new policies and procedures relating to fundamental business practices

2. Mergers among subsidiaries, or elimination of business units in order to curb managerial discretion

3. In the case of a bankruptcy proceeding, the issuing of a directive by the SEC to the corporate monitor to reorganize the business in a manner that enhances transparency and disclosure so as to severely reduce the opportunity for fraud

5. Limitations on Executive Compensation

As may have been expected, considerations of executive compensation have been the exclusive domain of private class action settlements. The more frequent conditions placed on executive compensation include:

1. Enhanced or reduced stock option plans for executive management, including limitations on vesting

2. Restrictions on the exercise of options (for example, bars on executive management from “going short” on the company stock)
3. Restriction on benefits received from the challenged transaction

6. Expanded Disclosure and Improved Channels of Communication with Shareholders or Investors

The major reforms in this category include the:

1. Establishment of a corporate governance website that allows shareholders to communicate with independent directors on matters of importance.
2. Enhanced disclosures in, and access to, proxy statements
3. Expanded disclosure by broker-dealers to investors regarding analyst performance and disclosure of investment banking ties with the company being covered

Of the reforms listed above, sub-categories (1) and (2) have been favored by private settlements while condition (3) formed part of the SEC analyst settlements.

7. Educational Measures

The major reforms in this category include the:

1. Requirement that directors attend the “Director’s College”, which are accredited fiduciary colleges at Stanford or Vanderbilt
2. Ongoing officer and director education on accounting controls
3. Training for staff on compliance with policy and procedures, the company code of conduct, or legislation

Generally speaking, the ongoing education of employees on company policy has been a tool favored by both public and private enforcers; although sub-category (1), in contrast with the other two conditions, has been utilized solely in private settlements.

4. A Descriptive Summary of Public and Private Actions

A useful starting point for the empirical analysis of corporate governance measures is the relationship of the sub-population of public and private enforcement actions in which corporate reforms have been enacted to their respective general populations, in order to ascertain whether these sub-populations have any distinguishing features. The presence of such distinguishing features may suggest *ex ante* the circumstances under which it is more or less likely for corporate governance reforms to be enacted.

4.1 A Descriptive Summary of SEC Enforcement Actions

4.1.1 An Ex Ante Analysis of Enforcement Actions Resulting in Corporate Reforms

An important initial hypothesis to explore is whether suits that result in corporate reforms ("governance suits") somehow differ systematically from other SEC enforcement actions with regard to some of their more important characteristics, including the nature of the factual allegations of misconduct, whether or not the company is publicly traded and the quantum of damages awarded.

We are able to test for these differences using a logistic model. Where a logistic model is used in this paper to address a research question, the logistic coefficients are reported as odds ratios. For ease of explanation during the course of this paper, however, we convert the logistic coefficients from odds ratios to probabilities. In the case of a binary covariate, the odds ratio (probability) of the dependent variable reflects the impact of a change in that binary covariate from 0 to 1. Thus, for example, where a binary covariate codes a particular allegation then the odds ratio that is reported is the impact of the allegation-binary variable changing from 0 to 1.

The dependent variable is binary and takes on a value of 1 if the suit has resulted in governance reforms and value of 0 if it has not. The allegation covariates follow from the SEC's categorization of factual allegations enunciated in their annual reports. The key results are summarized in the table below:

Table 2: Factual Allegations SEC Enforcement Actions Leading to Governance Changes

Dependent Variable **Covariates**[72]	**Corporate Governance Reform** *(Coefficients are in odds ratios)* **(N = 2316)**
Failure of Broker-Dealer to Supervise (Lack of internal controls)	22.38†† (11.33)
Broker-Dealer Fraud on Customer	4.15†† (1.89)
Illegal Actions by Investment Advisor	7.33†† (3.14)
Insider Trading	0.37 (.29)
Offering Violations	.095† (.10)
Ln of Total Award	1.19†† (.03)
Public Company Identifier	4.08†† (1.43)

†† *Significant at the 1% level*

† *Significant at the 5% level*

Four types of allegations predict *ex ante* whether governance reforms will been required by the SEC as a term of settlement. Broker-dealers' who fail to properly supervise their staff or lack the stringent internal controls required by their fiduciary duties increase their chances of being required to adopt governance changes by 96.7%. Part of the OECD definition of corporate governance is the "…structure through which the company objectives are set and the means of attaining those objectives and monitoring performance." Thus, the failure to establish adequate advisory procedures to monitor sales and track and respond to customer complaints, are almost *per se* corporate governance violations, and it is unsurprising that corporate governance reforms are required after such violations.   However, these infractions are not always especially

[72] Omitted Base Category: All other violations

severe as they attract, on average, civil penalties of less than 4% of the mean civil penalty levied by the SEC in enforcement actions where fines formed part of the settlement.[73]

Fraud committed on customers by broker-dealers are more serious violations of securities laws as they involve direct harm to investors, and attract on average civil penalties almost twice as large as the average enforcement action. The spate of analyst scandals following the bursting of the "dotcom" bubble and demise of Enron provides the most egregious recent example of fraud committed by leading brokerages. The cases involved star analysts, including the notorious Jack Grubman and Henry Blodget, hyping low quality stocks to retail investors in exchange for lucrative investment banking business for their firms. An allegation of broker-dealer fraud increases the probability of corporate governance reforms being required by 5.2%.

Investment advisors have traditionally been regulated very closely by the SEC as they often have actual custody or discretionary management of retail investor funds, with the latter being a group that the SEC has historically been extremely concerned with protecting. Our results are consistent with this observation. An infraction by an investment advisor increases the chance of governance reforms being required as part of the settlement by 65.8%.

Firms violating issuing provisions, either during a primary or secondary securities offering, are 3.1% *less* likely to have governance changes required as part of the settlement relative to a composite of all other violations. To some extent this result may indicate some degree of leniency being afforded to inexperienced private firms during their initial public offering.

This analysis unearths a few other interesting results. False financial disclosure by companies or misrepresentations in financial statements or proxy materials are not significantly related to corporate governance changes being required by the SEC. Secondly, a 1% increase in the settlement amount increases the probability of reform by 0.5%. One possible driver of this result could be the severity of the infraction. More serious infringements can be expected to attract both a higher settlement amount – either via harsher civil penalties or disgorgement of illegal gains – as well as corporate reforms

[73] The mean civil penalty assessed by the SEC is approximately $4,677,182 (conditional upon a civil penalty actually having been levied)

aimed at ensuring that the illegal behavior is not repeated. Finally, publicly listed companies are 4.7% more likely to attract governance reforms than other corporate entities guilty of securities law violations.

4.1.2 An *Ex Post* Analysis of Settlement Outcomes in Enforcement Actions

SEC enforcement actions that resulted in a corporate governance reforms as part of the settlement are relatively rare, with reforms occurring in approximately 3.3% of all settled cases in our population. The table below compares the more salient settlement outcomes in enforcement actions.

Table 3: Selected Settlement Outcomes of Enforcement Actions

Settlement Outcomes	**Settlements with Corporate Reforms (N = 76)**	**All Settled Enforcement Actions (N = 2316)**
Mean Total Settlement*	$31,600,000	$3,426,033
% of Suits Involving Monetary Awards†	84.2%	53.9%
% of Suits in which other Non-Monetary Penalties Assessed†	77.6%	92.2%
Mean Civil Penalties (conditional on civil penalties having being awarded)*	$29,900,000	$4,677,182
Mean Days from Filing to Settlement*	40 days	185 days

**Difference of means statistically significant at 99% level of confidence*

† *Difference of proportions statistically significant at 99% level of confidence*

A comparison in the mean settlement outcomes between the population of enforcement actions initiated by the SEC ("usual actions") and those in which corporate reforms resulted ("governance suits") yields a couple of interesting findings. Firstly, governance suits settle for more than nine times more than usual actions, where the value of the total settlement includes disgorgement of illicit gains, prejudgment interest and punitive civil penalties. Nevertheless, governance actions on average are less likely to be accompanied by non-monetary penalties, which usually include prohibitions on holding directorships, bars on lawyers and accountants from professional practice before the SEC and limitations on future involvements in financial markets by offenders. Injunctions against the future infringement of securities laws and cease and desist orders[74] are also common non-monetary sanctions issued as part of the settlement agreement, while trading suspensions and revocations of broker-dealer registrations are usually reserved for egregious or repeated infractions of the securities laws.

Secondly, if one accepts the usual premise that civil penalties are assessed as a means of deterring future errant conduct and to punish particularly severe civil infractions of the law, then one may reasonably reach the conclusion that governance suits are on average more serious than the usual public enforcement action. Furthermore, although governance suits on average settle sooner than usual actions this result is driven in large part by the fact that 88% of governance suits are filed and settled on the same day compared with 66% of usual suits. This result suggests that governance suits entail more "behind-the-scenes" maneuverings between the SEC and the defendant firm than is usual suggesting, perhaps, a more serious infraction that requires more complex settlement negotiations or, alternatively, an awareness by both parties of the greater potential impact of an adverse finding.

4.2 A Descriptive Summary of Private Securities Class Actions

4.2.1 An Analysis of Allegations in Class Actions Resulting in Corporate Reforms

The small numbers of class action suits that have resulted in governance reforms as well as the overall lack of variation in allegations make any detailed regression analysis of these suits misleading. However, useful comparisons may nevertheless be made with SEC governance actions.

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[74] Usually issued under Section 8Aof the Securities Act of 1933 and Sections 15(b), 19(h) and 21C of the Securities Exchange Act of 1934

Table 4: A Comparison of Factual Allegations made in SEC Enforcement Actions vis-à-vis Class Actions

Allegation	SEC Enforcement Actions with Corporate Reforms (N = 76)	Private Securities Class Actions (N=16)
Broker-dealer: Failure to supervise	17.1%	0%
Broker Dealer: Fraud on customer	15.8%	0%
False financial disclosure or misrepresentations in financial statements, proxy materials, or prospectus	19.7%	81.3%
Investment Advisor[†]	25.0%	0%
Fiduciary Duties	0%	18.7%
Other – including insider trading, self-regulatory organizations	22.4%	0%

The private suits allege only two sets of facts – either a breach fiduciary duty or false financial disclosure or misrepresentations in financial statements, proxy materials, or the prospectus. It is also clear that SEC and private actions attack very different forms of misconduct. Private actions concentrate on fraud or misrepresentation and breaches of the triad of fiduciary duties by officers and directors of the company. The SEC, on the other hand, brings enforcement actions to challenge a wide variety of misconduct committed by individuals, partnerships, private and public firms and self-regulatory organizations. As an illustration, only 8.6% of *all* SEC enforcement actions targeted publicly traded companies – a group which is the staple of the class action bar. Furthermore, with regard to offering violations the SEC tends to challenge secondary offering violations, while private plaintiffs are more likely to bring suits alleging misconduct during initial public offerings.

4.2.2 An *Ex Post* Analysis of Class Action Settlement Outcomes

Class actions that result in governance changes are rare, with only 2.1% of settled suits requiring reform as part of the settlement agreement. Of those suits that resulted in reform, however, almost 25% were *not* accompanied by the creation of a settlement fund for the distribution and benefit of the plaintiff class. The maximum legal fee in these suits was fixed by the court certifying the settlements. The table below relates some important outcome measures of private suits that have resulted in reforms vis-à-vis the population of private suits.

Table 5: Selected Settlement Outcomes of Private Actions

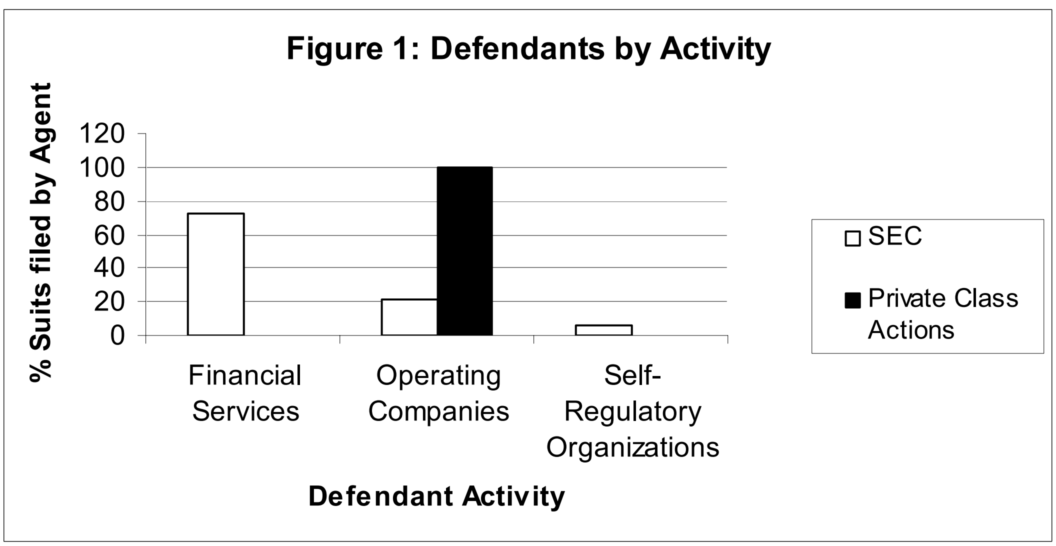
Settlement Outcomes	Settlements with Corporate Reforms (N = 16)	All Settled Private Actions (N = 732)
Mean Total Settlement	$48.9M	$44.4M
Mean Days from Filing to Settlement	1043 days	998 days

In contrast with the SEC governance actions, class actions that have resulted in corporate reforms did not differ in any meaningful statistical way from their underlying population. It must emphasized, however, that class actions that produce reforms represent a small fraction of all class actions. Private actions generally settled in a little more that two and half years against the 40 days of SEC actions. This difference, as has already been noted, can be explained in large part by the SEC policy of frequently filing already "settled" cases.

Private action settlements recover on average 13 times more than SEC actions. This suggests that aggrieved investors typically have very substantial monetary incentives to organize themselves into a private class in order to recover losses, over the alternative of federal enforcement. However, in selected cases where corporate reforms formed part of the settlement, this ratio fell to a little over 1.5. Nevertheless, the limited capacity of the SEC to pursue any more than a handful of these cases makes the shareholder class action a compelling vehicle with which to address investor grievances.

4.2.3 A Comparison of the Defendant Corporations Pursued by Public and Private Enforcers

The onus of regulating the internal governance of companies in the United States has generally fallen on self-regulatory organizations and in particular the national exchanges, which have achieved this end by focusing on developing and enforcing listing standards for companies. This diffusion of authority has ostensibly been reinforced by the SEC's reticence to involve itself in the internal governance of companies following the precedent of *Business Roundtable*. There is also reason to believe that the SEC would be naturally cautious when involving itself in the governance of operating companies as it lacks the expertise to so. This is in contrast with the regulation of financial institutions, which is an area that the Commission has ample experience with. These trends are evident in the figure below which compares the primary business of the defendants pursued by private and public enforcers.



Approximately 80% of the defendants in SEC enforcement actions involving corporate governance reforms hail from the financial services sector (broadly defined to include broker-dealers, banks, investment companies and investment advisors) or are self regulatory organizations. These entities are the most relevant to the SEC's mandate of investor protection since these intermediaries are most involved in the purchase and sale of securities by investors, either by effecting the trades themselves, making buy or sell recommendations, or by ensuring the integrity of the financial markets. A little more than 20% of the defendants in SEC governance actions were operating companies. This somewhat large fraction of operating company defendants may be explained by the Commission's stated policy[75] of reviewing a broad cross-section of regulatory filings by issuers, so as to maximize the breadth and deterrence effects of its enforcement activities.

Although investor class actions against financial institutions are fairly common with the cause of action usually alleging culpability for helping to conceal malfeasance at client companies, class actions requiring governance reforms have focused solely on operating companies. There are two plausible explanations for reticence of class action plaintiffs to require governance changes of financial instituions. First, the often indirect role of financial institutions in corporate wrongdoing, as well ad the complexity of the financial services industry vis-à-vis manufacturing concerns, may result in plaintiffs being more circumspect in seeking governance reforms of financial institutions. Second, the financial services industry is heavily regulated by the SEC and the Federal Reserve acting in partnership. The legality, or desirability, of judicially sanctioned governance reforms would be uncertain against this backdrop of extensive regulation with may deter class action plaintiffs from seeking governance reforms against class action plaintiffs.

5. An Examination of the Efficacy and Extent of Corporate Reforms Required by Public vis-à-vis Private Enforcers of Securities Law

This section explores three research questions regarding the efficacy and extent of corporate reforms that follow from the settlements of private or public actions.[76]

While the SEC has had its rulemaking authority over governance matters limited by restrictive legal precedent, the Commission, of its own accord, has also sought to limit governmental intervention in internal affairs of the corporation. Nevertheless, in the most egregious violations of investor protection, consent decrees entered into at the conclusion of an enforcement action may specifically alter the corporate governance structures of settling defendants. Such intervention in corporate affairs has, as its basis,

[75] See the SEC Annual Report for 2004
[76] It must be borne in mind that there are no private governance suits against financial institutions, which limits the public-private comparison that may be made in this regard.

the SEC's primary mission as outlined by the Securities Exchange Act of 1934 – to protect investors and, in particular retail investors, so as to facilitate capital formation within the economy.

Private enforcers, on the other hand, are usually reluctant to negotiate costly governance reforms, for which they ostensibly receive no additional compensation. However, there have been a limited number of instances where private plaintiffs have used the class action mechanism to coerce defendant firms into reforming their corporate governance structures.

Corporate reformers, be they public or private entities, face the challenge of tailoring governance reforms to enhance social welfare. Welfare is enhanced by corporate governance reforms (and civil and criminal penalties generally) if they efficiently deter future violations of securities laws that damage investors. Importantly, it makes no difference as to whether private or public enforcement mechanisms are responsible for requiring these welfare-enhancing reforms. However, a fine balance must be struck with over-deterrence, which chills decision making consistent with profit maximization. As a general proposition governance reforms enhance welfare if the legal costs of obtaining reforms and losses incurred as a result of more cautious behavior by managers, taken together, are less than the damage to investors in absence of such reforms.

The first research question develops and tests the hypothesis that the SEC is more likely to adopt stringent governance reforms as part of the settlement agreement vis-à-vis investor class actions. On one hand, as Section 4.1.2 illustrated, SEC governance suits are a subset consisting of the most egregious violations of securities laws. Thus, there is a strong basis to believe that the SEC will require stringent reforms of settling defendants in order to prevent a reoccurrence of such major infractions. On the other hand, a recurring theme in the governance of a diffusely-held public company is the collective action problem that arises as a result of no single shareholder having the necessary incentive to invest the resources in monitoring management.[77] "Consequently, one may reasonably expect private plaintiff attorneys to require less stringent reforms of settling defendants than the Commission."

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[77] William T. Allen and Reinier Kraakman. Commentaries and cases on the law of business organization (2003) (Aspen: New York) p. 351

The second question accepts that there are a range of governance reforms that may be imposed by both enforcement mechanisms and proceeds to test the hypothesis that private enforcers more likely to require a wider range of reforms as part of the settlement. Shareholders, and in particular activist or institutional investors, have substantial information of the firm's structure and management. The class action settlement gives these stakeholders the opportunity to implement of a variety of safeguards to guard against future abuses of managerial discretion. On the other hand, the SEC aims to protect investors with minimum government intervention (invasiveness) in internal corporate affairs. Consequently, one may reasonably expect the private governance suits to require a wider set of reforms than enforcement actions.

The final hypothesis tests the severity of corporate reforms by the SEC before and after the passing of Sarbanes-Oxley. One of the strongest features of SOX has been its emphasis on efficacious corporate governance. The passing of SOX was also interpreted by many commentators as an expression of Congressional dissatisfaction with the Commission's failure to enforce ethical business practices and corporate responsibility in the years preceding the passing of SOX. Thus, in addition to tangible improvements in the Commission's ability to discover, investigate and prosecute securities fraud, the Act may plausibly have spurred the Commission to take a heightened interest in requiring improved corporate governance of settling defendants. It is equally important to note that at about the time that SOX received Congressional approval the budget of the SEC was also increased substantially, which enabled the hiring of an additional 1,000 skilled staff members. This boost in recruitment could have contributed to a change in SEC behavior, although it is not possible to disentangle this effect from the SOX mandate. Thus, the third hypothesis tests for a change in behavior in the Commission in the post-SOX period with regard for its appetite in requiring governance reforms of settling firms.

5.1 The Development of an Index Measuring the Effect of Governance Reforms

The first step in examining the stringency of governance reforms requires the development of a "stringency index". As Table 6 shows below, the development of the index involves organizing the seven types of governance measures developed in section 3.3 into three distinct categories, using some reasonable and observable metric. The metric used is the likely direct and immediate costs to the company of adopting the reform (which tends to correlate with any substantive assessment of the severity the reform)

Table 6: The Stringency Index

Governance Measure	**Categorization of Reform**
Structural Reforms	**Severe Reforms**
Overhaul of Internal Controls	**Substantial Reforms**
• Changes to Board Structure and Functioning • Appointment of an Independent Consultant to Review Compliance Measures and Recommend Reform • Limits on Executive Compensation • Educational Measures to Employees and Management • Enhanced Disclosure to Shareholders	**Moderate Reforms**

The process and criteria by which the reforms have been categorized requires some detailed explanation.

Structural reforms were defined as requiring the fundamental restructuring of the business as the only means by which achieve efficacious and transparent corporate governance could be achieved. Such reforms could require mergers between subsidiaries in order to curb managerial discretion or demand a large scale reorganization of activities among business units, as was the case with the analyst settlements (which separated the research and investment banking functions at the major Wall Street financial institutions). The analyst settlements in 2003 constituted approximately 70% of the population of actions in which structural reforms were imposed. The very nature of structural reforms suggests that they will be the most difficult and costly to implement, and there are a few empirical indicia that support this notion. First, the average total settlement of companies required to undertake structural reforms was in excess of $156 million suggesting, at least indirectly, that very extensive internal measures would be required to remedy failings that resulted in fraud of such a magnitude. With regard to the analyst settlements, in particular, the total liability of offending financial institutions once all the investor class actions have been settled is estimated to be $4.1 million dollars.[78] It is reasonable to assume that developing new safeguards and reorganizing business units in the face of such abject failure will require very significant resources.

Further indicia of the magnitude of the restructuring costs to Wall Street in the wake of the analyst settlements may be gleaned from the reduction in headcount undertaken to defray restructuring costs. Between February 2001 and February 2002, Wall Street cut 43,000 jobs in the largest reduction in employment in 25 years.[79] In 2001, investment-banking bonuses were slashed to half of their 2000 levels.[80]

On the premise that massive fraud is frequently accompanied by substantial internal reforms, the structural reforms that have been imposed after the uncovering of such fraud have been considered to be the most **"severe"** types of reform that any company could be required to undertake.

Governance reforms aimed overhauling internal controls were intended to significantly strengthen compliance and reporting measures in order to prevent further infractions of securities laws. This category of reform has natural parallels with Section 404 of the Sarbanes Oxley Act (SOX) which requires managers to assess their internal financial controls and have these controls audited annually by their external auditor. The distinguishing characteristic, however, is that many of the reforms captured under this category are likely to be more stringent than those required by SOX. For example, the requirement that firms' rotate their external auditor periodically was a provision that was debated by Congress but excluded from the final text of the legislation presumably because of the high cost of implementation to firms. Nevertheless, estimates of the cost of

[78] See the estimate of the independent research agency, Credit Sights, at http://securities.stanford.edu/news-archive/2003/20030407_Headline06_Celarier.htm.
[79] Wells, David. "Wall Street Job Cuts Highest Since '74." Chicago Sun Times. April 4, 2002.
[80] Winokur, Cheryl and Cowan, Lynn. "Wall Street Bonus Pool Seen More Like a Puddle This Year." Dow Jones News Service. September 10, 2001.

implementing Section 404 of SOX reached by several empirical studies serve as a helpful minimum benchmark by which to assess the likely magnitude of these costs to the business. In a survey of 217 companies with revenues in excess of $5 billion conducted by Financial Executives International the mean cost of compliance with SOX was estimated to average $4.36 million.[81] In a more recent and comprehensive study Foley and Lardner estimated that the total cost of corporate governance measures to large corporations in 2005 averaged $14.6 million, most of which could be attributed to SOX.[82] Finally, a survey conducted by Charles River Associates of 90 of the Fortune 1000 estimated total average compliance costs at $7.8 million per company, consisting of an additional $1.9 million being paid to external auditors and improvements to internal controls costing an average $5.9 million.[83] It becomes clear from these empirical benchmarks that the costs of these "**substantial**" reforms to the company are likely to be high, but still some considerable distance short of the costs that accompany major business reorganizations.

The final category of reforms in the stringency index is "**moderate reforms**" which are expected to entail the least significant costs of compliance to firms. In assessing the costs associated with recruiting new independent directors in the wake of SOX, Linck[84] et al. find that the costs of large firms to non-employee directors increased from 13 to15 cents for every $1000 of sales, or approximately $15,000 for a firm with $10 billion in sales revenue. In a more general critique of the costs associated with board-related changes Clark[85] notes that "[c]ompared to the costs of the audit-related changes … all these costs seem likely to be more modest in their size and impact. The cost to large accounting firms of having to sever audit-related services from lucrative non-auditing services is massive, and the cost to public companies of having to comply with

[81] See: http://www2.fei.org/files/spacer.cfm?file_id=2104
[82] See: http://www.foley.com/news/news_detail.aspx?newsid=1270
[83] See: http://www.crai.com/pubs/pub_4896.pdf
[84] James S. Linck, Jeffrey M. Netter and Tianxia Yang, "Effects and Unintended Consequences of the Sarbanes-Oxley Act on Corporate Boards," (March 15, 2005), available at http://papers.ssrn.com/paper.taf?abstract_id=687496
[85] Clark, Robert Charles, "Corporate Governance Changes in the Wake of the Sarbanes-Oxley Act: A Morality Tale for Policymakers Too" (December 5, 2005). Harvard Law and Economics Discussion Paper No. 525 Available at SSRN: http://ssrn.com/abstract=808244

section 404 requirements concerning internal controls is dramatic. Next to the dollar figures associated with those changes, the measurable costs of restructuring boards to have more independent directors and tighter formal structures and processes seem relatively modest….” In a similar vein, it is difficult to envisage that the costs of expanded disclosure or increased training to approach an order of magnitude suggested by the severe and substantial reforms outlined above. Indeed, some of the limitations on executive compensation may actually result in the company saving money.

The decision to categorize the Commission-endorsed independent consultant review of internal governance and policies as a moderate reform requires some explanation since it may be argued that its classification should more correctly be dependent on the actual recommendations of the consultant. There are three reasons, however, to believe that the recommendations of the consultant are likely to be significantly attenuated. First, the consultant is chosen by the company although the Commission’s approval of the choice of consultant is required. Second, the settlement that the consultant reaches with the company usually takes the form of negotiated agreement in which both parties have undertaken to participate in *bona fide* talks aimed at minimizing the business impact of the proposed reforms. Finally, the Commission has seen fit to insist on the services of an independent consultant in more than 80% of the cases in which it has imposed structural reforms on companies. Hence, the Commission has been very careful in maintaining its jurisdiction to directly require severe reforms where the merits of the cases have warranted such action, rather than relying on the services of an independent consultant to effect such change.

A final series of caveats are in order when interpreting the stringency index. Firstly, the stringency index makes no attempt to frame its categorization in terms of a cost benefit or cost effectiveness analysis. The perils of attempting such a task are legion and I am unaware of any study that has plausibly estimated the overall welfare effects of corporate governance reforms. Most empirical studies in the corporate governance literature have focused on the narrow question of relating returns to shareholders to a variety of board and executive structures, with the evidence for such a relationship being mixed. Secondly, the stringency index considers only reasonable, direct costs to the company of implementing these governance reforms. Indirect costs, such as the loss of potential revenue resulting from enhanced governance measures that curb the risk appetite of executives are not considered in the construction of the index. The dearth of empirical literature on this subject as well as the highly speculative nature of theses costs make the consideration of such costs an extremely difficult (and hazardous) task.

5.2 Hypothesis One (Null): The SEC is no more likely than Private Plaintiffs to Insist on Severe or Substantial Corporate Governance Reforms

There are several theoretical reasons to suggest that we should reject the null hypothesis. In other words, there are reasons to believe that the SEC will actually tend to require more penetrative corporate reforms than private class action securities suits. As was outlined earlier, investor class actions are driven by the plaintiff bar who enter into a contingency agreement with the class and, as a consequence, have as a rational primary goal the maximization of the recovery of monetary damages. On average the settlement fund in governance private actions amounts to nearly \$50 million. The representative plaintiff shareholder also faces a disincentive to monitor the actions of the class attorney, as they are usually rewarded for their efforts at a considerably higher rate than the rest of the class receives.

Under these circumstances one may expect the plaintiff attorney to spend a minimal amount of time negotiating moderate, perfunctory corporate governance changes, since he receives no pecuniary benefit for his time spent in these negotiations. His appetite for insisting on substantial and severe changes in governance systems would be curbed by his rational self interest. The SEC enforcement actions that result in governance reforms, on the other hand, are usually those suits in which the most egregious violations have occurred relative to the population of all enforcement actions. Furthermore, mean civil penalties - which theory predicts should proxy for the gravity of the infringement - assessed in governance suits amount to nearly \$30 million, or more than six times the average. From the point of view of investor protection, the SEC would seem have strong grounds for frequently insisting on substantial and severe reforms to existing governance mechanism in order to prevent a reoccurrence of the infraction.

We use a logistic model to test this hypothesis with the coefficients reported in terms of odds ratios. The dependent variable is coded in two different forms. The first specification reflects on those cases in which severe (structural) changes have resulted, while the second, weaker specification collapses severe (structural) reforms and substantial (internal controls) into a single outcome. The independent variable of primary interest is the binary variable, "Class Action", which takes a value of 1 when the suit is a private investor class action and a value of 0 when the suit is an SEC enforcement action. The results of the regression analysis are shown below.

Table 7: Regression Analysis Testing Hypothesis 1

Dependent Variable **Covariates**	**Severe Changes**[86] **(N = 92)**	**Structural or Substantial Change (N = 92)**
Class Action	0.33 (0.54)	0.56 (0.51)
Illegal Actions by Investment Advisor		0.24†† (0.17)
Broker-Dealer Fraud on Customer	23.72†† (29.9)	3.70 (3.81)
False disclosure	1.22 (1.74)	0.86 (0.64)
Failure of Broker-Dealer to Supervise		0.20 (0.17)
Fiduciary Duty	200.76 (631.72)	0.75 (1.25)
Log of Total Award	1.37 (.24)	1.00 (.05)
Public Company Identifier	1.00 (1.24)	0.81 (0.51)

††*Significant at the 5% level*

In contradiction to our theoretical predictions, the results of the regression do not enable us to reject the hypothesis that the SEC will tend to require more penetrative corporate reforms than private class action securities suits. In neither of these specifications is the variable "Class Action" significant. In the first specification the only

[86] Blank boxes in this table reflect variables dropped from the regression analysis due to collinearity

meaningful statistical conclusion that may be drawn is that fraud committed by a broker dealer increases the chance of severe corporate governance reforms by 83% (conditional upon there having been a corporate governance reform). From the second specification we may also conclude that the illegal behavior by an investment advisor actually lowers the chance of a substantial or structural change by 35% (relative to a composite of all other allegations).

A few tentative explanations may be advanced for these findings. In view of the fact that only approximately 2% of all private suits resulted in any corporate governance reform one may argue that this was a highly selected subset of cases in which the plaintiffs took their role as custodians of all shareholder interests very seriously. They may have been willing to personally absorb the time and costs associated with negotiating severe or substantial settlements. Supporting this conclusion is the fact that nearly 20% of these suits settled without any settlement fund having been created. A more cynical explanation suggests that the plaintiff bar, in response to substantial public criticism of their predatory behavior, may have decided to defuse the criticism by negotiating substantial corporate governance changes in a few selected cases (which is scenario that was explored in greater depth earlier).

5.3 Hypothesis Two (Null): Private Plaintiffs are no more likely than the SEC to adopt a wider range of reforms

In pursuing corporate governance reforms during settlement negotiations the objectives of shareholders are likely to diverge from those of SEC. Aside from the losses which they may have experienced, investors are likely to place a greater value on the long term survival of the firm and will seek to adopt all reasonable and necessary measures to achieve this aim. Investors may use their informational advantages of the firm's structure and management to refine its operations in a way that maximizes long-term shareholder value by adopting a wide range of governance changes. Shareholders may also wish to express their dissatisfaction with management by adopting as many reasonable changes as possible, or choose to place a variety of safeguards in place to attenuate the effects of their managerial discretion. The SEC, on the other hand, is interested primarily in preventing future infractions of the law at a minimum cost and with minimum invasiveness to the company's operations. In instances where it is unable to assess the required reforms it is likely to appoint an agent (a single reform) in order to more carefully and prudently assess the changes that need to be made.

We use an ordered logistic model to test this hypothesis with the coefficients reported in terms of odds ratios. The dependent variable is ordinal and takes on a value of 1, 2, or 3 depending on the number of classes governance reforms undertaken of the seven classes listed in Table 6. The maximum number of class reforms adopted in any single suit is 3 (and there are 8 suits with 3 classes of reforms). The independent variable of primary interest is the binary variable, "Class Action", which takes a value of 1 when the suit is a private investor class action and a value of 0 when the suit is an SEC enforcement action. The results of the regression analysis are shown below.

Table 8: Regression Analysis Testing Hypothesis 2

Dependent Variable **Covariates**	**Number of Reforms (1 or 2+)** *(Coefficients are in odds ratios)* **(N = 92)**
Class Action	11.69††† (11.9)
Illegal Actions by Investment Advisor	1.45 (1.2)
Broker-Dealer Fraud on Customer	67.94††† (93.98)
False disclosure	3.91 (3.38)
Failure of Broker-Dealer to Supervise	0.35 (0.42)
Fiduciary Duty	0.8 (1.3)
Log of Total Award	1.02 (0.05)
Public Company Identifier	.75 (.51)

†††*Significant at the 1% level*

The result of the regression confirms that private investors are more significantly more likely (actually 20% more likely) to adopt more than one major class of reforms than is the SEC. In so doing we have rejected the null hypothesis. Furthermore, fraud on customers by broker dealers increase the chances of further reaching reforms by 20%.

The first and second hypotheses point to a limited number of instances where private plaintiffs have used the class action mechanism to coerce defendant firms into reforming their corporate governance structures. Notably, 81% of the private plaintiffs in governance suits were institutional investors suggesting that they had the resources and economic incentive to monitor both management and their class action attorney. The enhanced monitoring capacity of institutional investors stands in stark contrast to the traditional collective action problem attendant with diffuse, public ownership of most public corporations.

Where governance reforms are pursued by public and private enforcement mechanisms, private investors have been successful in obtaining a wider range of reforms from settling defendants than the SEC. Furthermore, public and private enforcers are equally likely to pursue more stringent governance reforms. It would appear as if private governance cases are highly selected subset of class actions, in which plaintiffs have taken their role as custodians of all shareholder interests very seriously. There is evidence to suggest that plaintiffs may have been willing to personally absorb the time and costs associated with negotiating severe or substantial settlements, as 25% of governance suits settled without any settlement fund being created.

5.4 Hypothesis Three (Null): In the First 2 Years after its Passage the Sarbanes-Oxley Act has had no Effect on the Stringency of Corporate Reforms Pursued by the Commission in its Enforcement Actions

Sarbanes-Oxley includes several provisions aimed at enhancing the Commission's capability to review Company filings and to bolster enforcement of the securities laws. The Act expands the Commission's authority to impose sanctions on persons who have violated securities laws, while also affording the Commission the ability to fashion specific remedies for violations of the securities laws. In a more oblique manner the passing of SOX was interpreted by many commentators as Congressional dissatisfaction with the performance of the Commission, in particular its failure to enforce efficacious corporate governance standards.

These two factors suggest that the SEC may have rationally altered its enforcement strategy by imposing severe or substantial corporate governance reforms more frequently after the passing of the Act.

Table 9: Regression Analysis Testing Hypothesis 3

Dependent Variable **Covariates**	**Structural or Substantial Change** *(Coefficients are in odds ratios)* **(N = 92)**
Post-Sox	2.25 (1.21)
False disclosure	3.91 (3.38)
Broker-Dealer Fraud on Customer	8.93†† (8.19)
Log of Total Award	1.02 (0.05)

††*Significant at the 5% level*

The results of the regression analysis suggest that, in the first 18 months after the passing of SOX, we cannot reject the null hypothesis of no change in the stringency of the Commission's enforcement post Sarbanes-Oxley, as measured by the rate of structural or substantial reforms required as part of its settlements. The coefficient on the post-SOX independent variable is, however, marginally insignificant at the 10% level of confidence (p value = 0.13), suggesting that this result could easily reverse itself over time and with the benefit of a larger population of SEC governance actions.

6. Market Reaction to the Corporate Reforms

We now turn to the market's reaction to companies that have settled suits, either with the SEC or with investors, which have resulted in corporate governance reforms.

6.1. Development of Hypotheses

Following Salavei and Moore (2005) it is hypothesized that that settlements of enforcement and investor class actions affect the information set of investors in two ways. The first effect, or wealth effect, is the negative market reaction that follows from the downward revision of expectations of the net present value of future cash flows which accompanies the announcement that the firm is being sued. The prospect of a relatively higher settlement attracts greater, negative market reaction as the impact on company profitability is rationally expected to be more substantial. If market expectations are later proven to be correct and the company eventually pays a settlement equal to the expected settlement then there should be no further change in the share price. If, on the other hand, the settlement is lower than expected the share price should rise on announcement of the settlement; conversely, a higher than expected settlement should see the stock price falling.

A second, countervailing effect of a legal settlement may be to alter the precision of the investors' information sets. As risk-averse investors dislike uncertainty, the resolution of litigation proceedings should ordinarily result in a positive market reaction (holding the wealth effect constant). In other words, the markets should be buoyed that the cloud of litigation has passed and the fact that executives are now able to concentrate their attention more completely on maximizing shareholder wealth. These two market effects act in opposing directions on share price with the result that the true effect of a settlement announcement on share price distils to an empirical finding.

6.2 Data

In order to test the market reaction to settlements involving corporate governance reforms two datasets have been compiled. The first dataset consists of the pooled share prices of the 30 public companies that have agreed to governance changes, either in a settlement with private investors or the Commission. Of these 30 companies, 12 settled with private litigators and 18 with federal enforcers.

In order to provide a meaningful basis for comparison a second dataset was constructed, consisting of a random sample of 30 publicly traded firms that have settled suits in which governance reforms did *not* form part of the settlement (i.e. restitution to affected investors was the only term of settlement). In order to mirror the composition of the first dataset, 12 of these settlements were with private litigators and 18 settlements were with the Commission. All share prices were collected for one year before and after the settlement announcement, and have been adjusted for stock splits and dividends.

6.3 Event Study Methodology[87]

In order to discern the short-term market reaction to a settlement announcement we employ a standard event study methodology in computing abnormal returns. The effect of a settlement announcement on the price of a security is determined by comparing the return on the security over the time that the market receives the news, called the observed return, to the return that would be expected in the absence of any news (or the expected return). The (counterfactual) expected return of a security is arrived by approximating the value of the stock relative to an index of stocks that have not been affected by the information, while accounting for the natural variance of the security in the recent past.

The period during which the news is believed to affect the securities return is called the "event window". Although a longer event window provides greater certainty that the full effect of the announcement has been captured it also increases the likelihood that the results may be tainted by the seepage of other value-affecting information. The share prices of publicly traded companies in an efficient market are usually very sensitive to new information so that an event widow for a few days before and after the announcement is generally considered reasonable.[88]

[87] See Stephen Mahle (2004). "Expert Testimony in Securities Litigation" (available at http://www.daubertexpert.com/applying_securities.html)
[88] See Bernard Black. "Bidder Overpayment in Takeovers, 41 Stan. L. Review 597, 603) (tabulating event study results for "narrow (one to four day) 'window' periods")

The abnormal return for a day is the actual return less the predicted return for that day. The daily abnormal returns can be summed over the event window to find the cumulative abnormal return (CAR), which is a measure on the impact of the event on the security's return.

In more formal terms, the returns are estimated using the following market model:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \qquad (1)$$

where: R_{it} is the return on security i on day t

R_{mt} is the return on the S&P 500 market index on day t

ε_{it} is the random error term

The model is estimated over 255 trading days, ending 46 days before the settlement announcement. The abnormal return for security i on day t is defined as:

$$AR_{it} = R_{it} - (\acute{\alpha}_i + ß_i R_{mt}) \qquad (2)$$

where $\acute{\alpha}$ and ß are the ordinary least squares estimates of security *i's* market model parameters in equation (1). The robust cross-sectional standard deviation test is used to estimate the significance of the abnormal returns. This test assumes cross-sectional independence and estimates a separate standard error for each security-event.

6.3.1 Event Study Parameters

Abnormal returns are calculated using the S&P 500 index as a benchmark. All the stocks on the index are those of large, publicly held companies that trade on major national stock exchanges and, in this regard, are very similar to the defendant companies that have agreed to adopt corporate governance settlements. Furthermore, the S&P 500 is considered to be a bellwether for the US economy and is frequently used by analysts and academics as a baseline for comparison.

The event dates used for the federal enforcement actions are the published settlement dates of Commission actions found on the SEC website (http://www.sec.gov).

The dates of announcement of class action settlements were obtained from the public press releases posted on Dow Jones Newswire by the settling parties.

The event study analysis was performed using Eventus, an analytical software package that is widely used by finance academics. By default, Eventus uses the market model outlined in equations (1) and (2), estimated by OLS with data from a 255 trading-day estimation period ending 46 days before the event date.

Results are reported using event windows of 3, 4, and 5 days are reported in Table 10 below. The financial economics literature tends to favor a 3 day event window – beginning one day before the announcement and ending one day after the announcement. The use of the pre-announcement day in the event window is intended to capture the price effects that accompany pre-announcement information leakage. However, this study also reports 4 and 5 day event windows to account for the complexity of settlement agreements that involve corporate governance reforms. Although news of the settlement will quickly reach the subset of analysts and traders that follow the particular security, it is reasonable to expect that the analysis of lengthy corporate governance settlement agreements, incorporating somewhat unusual terms, together with a decision to sell, buy, or hold, may require a couple days.

6.3.2. A Cautionary Note on Event Study Analysis

This event study analysis relies on the semi-strong form of the Efficient Capital Market Hypothesis (ECMH). This hypothesis is based on the notion that security prices reflect all publicly available information, so that the rapid changes in stock prices that are observed is merely the market digesting new information as it becomes available. A correlative point is that investors cannot generally “beat the market” by examining publicly available information for determining the true value of the stock.

The ECMH has nevertheless been subject to some criticism. There is substantial empirical evidence to suggest that markets often overreact to public announcements and that stock prices reach their equilibrium over a long period of time via a process that is akin to reversion to the mean. Insight from the behavioral sciences suggests that while individuals act rationally groups of people do not. The result is that pricing decisions may not be fully reflective of rational expectations about asset values. Loss aversion, or the tendency of investors to be more willing to take a risk to avoid a loss than to pocket a gain, and the tendency of market participants behave as if securities markets are not efficient, by seeking out bargains and being influenced by trends rather than the fundamentals of finance, also tend to undercut the ideal of the "rational investor" underlying the ECMH.

An issue, germane to this study, that arises with respect to both private and public enforcement actions is that news of settlements are not always a total surprise to the market and will sometimes reach the market via a slow drip of information in the weeks leading up to the pubic announcement of a settlement. Nevertheless focusing on an identifiable event date does improve the signal-to-noise ratio of the measured abnormal returns. This study has controlled for some possible leakage by including the day before the settlement announcement as part of the event window moreover. Moreover, in the event of prior information leakage, the results in Table 5 would represent a lower bound of market reaction to the settlement.

Furthermore, given the non-rational behavior of some investors, the initial market reactions reported in Table 10 below may not endure as more information and rational analysis comes to bear on the settlement agreements.

6.4 Results and Analysis

The results of an event study on both corporate governance settlements and non-corporate governance settlements, for 3, 4, and 5 day window periods, are summarized in Table 10 below:

Table 10: Abnormal Returns around Settlement Announcements

Event Window (Days Before, Days After)	**SEC Governance Suits (N=18)**	**Pooled Dataset of Governance Suits (N = 30)**	**Pooled Dataset of Random Non-Governance Suits (N = 30)**
(-1, +1)	-0.87%*	-0.6%	1.48%**
(-1, +2)	-2.06%**	-1.32%**	2.74%**
(-1, +3)	-2.03%**	-1.2%*	2.25%**

** *Significant at the 5% level*

* *Significant at the 10% level*

Enforcement Actions with governance settlements were met with negative market reaction in the 3, 4, and 5 day event windows. A pooled dataset of private and public suits with governance settlements exhibit an insignificant (but negative) market reaction during the 3 day event window. However, we find a significant negative reaction during the 4 and 5 day event windows reflecting, perhaps, the additional time required by market participants to fully digest the implications of corporate governance reforms on the company's future performance. It is also important to mention that private governance suits also engendered uniformly negative market reaction in the 3, 4, and 5 day event windows. However, these reactions were insignificant – likely due to the small sample size – and are hence not reported here.

Table 5 revealed earlier that class action governance suits had a monetary settlement that was roughly equivalent to other investor class actions. Similarly Table 3 showed that most governance settlements, in actions initiated by the SEC, resulted in a total monetary award that was no more severe than typical investor class action actions. As a result, the negative reaction of the markets to governance settlements can hardly be attributed to the stringency monetary penalties vis-à-vis all other suits. The most plausible explanation for the anemic reaction of the market to governance settlements vis-à-vis other securities settlements is likely to lie with the market's disdain for the constraints that the governance reforms place on managerial discretion. Monetary settlements, on average in the magnitude of $30 - $50 million, may be recovered over a fairly short time horizon by a large public company provided that an unfettered management is committed to the increasing profitability of the firm. Internal reforms, however, have the potential to affect company and managerial performance deep into the future. Moreover, at the very least, substantial uncertainty must exist with regard to the extent to which management will find itself constrained by the new internal procedures leading to a negative market reaction.

In contrast to governance settlements, the 30 randomly selected public firms in which governance reforms were *not* imposed as part of the settlement showed significant positive cumulative abnormal returns of 1.48%, 2.74% and 2.25% in event windows of 3, 4, and 5 days respectively. The positive cumulative abnormal returns may be taken as evidence that, on average, markets were buoyed by the news of the settlement. The market appeared to be relieved that the cloud of litigation had passed, enabling executives able to concentrate their attention more completely on operational issues aimed at increasing profitability.

In sum, settlements requiring corporate governance reforms and, in particular SEC governance actions, have turned out to be more onerous than the markets have expected. A plausible explanation for this result is that the markets had acquiesced to prior firm behavior which, although consistent with profit maximization, had bordered on illegality. The governance settlements subsequently constrained management discretion to a greater extent than the market had expected, leading to a significant fall in share prices.

7. Conclusion

The enforcement of securities laws has been thrust into policy limelight by spate of corporate scandals in early years of this decade, most notably at Enron, Tyco, and WorldCom. The perceived failure of regulatory authorities to enforce ethical business practices and efficacious corporate governance has led to a substantial growth in the number of suits being brought by private class action attorneys, as shareholders turn to private litigation for remedies. Corporate malfeasance and the perceived infirmity of regulators is troubling for policymakers as investor losses dents investor confidence and lowers willingness to invest thus hindering capital formation in the economy.

The adoption of corporate governance reforms by a defendant company offers one potential means of ensuring future lawful and ethical behavior by office bearers. The focus is not on monetary penalties as a means of achieving wider deterrence; rather, deterrence is achieved by requiring companies to adopt effective corporate governance structures that focus on the institutional and policy framework of corporations to ensure that the checks and balances exist to prevent a future abuse of power by officers of the corporation. Social welfare is enhanced by corporate governance reforms (and civil and criminal penalties generally) if they efficiently deter future violations of securities laws that damage investors.

This paper has revealed that governance reforms are not usually pursued by either public or private enforcers. The SEC is bound by restrictive legal precedent as well as its stated intention of limiting government intervention in internal affairs of the corporation. For private enforcers, on the other hand, the extensive negotiation of corporate governance settlements for which they do not receive additional remuneration is incompatible with their objective of maximizing the expect value of their settlement.

However, when governance reforms are pursued by the Commission it targets defendants involved in serious violations of investor protections. This is consistent with its mission, as stated in the Securities Exchange Act of 1934, of protecting investors, and in particular retail investors, in order to facilitate capital formation in the economy. Private investors have been successful in obtaining a wider range of reforms from settling defendants than the SEC due primarily to the fact that over 80% of plaintiffs have been institutional investors with the means to carefully monitor the plaintiff attorney and a superior knowledge of the business that enables them to negotiate a wider range of reforms. Furthermore, public and private enforcers are equally likely to pursue highly invasive (stringent) reforms. It would appear as if private governance cases are highly selected subset of class actions, in which plaintiffs have taken their role as custodians of all shareholder interests very seriously. There is evidence to suggest that plaintiffs may have been willing to personally absorb the time and costs associated with negotiating severe or substantial settlements, as 25% of governance suits settled without any settlement fund being created. Over time, SOX may result in the SEC being more aggressive in requiring corporate governance reforms in its enforcement actions, although it is too early to make a definitive judgment in this regard.

Settlements requiring corporate governance reforms and, in particular SEC governance actions, have turned out to be more onerous than the markets have expected. One explanation for this result is that the markets had acquiesced to prior firm behavior which, although consistent with profit maximization, had bordered on illegality. The governance settlements subsequently constrained management discretion to a greater extent than the market had expected, leading to a significant fall in share prices.

Chapter 4: A Recent History of Private and Public Oversight of Self Regulatory Organizations with a Focus on the National Exchanges

1. Introduction

Self-regulatory organizations (SROs) are unique to the American securities landscape. Section 3(a)(26) of the Securities Exchange Act of 1934 ("Exchange Act") defines an SRO as any national securities exchange, registered securities association, registered clearing agency, or the Municipal Securities Rulemaking Board. Sections 6 and 15A of the Exchange Act give formal recognition to self-regulatory organizations by enumerating a list of standards governing the registration, operation and administration of SROs. These organizations are responsible for promulgating standards, conducting inspections, and undertaking enforcement actions against members who fail to comply with internal standards. Section 19(b) of the Exchange Act requires SROs to file proposed rule changes with the Securities Exchange Commission (SEC or the "Commission"), while §19(c) gives the Commission the authority to amend the rules of SROs in order to ensure the fair administration of the SRO or to bring the rules into statutory compliance. The focus of this paper lies exclusively with the nine securities exchange SROs and the most influential of the national securities associations - viz. the National Association of Securities Dealers (NASD) - as these organizations feature most prominently on the agenda of regulators. [89]

Historically, stock exchanges have been classed as "self-regulators" because market participants are involved in rulemaking and enforcement activities. Representatives of the various constituencies that together own the exchange set and enforce the standards to which all members must adhere. Ideally, self regulation allows market participants to harness their collective knowledge to adopt and enforce standards that give due consideration to the complexities of the securities industry. The pitfalls of ill-tailored and invasive statutory regulation are avoided, while the government benefits from being able to leverage its scarce resources via oversight of the SROs by the Commission. Supporters of the SROs point to these benefits of the system and note the

[89] SEC Concept Release Concerning Self-Regulation; Release No. 34-50700

endorsement of SEC that "[i]t is generally considered that the SRO system has functioned effectively and has served government, industry and investors well."[90] Past failures by the SEC to efficaciously "micro-regulate" the thousands of broker-dealers during the SECO (SEC-only) program of the mid-1960's have only added to the enduring appeal of self-regulation in the securities industry.

A system of self regulation, however, bears some risks, as self-regulators are not disinterested but may be biased by their industry affiliation. These clashing interests may lead to lackluster rulemaking, a lack of vigilance during surveillance of market operations and inadequate enforcement in instances of wrongdoing.

Despite the presence of mixed incentives by SROs to efficaciously self-regulate, proponents of the system point to the beneficial effects of reputation and competition between exchanges globally as important incentives to operate fair and competitive market places. Moreover, oversight by federal regulators and judicial remedies in the form of private enforcement also serve as important disciplining devices on SROs.

In response critics of self-regulation argue that the SEC lacks the financial resources, and consequently the expertise, to properly detect all but the most blatant violations by SROs. Private litigation of securities actions is also poor a disciplining device on SROs. The plaintiff bar has had an uncharacteristically muted history in uncovering malfeasance within SROs, due to the mutualized form of exchange ownership that has made the formation of a plaintiff class a virtual impossibility and to the substantial technical expertise required to detect wrongdoing. The relative paucity of private enforcement patterns against SROs is consistent with the historically mutual form of exchange ownership. Stock exchanges were typically founded and owned by a tightly knit community of broker dealers. This left little room for litigation as business decisions are made on a consensus basis, and differences resolved internally via voting, dispute resolution mechanisms or by internal enforcement actions.

The second section of this paper makes a contribution to the literature by laying out a conceptual framework within which to understand the myriad of market and regulatory forces, alluded to above, that impact the quality of self-regulation. In keeping with a major theme of this dissertation, the third section empirically examines the

[90] SEC Concept Release Concerning Self-Regulation; Release No. 34-50700

disciplining effect that federal regulation and enforcement and private class action suits have had on the self-regulatory organizations between 1990 and 2005.

In recent years, the debate on the relative merits of a system of self regulation has occurred against the backdrop of demutualization – the trend by which private, member-owned exchanges have listed as public companies. Demutualization can be seen as a response by exchanges to two related factors that have impacted global financial markets viz. technological advancement of trading systems and globalization. Exchanges argue that going public will allow them access to capital markets, enhancing their adoption of the most modern technologies, enabling their expansion into related areas like clearing, and generally facilitating effective competition among the major, international exchanges. This notion of a public, "demutualized" exchange stands in stark contrast to the traditional, mutualized exchange in which the corporation-exchange has no capital stock and profits are doled out to the owner-customers in proportion to the order flow that each diverts to the exchange.

In view of this trend the fourth section of this paper will discuss the extent to which the demutualization of exchanges affects federal regulation and the potential of demutualization to fuel private class actions as ownership of exchanges begins to diffuse into the wider investment community. On one hand, public investors seeking to maximize their return may be more likely to keep a keen watch for mismanagement and financial irregularities at the exchange. They will also be concerned with the future profitability of the exchange with the class action perhaps being used as a means to enforce minimum standards of self-regulation aimed at retaining and attracting listings.

The concern for regulators, however, is that profit seeking private investors will seek to abuse the substantial market power that the established international exchanges – most notably the New York Stock Exchange (NYSE), the NASDAQ stock market and the London Stock Exchange (LSE) - wield over issuing firms and the suppliers of capital, resulting in a deterioration in the quality of self regulation. Moreover, while the trend towards the demutualization of exchanges may represent an important inflection point the true disciplining effects of private actions remain to be seen. Thus, the advent of demutualization has prompted some commentators to argue that the current labyrinth of market forces, federal regulation and enforcement, and private actions will not been sufficient to maintain the integrity of SROs in the future.[91] The United Kingdom, for example, has taken the view that the contradictions inherent in the notion of self-policing are too fundamental to be remedied by the market or unobtrusive federal regulation. This led to the creation of the British Financial Services Authority (FSA) in 1997, three years before the demutualization of the London Stock Exchange (LSE). Under the FSA all financial regulation has been consolidated under a single regulatory body that exercises jurisdiction over the banking, insurance and securities industries.

The final section of this paper argues that outsourcing the surveillance and enforcement functions of SROs to private "exchange-auditors" may be more effective at policing by private entities than the current self regulatory regime.

2. A Conceptual Framework for Discerning the Welfare Effects of Self-Regulation

Following Hansmann (1980)[92], an apt economic characterization of an exchange is as a "commercial mutual" non-profit. "Commercial" refers to the fact that the exchange's income derives primarily from a service that takes the form of providing financial intermediaries a marketplace in which to deal. "Mutual" alludes to the fact that the financial intermediaries who trade on the exchange also control it. Given that the exchange is controlled by and run for the financial intermediaries that trade on it, that the exchange cannot distribute any profits, and the exchange cannot operate if its cumulative losses exceed its revenues, the objective function of an exchange may be described as maximizing the consumer surplus of the owner financial intermediaries subject to breaking even.[93] Although non-profit exchanges may not distribute any profits they earn, they may contribute to the welfare of their owner-members by lowering the fees they charge for various services or offering rebates.

In maximizing the surplus of its member-owners (particularly powerful ones), exchanges may be tempted to impair the quality of their market oversight. *Figure 1 (below)* illustrates the social welfare conundrum posed by self-regulation and depicts the

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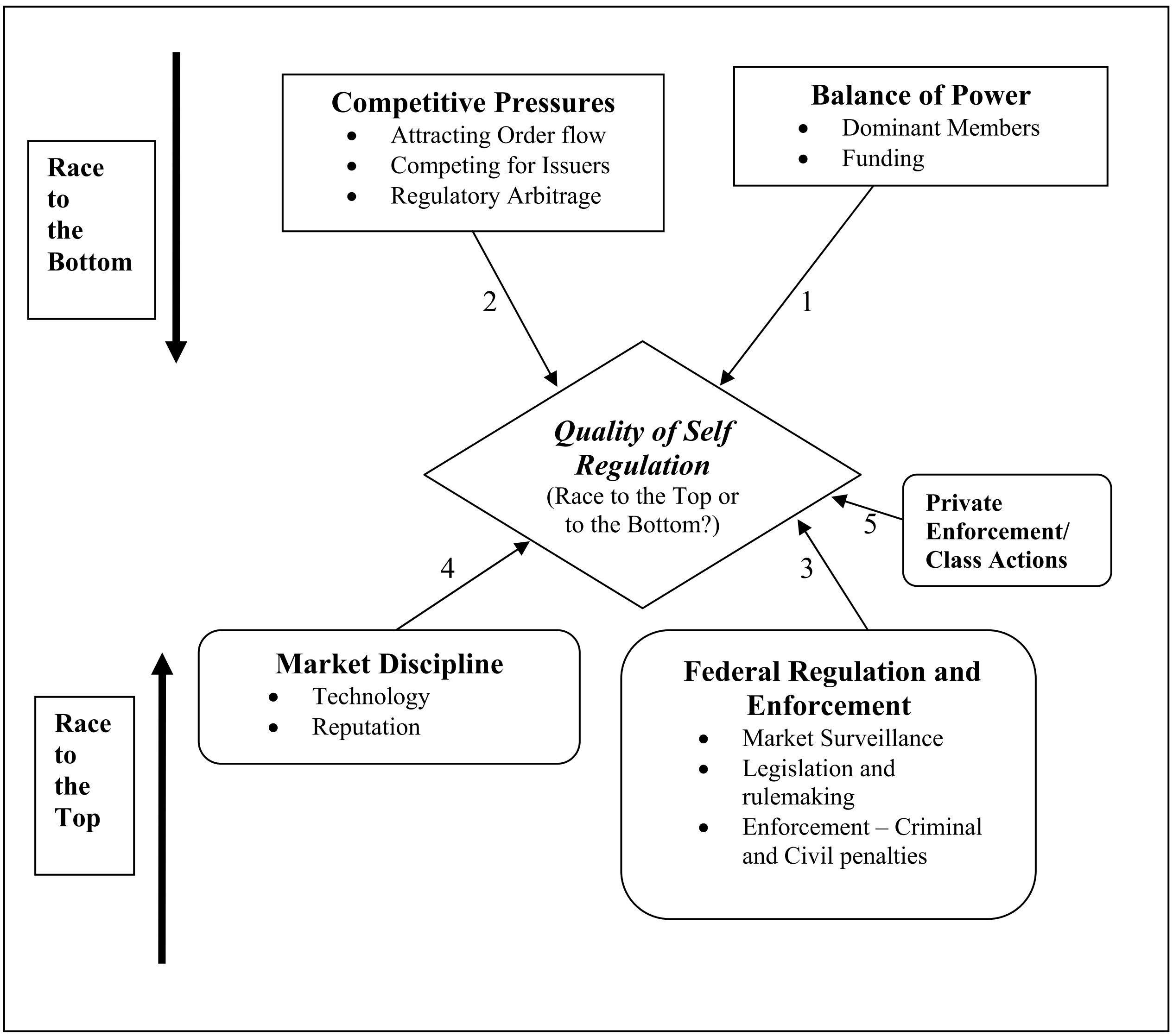
[91] For example, one of the most prominent critics of self-regulation is Hal Scott, a Harvard Law School Professor and former director of the American Stock Exchange and a member of the Legal Committee of the New York Stock Exchange

[92] Hansmann, H.B. (1980) "The Role of Nonprofit Enterprise" Yale Law Journal, 89: 835-98

[93] Ruben Lee (1998) "What is an Exchange? The Automation, Management, and Regulation of Financial Markets" Oxford: Oxford University Press

quality of self-regulation (rather informally) as either a "race to the top" or "to the bottom" depending on the magnitude of the opposing forces impacting the quality of the regulation. More formally, the SRO decision making (depicted in figure 1) represents an equilibrium that is based on an incentive structure, which reflects the objectives of the SRO and a weighing of the benefits and costs of alternative policies toward achieving the objectives.

Figure 1: Factors Influencing the Quality of Self Regulation: A Race to the Bottom or to the Top?



In the figure above, potential impairments to optimal self-regulation are broadly characterized as arising from either the internal economic and political power dynamics within the SRO or from competitive responses by the SRO to other exchanges. Fierce competition may result in lax detection and enforcement of wrongdoing against exchange members and listed firms in a bid to compete successfully against rival exchanges. These welfare reducing forces are represented by the red arrow in Figure 1 as leading to a "race to the bottom" of the quality of self regulation.

Acting to minimize these impairments to self-regulation are the forces of market discipline coupled with effective regulation and private enforcement actions by aggrieved members or investors (represented by the red arrow in figure 1).[94] In other words, the potential punishment of exchanges by the market, meted out for example by potential issuers who look to list elsewhere, combined with assiduous federal oversight and active participation by the plaintiff bar may be sufficient to deter SROs from regulating the markets they operate to the detriment of the public interest.

The discussion following in this section considers these competing forces more carefully, with a particular emphasis on the role that federal regulation and private enforcement have played in ensuring fair and transparent securities markets.

2.1 The Balance of Power within SROs Impact the Quality of Self-Regulation[95]

The diverging objectives that regulatory operations within SROs may have from their members, market operations, and issuers are a substantial source of conflict within exchanges. Dominant members, for example, may adversely influence key decisions on governance and regulatory personnel by preferring their parochial interests to those of the exchange. For instance, the Commission's investigation of anticompetitive behavior by NASD market-makers in 1996 revealed how this powerful grouping was able to avoid internal disciplinary measures due to their control of the committee effectively serving the "grand jury" role within NASD.[96] In response to the potential for abuses by dominant members, exchanges have sought to curb their power, often at the insistence of

[94] Much of the discussion that follows draws on the SEC Concept release referred to in note 1 *supra*
[95] See the Arrow labeled 1 in figure 1
[96] See SEC Release No. 37538 (8/8/1996)

regulators, by instituting ownership or voting restrictions that are usually capped at five percent.[97]

A second impairment to self regulation arises from potential funding shortfalls that regulatory operations may suffer either as a result of an internal business decision to fund market operations over regulation, or as an act of retribution from powerful members concerned about invasive surveillance or over zealous enforcement by internal regulators. At the best of times determining the optimal funding for regulatory operations can be a very challenging task, as this will depend on type of market that the SRO is operating, its business model, and trading systems. The SEC has been thus been reluctant to issue guidelines on this matter despite acknowledging the potential for abuse by major members of the exchange.

Advocates of a market driven approach to regulation[98] argue that the adoption of cost-effective, accurate, and sophisticated technologies, such as automated trading structures and electronic audit trails, may result in the attenuation of the influence of powerful members. This is certainly the belief of the SEC. As will be discussed in greater detail in Section 2.3.4, in four of the six enforcement actions instituted against SROs between 1990 and 2005, the defendant companies were required to adopt advanced surveillance technologies as remedial measures to improve their ability to detect wrongdoing.

Comprehensive surveillance facilitates the production of more convincing evidence during internal and federal enforcement proceedings ultimately leading to more accurately assessed penalties and enhancing the deterrence value of such hearings. For

[97] In some respects the dominant members in mutualized exchanges resemble interested, executive directors on the board of directors in public companies. This issue of interested directors was brought to the fore in the United States at the turn of the century, after executive malfeasance at major corporations, most notably Enron and WorldCom. In response, the Sarbanes Oxley-Act required an independent audit committee while the major exchanges went a step further by requiring a majority of independent directors on the board and particular financial expertise on the part of the audit committee members. Similarly, Japan is now facing a fundamental challenge and transformation of its postwar corporate governance institutions. The main bank system, cross-shareholding (keiretsu), and lifetime employment appear to be eroding. On the issue of board reform, legal measures have also aimed to increase the role of outsiders, in particular outside directors. Japan's approach in this regard has been gradual - to encourage but not mandate the appointment of outsiders. Mention must also be made of the statutory auditors (*kansayaku*) and, in particular, recent moves to strengthen their independence from the firm in order to make it easier for them to play their legally prescribed role in corporate monitoring. Although there is currently a dearth of empirical research the effectiveness of this change it is nevertheless being watched keenly by Japanese policymakers.

[98] See the Arrow labeled 4 in figure 1

example, at first glance, the Specialist scandals of 2005 appeared to involve only minor trading infractions resulting illegal gains to dealers of no more than a few tens of dollars per trade. In an internal hearing the specialists were merely cautioned by the NYSE. However, in a subsequent SEC investigation, audit trails were recreated for a four year period and revealed that the illegal behavior was more widespread and systematic than initially imagined. All told, audit trails revealed that the damage to investors exceeded $158 million.

A final argument of those advocating a market driven approach to regulation is that the SEC has remedied many of the ills of the past abuses by insisting on stringent corporate governance reforms that require independent arbitration of internal enforcement proceedings, thereby attenuating the influence of powerful members.

2.2 Competition between Exchanges for Order Flow and Issuers: The Threat Posed by Regulatory Arbitrage[99]

Globalization and advancing technology have greatly facilitated the quick purchase of shares in public companies by individual investors and professional broker-dealers. These developments have fostered competition between exchanges hoping to attract, and profit from, the enhanced order flow. Unfortunately, these competitive pressures have the potential to impair the proper functioning of the regulatory arms of SROs, as internal regulators may lack the inclination to enforce those bylaws that may result in providers of liquidity redirecting their order flow to other exchanges.

For example, in 1999 the New York Stock Exchange (NYSE) was heavily penalized by the SEC for failing to prosecute prominent exchange floor brokers that had illicitly exploited their knowledge of large, price-altering block trades for personal gain. The floor brokers had also apparently falsified order tickets and records to reap profits during periods of substantial price volatility. The conditions of settlement with the Commission included over a dozen onerous undertakings by the NYSE, such as the development of an electronic audit trail system, the redrafting of comprehensive procedure manuals under the guidance of an independent committee, enhanced internal audit and policing functions, and the “re-education” of floor members.

[99] See the Arrow labeled 2 in figure 1

Similarly, competition for listings may result in SROs failing to discharge their duty to maintain the integrity of the market they operate. As the Commission notes in its Concept release this "can take the form of admitting to trading issuers that fail to satisfy initial listing standards; delaying the delisting of issuers that no longer satisfy maintenance standards; failing to enforce listing standards (including the new issuer corporate governance standards); and reducing (or even eliminating) listing fees."[100]

The destructive nature of this competition may also reveal itself as "regulatory arbitrage" as issuers seek out markets more willing to make concessions on the stringency of financial and reporting standards that will be applied. There is empirical evidence to support this proposition. Several early studies by Biddle and Saudagaran found that firms are less likely to list on exchanges with more onerous disclosure requirements.[101] Jackson and Pan[102] also find that the primary concern for European issuers accessing US markets are the costs incurred in translating financial accounts from their less onerous home country accounting rules to the US Generally Accepted Accounting Principles (GAAP).

It is important to note that reputation does play an important role in disciplining firms that seek to benefit from regulatory arbitrage.[103] Empirical evidence tends to support the idea that obtaining a listing on an SRO that is vigilant and responsive to investor concerns is the surest way for a company to attract and retain capital and investor confidence. Cheung and Lee[104] conclude that for foreign issuers listing on an exchange with more rigorous disclosure requirements than the home country exchange signals management's confidence in the quality of its reports and earnings. An American

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[100] See note 1 *supra*

[101] See Gary C. Biddle & Shahrokh M. Saudagaran, The Effect of Financial Disclosure Levels on Firms' Choices Among Alternative Foreign Stock Exchange Listings, 1 J. INT'L FIN. MGMT. & ACCOUNTING 55, 68–72, 81 (1989) (using data on 207 internationally traded firms); Shahrokh Saudagaran & Gary C. Biddle, Financial Disclosure Levels and Foreign Stock Exchange Listing Decisions, 4 J. INT'L FIN. MGMT. ACCOUNTING 106, 121–24, 140 (1992) (using a sample of foreign firms that listed on the top nine stock exchanges globally); Shahrokh Saudagaran & Gary C. Biddle, Foreign Listing Location: A Study of MNCs and Stock Exchanges in Eight Countries, 26 J. INT'L BUS. STUD. 319, 329–30, 335 (1995) (using a sample of 459 internationally traded multi-national corporations with foreign listings on at least one of the nine major foreign stock exchanges)

[102] Jackson, Howell & Eric Pan. "Regulatory Competition in International Securities Markets: Evidence from Europe in 1999-Part I," 56 Business Law 653 (2001).

[103] See Arrow 4 in figure 1

[104] See C. Sherman Cheung & Jason Lee, Disclosure Environment and Listing on Foreign Stock Exchanges, 19 J. BANKING & FIN. 347, 348 (1995).

listing also appears to curtail the ability of a controlling shareholder to extract private benefits of control from the company thereby making the firm a more attractive proposition to investors.[105] Japanese firms, in particular, value the prestige of listing on an American exchange with a recent survey finding that Japanese conglomerates hoped to build brand recognition by signaling their compliance with the demanding US disclosure requirements.[106] In sum, there is conflicting empirical evidence to support both the notion of regulatory arbitrage and the argument of free marketers that successful exchanges, acutely aware of the value of reputation, will ensure that they maintain the well-operated and carefully regulated trading markets.

The disciplining effects on SROs that follow from responsiveness to issuer requirements, however, are not always present when exchanges hold significant market power with respect to both issuers and the suppliers of capital. For example, at the end of October 2006, the total market value of U.S. equities, as defined by the Wilshire 5000 index, stood at $15.2 trillion, with 80 percent of that value coming from NYSE-listed companies. Listings of issuers on the NASDAQ exchange accounted for a further 16% of the total market value of US securities. The Chicago Mercantile Exchange is similarly positioned as the largest options and futures exchange in the world. These market places serve as a natural first port of call for investors and issuers seeking wider, more liquid trade in their securities.

The simple policy prescription of encouraging alternative market centers offers no panacea due to the fragmentation of liquidity, and the resulting impairment of price discovery and the efficient functioning of markets. In other words larger and more liquid exchanges are prerequisites for efficient pricing of securities as such prices reflect the wisdom of a larger number of market participants and, hence, more complete information.[107] The challenge for regulators is to curb the potential for abuse of market

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[105] See Craig Doidge et al., Why Are Foreign Firms Listed in the U.S Worth More? (Sept. 2001) (unpublished manuscript) (surveying data from 11,757 firms from 40 countries including cross-listed and non cross-listed firms)

[106] See Patrick M. Dougherty, Regulation of Japanese Issuers Entering U.S. Public Equity Markets, (2002) (unpublished J.D. paper, Harvard Law School)

[107] Although it could be argued that if prices at each exchange were readily available on the Internet then having four smaller exchanges instead of two big exchanges should not matter. The population of potential traders would be the same, albeit dispersed at different locations, and the actual number trading at a given exchange would be a portion of that population. In reality, however, prices are "discovered" at the NYSE and CME exchanges in a rapid, auction process ("open-outcry"). These prices are then posted on electronic

power by dominant exchanges while preserving their crucial ability to discover and reflect accurate prices.

2.3 A Recent History of Public Enforcement against Self Regulatory Organizations

The conceptual framework outlined in Figure 1, and further developed by the discussion in the previous section, suggests an important role for federal regulation of SROs to the extent that owners of exchanges abuse their power to impair the efficient functioning of securities markets. The regulation of SROs is ultimately a complex task that is achieved in a piecemeal fashion via the adoption of a wide ambit of strategies. Over time, however, the following approaches come to dominate the regulatory landscape:

1. Enforcement actions filed directly against the self regulatory organization by the enforcement division of the SEC
2. Civil enforcement actions filed by the Commission against individuals involved in misconduct at SROs
3. Cooperation in joint federal criminal proceedings instituted against individuals involved in egregious infringements of the law during the course of the SRO misconduct
4. Regulation by SEC coercion and threat of sanction
5. Cooperative strategies in "gray areas" where the SEC's legal jurisdiction or political support to enact the reforms that it wishes to is questionable

This section discusses each of these strategies in light of the Commission's enforcement history against SROs between 1990 and 2005. The discussion is supported by insights gleaned from discussions with an influential former regulatory officer at both the SEC and NYSE, and a former governor of the American Stock Exchange (AMEX).

2.3.1 SEC Enforcement Actions against SROs

The previous section examined how the business objectives the powerful owner-members of SROs may not always align with the public interest. With this in mind, this

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trading systems. Thus, greater order flow placed with auction participants on the trading floor make the open outcry system more efficient, allowing more accurate prices to be placed subsequently on the electronic trading systems.

section now examines how regulators have punished SROs guilty of infringements of securities laws. In order to obtain the subset of federal enforcement actions against SROs a specially constructed dataset consisting of over 8,500 SEC actions brought against all securities law violators between October 1990 and October 2005 is analyzed. This database of enforcement actions was compiled from the SEC Annual Reports, and was supplemented by case-specific characteristics drawn directly from litigation releases posted on the SEC website.

The SEC filed just 6 suits against SROs over this 15 year period. The most salient allegations and terms of settlement of the six enforcement suits are summarized in Table 1 below. The insights to be taken from this table are discussed in detail in Section 2.3.4. For present purposes, it would suffice to note the complexity of the allegations and the stringency of the penalties imposed by the SEC.

Table 1: Summary of SEC Administrative Actions against SROs from 1990-2005

Date	Defendant	Allegations	Most Important Terms of Settlement
8/96	National Association of Securities Dealers, Inc	Failures in surveillance and enforcement by NASD fostered uncompetitive behavior by market makers, including coordinated price quotations, resulting in artificially wide and inflexible spreads	$100M capital expenditure development and implementation of sophisticated audit trail system to enhance surveillance, examination and enforcement; appointment of at least 50% of non-member directors; appointment of experienced attorneys to hear enforcement actions; provisions for autonomy and independence of the regulatory staff of the NASD; bolstering internal audit function including appointment of board audit committee
8/97	Stock Clearing Corp. of Philadelphia (SCCP) & Philadelphia Depository Trust (Philadep) (both are subsidiaries of the Philadelphia Stock Exchange)	Failure by SCPP to enforce their own clearing rules and securities law against members; failure to file necessary proposed rule changes with the SEC in violation of S19(b) of the '34 Act; failure to safeguard their participants' fund deposits from unapproved uses; Philadep's granting of a volume discount fee to customers without required Board approval; failure to use current market price in mark-to-market accounting in order to determine participant positions; and violations	SCCP to curtail its securities clearing business; Philadep to withdraw from securities deposit business; appointment of at least 50% of non-member directors and compliance officer; $5M capital expenditure to improve technological and compliance programs; acquiescence to a forensic audit

		of Regulation T	
6/99	New York Stock Exchange	Failure by NYSE to enforce compliance with S 11(a) of the '34 Act and NYSE Rules 90, 95 and 111 which are aimed at preventing independent floor brokers from exploiting their advantageous position on the NYSE floor for personal gain. Accusations included front-running, trading ahead, and falsifying certain order tickets or other books and records.	Enhanced regulation and policing of floor brokers; Independent Committee of the Board to draft comprehensive procedures manuals outlining the objectives, policies, and procedures of the NYSE's Floor Members trading surveillance, investigation and examination programs; Independent Consultant to review the NYSE's rules, practices and procedures (and their interpretations) applicable to Floor Members and recommend changes to strengthen the regulatory ability of the NYSE, as well as making recommendations regarding codification of unwritten rules; NYSE to implement a mandatory, regular education program for Floor Members; NYSE undertakes to continue the development and implementation of an electronic Floor system ("Phase I Floor Audit Trail"); NYSE to maintain Regulatory Quality Review Department as an independent internal audit function that has adequate resources to regularly review all aspects of the NYSE
9/00	The Options Exchanges (including AMEX, CBOE, PCX, PHLX)	Options exchanges refrained from the multiple listing of a large number of options; failed to adequately enforce compliance with their rules, including order handling and investment protection rules and trade reporting rules; anticompetitive conduct, such as intimidation, refusals to deal and retaliation in the form of limitation of access to OPRA, directed at market participants who sought to act competitively	Amendment of the Joint Exchange Options plans to prohibit advance notice to any other market of the intention to list an existing option; eliminate provisions in plan allowing one market to prevent or delay another market from listing an option; modify the structure and operation of the OPRA system to establish a system whereby each participant in OPRA will independently determine the amount of data transmission capacity they require; joint action by options exchanges to design and implement a consolidated options audit trail system ("COATS"), that will enable the options exchanges to reconstruct markets promptly, effectively surveil them and enforce order handling, firm quote, and trade reporting rules; requirement that trades to be reported within 90 seconds of the time of execution; each exchange to spend a minimum amount for options-related surveillance systems and regulatory staffing totaling $79M
9/03	Chicago Stock Exchange	From 1998 to 2001, as CHX's NASDAQ trading volume was increasing, CHX did not adequately improve and increase its surveillance and disciplinary capabilities to match the increase in trading volume. Numerous violations of its firm quote, trading ahead and limit order display rules occurred. CHX relied on	Create a sufficiently funded Regulatory Oversight Committee to regularly advise CHX's Board of Governors about regulatory, compliance and enforcement matters; engage an outside consultant to conduct a comprehensive review of CHX's trading floor surveillance and enforcement programs and recommend any changes necessary to enable CHX to better carry out its regulatory responsibilities; require the CHX board to

		ineffective, and often flawed, manual review processes to detect violations of these rules. When CHX was able to detect such violations, it took inadequate, minimal and untimely disciplinary actions.	certify the adequacy of CHX's Compliance with its statutory obligations
4/05	New York Stock Exchange	From 1999 through 2003, various NYSE specialists repeatedly engaged in unlawful proprietary trading, resulting in more than $158 million of customer harm. The improper trading took various forms, including "interpositioning" the firms' dealer accounts between customer orders and "trading ahead" of executable agency orders on the same side of the market. For much of this period the NYSE failed to adequately monitor and police specialist trading activity, allowing the vast majority of this unlawful conduct to continue. Consequently, the NYSE's regulatory program was deficient in surveilling, investigating and disciplining the specialists' trading violations.	Retention of a Regulatory Auditor: The NYSE will set aside a $20 million reserve fund to retain a regulatory auditor to conduct audits of the NYSE's regulatory program including assessments of whether the NYSE's regulatory policies and procedures are reasonably effective in detecting and deterring securities laws violations. The NYSE will also implement a Pilot Audio and Video Surveillance System on its trading floor. Other significant undertakings include: (i) systems and procedures to track the identity of specialists and clerks trading on the NYSE floor; (ii) enhancements to the NYSE's electronic trading systems to prevent specialists from engaging in trading ahead and interpositioning; (iii) enhancements to the NYSE's referral process and the training of its regulatory staff; and (iv) certification by the NYSE's Chief Regulatory Officer that the NYSE is in compliance with the Commission's Order.

2.3.2 SEC Civil Enforcement Actions against Individuals

Twelve civil suits were filed by the SEC in connection with the six primary violations of SROs examined above. By holding the wrongdoers personally accountable in separate actions the SEC is able to leverage off its detailed investigations and cast the net of liability wider, furthering in the process its twin aims of deterrence and justice.

Two of these suits were filed against officers who either partook or should have been aware of the illicit behavior in *Stock Clearing Corp. of Philadelphia*, while a further three suits were filed against floor brokers in the first NYSE action in 1999. Sanctions against these individuals took the form of cease and desist orders, injunctions against future securities law violations and bars on future trading activity. More recently in the 2005 specialist scandals the SEC brought enforcement actions, which subsequently settled out of court, against all seven specialist firms responsible for unlawful proprietary trading. In settling, the specialist firms agreed to pay a total of $247 million in civil penalties and disgorgement and to improve their compliance procedures. Although, the SEC declined to bring civil enforcement actions against the 15 specialists involved in the scandal, the Commission did cooperate with federal authorities in bringing criminal charges (as discussed in Section 2.3.3 below).

2.3.3 Cooperation with the Department of Justice in Criminal Proceedings

The SEC may recommend that the Department of Justice (DOJ) file criminal charges in instances of particularly egregious infringements of securities laws. In recent testimony before Congress the Commission noted that it "… generally prioritizes the cases in terms of (1) the message delivered to the industry and public about the reach of the SEC's enforcement efforts [and] (2) the amount of investor harm done[108]." Seen in the light of this testimony the Commission's cooperation with the Department of Justice in pursuing high profiled criminal indictments is easily explained.

The Commission's investigations into malfeasance at SROs have led to 27 individuals having being indicted following the Commission's findings in the three NYSE related investigations since 1990. In the 1999 NYSE action[109] nine floor broker defendants pleaded guilty to federal criminal charges involving either direct, or a conspiracy to commit, violations of Section 11(a) of the Exchange Act, by illegally effecting transactions on the NYSE floor in accounts in which the brokers either shared in the profits and losses, or had an interest in. A federal grand jury indictment was also issued in April 2005 against 15 specialists involved in the "Specialist scandals" discussed above. However, the government subsequently dropped seven of these suits while a further three specialists were acquitted. Two more specialists pleaded guilty, two were found guilty after a trial, and one defendant remains at large. [110] In the ongoing "squawk box" trials four brokers from premier investment houses are on trial in federal court for allowing day traders to eavesdrop on conversations regarding market impacting trades.[111]

[108] Major Human Capital Challenges at SEC and Key Trade Agencies: Hearing before the S. Subcomm. on Oversight of Government Management., Restructuring and District of Columbia, Comm. On Government Affairs, 107th Cong. 6(2002)
[109] See SEC Release 34-41574 / June 29, 1999
[110] *See* newsday.com on 2/22/2007 "Reversal of NYSE Specialist verdict a blow to federal cases"
[111] See Reuters.com on 5/4/2007 "Jury deliberations begin in Squawk Box Trial"

2.3.4 An Analysis of the Recent History of SEC Enforcement Actions against SROs

The few SEC actions filed against SROs in recent times - just six in the past 15 years – can be explained in several ways. It may be that the supervision of US securities markets – described by the Supreme Court as a "policy of self-regulation by the exchanges coupled with oversight by the SEC."[112] - is functioning well due to the generally equitable and disciplined behavior by the SROs. Unsurprisingly, this is the belief of the SEC. The Commission has noted that it "is generally considered that the SRO system has functioned effectively and has served government, industry and investors well."[113] If this explanation has merit then the relative infrequency of SEC actions against SROs can be ascribed to dearth of illegal activity at the exchanges.

Although this explanation is appealing, history suggests that it may be somewhat naïve especially with regard to the NYSE, which is the largest and most influential of the SROs. History is replete with suggestions of the NYSE being a private, monopolistic club that has garnered huge profits for its members by allowing the listings of some very dubious enterprises, most notably in the lead up to the stock market crash of 1929. The failure of the NYSE to vet listing firms has been touted as being partially responsible for the speculative boom of the 1920's, which ended with the sharp market corrections that ushered in the Depression.[114] The birth of the SEC and the passing of the federal securities laws in the 1930's, which was accomplished despite severe resistance from the NYSE, reflected the government's belief that the NYSE's natural tendency was to act in a vein similar to any profit maximizing private monopolist, leading to an unwelcome deterioration in the quality of self-regulation and listed companies.

In the 1970's, the monopolistic tendencies of the NYSE were again attacked in *Gordon v. NYSE* [115] when a class of small investors sued the NYSE, AMEX and two member firms of the exchanges alleging that the system of fixed commissions used by broker-dealers for transactions less than $500,000 violated the anti price-fixing provisions the Sherman Act. Although the plaintiffs were unsuccessful in their appeal to

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[112] Gordon v. New York Stock Exchange, Inc., 422 U.S. 659, 667 (1975).
[113] SEC Concept Release Concerning Self-Regulation; Release No. 34-50700
[114] See, for example, the lengthy treatment that John Kenneth Galbraith gives to the role of the NYSE in his classic "The Great Crash, 1929" (1955).
[115] 422 U.S. 659 (1975)

the Supreme Court, these fixed commission practices were dismantled by the SEC shortly after the verdict was delivered. In more recent times, the regulatory role of the NYSE has been criticized as toothless after its failure to detect the spate of corporate fraud at the turn of this century. To its credit, however, the NYSE was quick to insist on elevated corporate governance standards for listing firms in the aftermath of the scandals.

One explanation for the low enforcement rates against SROs that has yet to be explored by academic commentators' hinges on the possibility that the SEC lacks the financial resources, and consequently the expertise, to properly detect all but the most blatant violations by SROs. A major concern for policymakers, then, is the atrophying of the SEC's independent monitoring function caused by the Commission's tight budget constraint. The recent spate accounting scandals highlighted this issue, as serious criticisms were leveled against the quality of the SEC's expertise in its oversight of corporate accounts. Then, however, the government acted quickly to increase the SEC's budget from $308 million in 1999 to $913 million in 2006, with much of the funding being used to attract accountants to the SEC staff.[116]

Insiders support the view that the Commission's powers of detection, as least with respect to SROs, are weak. Edward Kwalwasser[117], formerly Executive Vice President of the Regulatory Group at the NYSE and Associate Director of the SEC's division of Market Regulation, has argued that the sophistication of market surveillance systems at SROs and the volume and complexity of records kept by major broker-dealers has resulted in the SEC having to rely exclusively on reports of wrongdoing from the SROs regulatory apparatus, or outside sources, before pursuing any enforcement action.

History has borne out Kwalwasser's contention in at least two of the six enforcement actions listed in Table 1. In the NYSE specialist scandal (2005), specialists on the floor profited by trading their own positions in certain stocks ahead of investor trades that had been placed earlier. These trades violated the specialist's legal duty to match the orders of (customer) buyers and sellers with each other and to refrain from

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[116] See for example the comments by James McConnell, the SEC executive director, in http://www.forbes.com/2003/02/04/cx_da_0204topnews.html (sited visited on 4/26)
[117] Comments during the Market Structure Seminar at HLS on 3/8/2006

trading for their own account except when necessary to maintain a fair and orderly market. The NYSE had been aware of these violations for at least four years (1999-2002) but had chosen to informally discipline those responsible as the amounts involved were often no more than a few tens of dollars per transaction (in comparison with the multi-million dollar salaries that specialists command). After several years of these seemingly *de minimus* violations the NYSE conducted a special study that revealed the cumulative effect of the interpositioning practices on the exchange floor. It was only at this advanced stage that the Commission became involved with the investigation, by which point investors had been defrauded of $158 million. Tardiness by the NYSE and lax oversight by the SEC, which lacked the technical expertise to define the parameters required by sophisticated electronic surveillance systems to detect systemic trading violations, have been cited as the key failures underlying this fraud.

The Commission's powers of detection had already been called into question a decade earlier during the so-called "market-maker" scandal, which was the most damaging SRO violation of the 1990's. It took the first of two highly publicized academic studies in 1994 to reveal that odd-eighth bid and ask quotes for stocks – prior to decimalization of the exchanges in 2001 – were virtually non-existent for many heavily traded NASDAQ stocks.[118] Suspiciously, in the months following newspaper reports of the first study, a follow-up paper[119] by the same authors noted a sharp decline in spreads for several actively traded NASDAQ stocks – including Microsoft Corp and Cisco Systems – and a corresponding rise in odd-eight price quotes for the same stocks. The implication was that NASDAQ market makers had been colluding in adopting a quoting convention that artificially widened bid-ask spreads resulting in higher dealers' profits at investors' expense. The publication of the studies triggered investigations by both the Department of Justice and the SEC. The $100 million dollar settlement between the government and twenty-four major brokers in July of 1996 eventually ended an anti-

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[118] CHRISTIE, WILLIAM G., AND PAUL H. SCHULTZ. 1994. "Why Do NASDAQ Market Makers Avoid Odd-Eighth Quotes?" Journal of Finance 49 (December): 1813–40.

[119] CHRISTIE, WILLIAM G., JEFFREY H. HARRIS, AND PAUL H. SCHULTZ. 1994. "Why Did NASDAQ Market Makers Stop Avoiding Odd-Eighth Quotes?" Journal of Finance 49 (December): 1841–60

competitive pricing convention that had gone undetected and unpunished for over three decades.

Economic theory suggests that the goal of deterrence may be achieved, despite limited information on the prevalence of offences, by punishing offenders. Thus, a hamstrung SEC aware of its financial and informational limitations could nevertheless exercise some regulatory oversight by imposing onerous sanctions on those SRO violations that do come to its attention. Empirical evidence from the recent enforcement actions outlined in Table 1 lends support to this argument. A perusal of the settlement details of the enforcement actions reveal that once fraud has been detected at an SRO the Commission has generally insisted on a wide array of costly reforms and attempted to single out individual offenders for criminal sanction. This trend is indicative not only of the gravity of the offence, but also reflects an attempt to deal with the difficulty in the detecting SRO malfeasance.

For example, in the wake of the market-maker scandals of 1996 the NASD was forced into a corporate restructuring that saw the establishment of an independent regulatory corporate subsidiary, NASD Regulation, and was ordered to invest a $100 million in developing an enhanced audit trail. As part of a settlement agreement in 1997 the Philadelphia Stock Exchange was also forced to into substantial restructuring after agreeing to dispose of its securities deposit business and curtail its lucrative clearing business. In 2000 the four national options exchanges were required to jointly develop an expensive and sophisticated consolidated options audit trail system that would facilitate a prompt reconstruction of their markets and allow effective surveillance. The recent specialist scandals at the NYSE resulted in a $20 million fund being established to secure the services of a regulatory auditor to conduct a comprehensive audit of NYSE Regulation's surveillance, examination, investigation and disciplinary programs.

A final, interesting observation is that seven of the nine stock exchanges falling under the purview of the SEC have faced enforcement actions. The remaining two exchanges – the National Stock Exchange (NSE) and the Boston Stock Exchange (BSE) – are among the smallest exchanges nationally. Two explanations are consistent with the clean enforcement records against these two exchanges, apart from the efforts of these exchanges to maintain vigilant oversight of trading activities. The small trading volumes on these exchanges may make them an unlikely target for SEC scrutiny as the Commission, in view of its limited resources, may rationally prefer to concentrate its oversight and enforcement powers on high volume exchanges where the potential for investor harm is greater. Moreover, the NSE and BSE favor the electronic matching of buy and sell orders which, by eliminating the human component found at the NYSE and Chicago exchanges, substantially reduce the probability of fraud on investors.

2.3.5 Regulation via Coercion and Threat of Sanction

Having established a wide ambit for its rulemaking authority and the wherewithal to pursue selected enforcement actions against SROs, the SEC has come to rely on the *threat* of enforcement as a primary means by which to effect change. In other words, having established a credible enforcement reputation mere hints by the Commission of the proposed direction in which it intends to move securities law are sufficient for the SROs to adopt the envisaged changes. This practice has been aptly termed "regulation by raised eyebrow".[120] For example, a preoccupation of the Commission in the 1970's was the strengthening of the internal control systems within corporations by requiring the formation of an audit committee. Rather than controversially exercising its rulemaking authority to achieve this end the then-Chairman of the SEC, Roderick Hills, extolled virtues of such a committee in a public speech.[121] The NYSE took the hint and responded by requiring listed companies to have audit committees. In addition to fearing unwanted federal encroachment on corporate governance regulations, which have traditionally been vested in the exchanges (and states), the NYSE would have been reluctant to unilaterally adopt the audit committee requirement lest it lose valuable ground to competitor exchanges in the battle to obtain and maintain lucrative listings. Issuing companies, faced with the prospect of listing on one of a few high quality exchanges, would prefer the exchange with less onerous (and costly) listing requirements. It is this behavior that has

[120] *See* Donald E. Schwartz, Federalism and Corporate Governance, 45 Ohio St.L.J 545, 571 (1984)

[121] Another example, mentioned by Micah Green, the president of the Bond Market Association in a talk before the Market Structure seminar at HLS on 4/5, was the movement of bond markets towards greater transparency after then SEC Chairman Arthur Levitt deemed, in a speech to the association, that it was time for them to emerge from the shadows.

generally made exchanges reluctant to adopt listing standards that exceed the minimum stringency required by law.

2.3.6 A Cooperative Strategy for Effecting Regulatory Change

There are instances where the power of the SEC to engage in rulemaking has been curtailed by practice or precedent, despite the seemingly the wide authority that § (19)(c) of the Exchange Act grants the Commission over the rules promulgated by SROs. In such situations the SEC is forced to adopt a conciliatory stance, which may involve some degree of bargaining with SROs if it is to effect the intended reforms. A primary source of tension between SROs and the SEC arises in defining the boundaries of federal preemption of state corporate law by federal securities law. In *Santa Fe Industries*[122] the Supreme Court emphasized that "[c]orporations are creatures of state law, and investors commit their funds to corporate directors on the understanding that, except where federal law expressly requires certain responsibilities of directors with respect to stockholders, state law will govern the internal affairs of a corporation."

The case of *Business Roundtable v. Securities and Exchange Commission*[123] raised the issue of the extent to which market regulation, via the operation of federal securities laws, may interfere with the internal governance of a firm. The case concerned a plan by General Motors to issue a second class of common stock with a half vote per share. The NYSE, which has traditionally developed listing standards, permitted the issuance in violation of its own rule requiring one vote per share of common stock.[124] The SEC responded by promulgating Rule 19c-4 barring SROs from listing the stock of any corporation which undertakes an action that has "the effect of nullifying, restricting or disparately reducing the per share voting rights of [existing common stockholders]."

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[122] Santa Fe Industries, 430 U.S. at 479, 97 S.Ct. at 1304, quoting *Cort v. Ash,* 422U.S. 66, 84 (1975)
[123] 905 F.2d 406 (D.C. Circuit 1990)
[124] During the era of hostile takeovers in the late 1980's disparate voting rights plan were a legal mechanism used by managers to insulate them from this threat. A substantial number of NYSE-listed firms began demanding the right to adopt such plans. Moreover, NASDAQ and AMEX, which by this time had emerged as serious alternatives to the NYSE, had mandated the use of the disparate voting rights. Thus, the NYSE's weakened competitive posture combined with issuer demands resulted in a reconsideration of its policy against dual class stock. See Stephen M. Bainbridge (1991). The Short Life and Resurrection of SEC Rule 19c-4 WASHINGTON UNIVERSITY LAW QUARTERLY Vol. 69; pp. 565-634

However, the court declined to validate the SEC rule. The court held that "[i]f Rule 19c-4 were validated on such broad grounds, the Commission would be able to establish a federal corporate law by using access to national capital markets as its enforcement mechanism. This would resolve a longstanding controversy over the wisdom of such a move in the face of disclaimers from Congress and with no substantive restraints on power. It would, moreover, overturn or at least impinge severely on the tradition of state regulation of corporate law." The court held further that if Rule 19c-4 were to survive then "some kind of firebreak is needed to separate it from corporate governance as a whole" as the Exchange Act had an "intelligible conceptual line excluding the Commission from corporate governance."

The decision in Business Roundtable was a clear signal to the SEC that its discretion in the sphere of corporate governance was not unfettered.[125] By failing to appeal the verdict to the Supreme Court the SEC seems to have tacitly accepted that at times co-operation with Exchanges will be necessary if its will is to be effected, and that it would need to tread carefully when proposing internal or corporate governance changes. The decision not to appeal could be seen as a strategic retreat by the SEC. An unsuccessful appeal risked not only a seemingly irrevocable erosion of its presumed powers but, in the process, would have challenged the Commission's credibility and power to effect change by threat of enforcement. While the debate surrounding dual class stock has reverted to the SROs in the decade and a half since the Business Roundtable decision, it is interesting to note that the SROs now have in place restrictions very similar to those mandated by Rule 19c-4. This outcome suggests that, while the SEC was chastened by the outcome in *Business Roundtable* and could no longer unilaterally impose corporate governance reforms on public companies, its ability to exercise indirect influence over the SROs (i.e. "regulation by raised eyebrow") remained undiminished. [126]

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[125] It bears mentioning that the empirical evidence as to the effect of dual class stock on shareholder wealth is unclear and, at best, inconclusive. See: Grossman & Hart, One Share-One Vote and the Market for Corporate Control, 20 J. FIN. ECON. 175 (1988); Harris & Raviv, Corporate Governance: Voting Rights and Majority Rules, 20 J. FIN. ECON. 203 (1988); SEC Office of the Chief Economist, The Effects of Dual-Class Recapitalizations on the Wealth of Shareholders 11-12 (June 1, 1987) [SEC Office of the Chief Economist, The Effects of Dual-Class Recapitalizations on Shareholder Wealth including evidence from 1986 and 1987 at 2 (July 16, 1987); Gordon, Ties that Bond: Dual Class Common Stock and the Problem of Shareholder Choice, 76 CALIF. L. REV. 3, 4 (1988)

[126] Howell E. Jackson & Edward L. Symons, Jr. *Regulation of Financial Institutions* West Group St. Paul, Minn (1999)

This inference is strengthened by the observation that the NYSE, under pressure from the SEC, had begun to adopt Rule 19c-4 restriction even before the final decision in Business Roundtable was delivered. As Bainbridge notes "[t]he SEC retains considerable informal influence over SRO rulemaking … The Commission is using just that sort of influence to urge the SROs to adopt listing standards restrictions based on rule 19c-4 [127] … The significant question then is not whether the SROs will continue to regulate dual class stock; they will do so."[128]

In more recent times the SEC, despite wanting more stringent corporate governance standards than those imposed by Sarbanes Oxley with regard to a majority of independent directors on the board and the level of financial expertise required by the audit committee, chose not use its rulemaking authority to achieve these ends. Instead it negotiated, or coerced, the SROs into adopting these higher standards.[129] The chastening specter of *Business Roundtable* may have played into its choice of strategy, as might the Commission's natural reticence to propagate more extensive rules on a matter on which Congress has expressly spoken on.

3. Private Enforcement of SRO violations[130]

The role of private litigation in enforcing the antifraud aspects of securities legislation has, on the whole, been given support by the courts, government, and legal academics. The Supreme Court, for example, noted in *J.I. Case v. Borak (1964)[131]* that "implied private actions are a most effective weapon in the enforcement of securities

[127] Shortly after the D.C. Circuit's decision, for example, SEC Director of Market Regulation Richard Ketchum expressed hope that the other SROs would follow the NYSE in adopting rules tracking rule 19c-4. 22 Sec. Reg. & L. Rep. (BNA) 895-96 (1990)

[128] Stephen M. Bainbridge (1991). The Short Life and Resurrection of SEC Rule 19c-4 WASHINGTON UNIVERSITY LAW QUARTERLY Vol. 69; pp. 565-634

[129] On February 13, 2002, then SEC Chairman Harvey Pitt asked the Exchange to review its corporate governance listing standards. In conjunction with that request, the NYSE appointed a Corporate Accountability and Listing Standards Committee to review the NYSE's current listing standards, along with recent proposals for reform, with the goal of enhancing the accountability, integrity and transparency of the Exchange's listed companies. (See Amendment No. 2 to the NYSE's Corporate Governance Rule Proposals available at http://www.nyse.com/pdfs/amend1-04-09-03.pdf.). Professor Hal Scott, a governor of the Board of Directors of Amex when Pitt issued this letter to SROs, discussed the clear, predetermined reforms that the SEC had in mind and very limited discretion SROs were given in complying the SEC's directive. (Harvard Law School, Market Structure Seminar, Spring Semester (2006))

[130] See the Arrow labeled 5 in figure 1

[131] 377 U.S. 426 (1964)

laws" while, in the academic literature, Joseph Grundfest, a law professor and former SEC commissioner, observes that "[t]he social value of private enforcement of federal securities claims has become an article of faith in the federal securities liturgy."[132]

Nevertheless, concerns over vexatious private litigation surfaced during the early 1990's and eventually led to the passing of the Private Securities Litigation Reform Act of 1995 (PSLRA). This Act, in an attempt to thwart the filing of frivolous class action securities lawsuits, raised the substantive and procedural prerequisites for filing a securities suit under federal law.

In recent years a perceived failure on the part of regulatory authorities to detect and discipline questionable business practices, deter corporate malfeasance and obtain adequate restitution for investors has led to a resurgence of filings by private class action attorneys, as shareholders turn to private litigation for remedies.

Despite their role in disciplining corporate behavior, one would expect *ex ante* that class actions would be rarely used a remedy by members of an exchange in a suit against the exchange. The reason stems from the historically mutualized form of ownership of exchanges. As was noted earlier, stock exchanges have historically been organized as not-for-profit organizations, founded and owned by a tightly knit community of broker dealers. Business decisions were made on a consensus basis, and the non-profit basis of the exchange eliminated a major motive of plaintiffs in modern investor class actions who seek restitution for their losses. Furthermore, the formation of a plaintiff class was very challenging for the plaintiff bar, as differences at exchanges were resolved internally via voting, dispute resolution mechanisms or by internal enforcement actions. The only plausible form of class action suit against exchanges likely to arise would occur when investors in listed companies charged the exchange (or listing organization) for poor surveillance of their (member) broker-dealers.

[132] Joseph A. Grundfest, *Disimplying Private Rights of Action Under the Federal Securities Laws: The Commission's Authority,* 107 HARV. L. REV. 963 (1994)

In order to examine the incidence of securities class actions against SROs I have assembled a private suits dataset drawn from The Securities Class Action Alert Service (SCAA) database.

This dataset includes 3,646 securities class actions, principally filed within federal court by private plaintiffs against individual(s) and/or a firm(s) between January 1987 and March 2005. Of these suits 48.2% had settled and 17% had been dismissed. The average settlement fund was approximately $26.32 million.

Only two securities class actions were filed alleging *any* SRO involvement over this 18 year period[133]. The most salient allegations and terms of settlement of these two suits are summarized in Table 2 below.

Table 2: Summary of Securities Class Actions filed against SROs from 1987 – 2005

Defendant	**File Date**	**Hearing Date**	**Class Period**	**Class Definition**	**Allegations**	**Settlement**
NASDAQ Market-Makers *(See Table 1 SEC v NASD filed 8/96)*	5/94	9/98	5/89-7/96	All persons who traded any one or more of the 1869 different securities on the NASDAQ National Market during the class period	The Complaint alleges that NASDAQ brokers have an unspoken and continuing agreement to "fix, raise, stabilize, and maintain" excessively wide "spreads" in NASDAQ stocks to boost their profits at the expense of individual investors.	37 NASDAQ Market Makers settled the claim for $1,027,000,000
NYSE Specialists *(See Table 1 SEC v NYSE filed 4/05)*	10/03	On-going	10/98-10/03	All entities who purchased and/or sold shares of stocks of NYSE and AMEX listed companies that were auctioned by the seven specialist defendant companies	Defendant Specialists repeatedly violated their negative obligation duty by engaging in interpositioning. They traded ahead of potential customers by buying stock from the seller and then selling it to the buyer at a higher price for a profit, rather than allowing the customers to trade between themselves without specialist intervention.	Ongoing. In the latest round of litigation the Southern District Court of NY granted the NYSE's application to dismiss but denied a similar application by the Specialist firms.

133 The SCAA database revealed a 3rd securities class action filed in 1998 by Amex members who complained that they had not been adequately informed about the impact of a proposed merger of Amex and NASDAQ. However, the entry contained no other settlement information and further research failed to uncover any more details about the case. In any event, the case apparently did not include allegations of abuse of self-regulatory power and was thus not included for the purposes of this analysis.

The allegations made by these two securities class actions are based on the same cause of action as two of the SEC enforcement actions listed in Table 1. In the suit against NASD plaintiff investors' alleged concerted action by broker-dealers to unfairly increase the price paid for a particular security. The $1 billion settlement reached in the private action far exceeded the $100 million that the SEC required NASD to expend on the development of an audit trail system. The magnitude of this settlement lends credence to Coffee's observation that "[t]oday, private securities class actions in fact represent the principal means by which financial penalties are imposed in cases of securities fraud and manipulation, overshadowing the aggregate penalties imposed by federal and state authorities."[134] This finding does not augur well for the NYSE specialist firms in their ongoing litigation against Calpers (the lead plaintiff), and one may reasonably expect that private suits will settle for many times the $247 million in civil penalties and disgorgement that the specialist firms agreed to in their settlement with the SEC.

A second, albeit nascent, feature to emerge from a comparison between federal and private suits involving SROs is that the private suits are filed before the SEC announces the outcome of its investigation and terms of settlement, with the private suits then settling some time after the SEC announcement. Despite the best efforts of the SEC, news of an ongoing federal investigation tends to be a poorly kept secret. In such a situation it is to the plaintiff's advantage to file its suit once enough information has leaked from the investigation to assure him that the SEC investigation has yielded some real evidence of wrongdoing. Motivating the plaintiff to file suit as soon as is reasonably possible is the potential for an early settlement, prior to the financial difficulties that may beset the firm should the SEC find the firm liable. Furthermore, in the advent of more than one class action, an early filing increases the probability of obtaining a larger class, and hence greater damages and legal fees. Once he has filed, however, it usually pays the plaintiff to allow the SEC to use its superior statutory powers of investigation to uncover

[134] John C. Coffee Jr. Reforming the Securities Class Action: An Essay on Deterrence and its Implementation (2006: Columbia law School Working Paper Series) available at http://www.law.columbia.edu/center_program/law_economics

wrongdoing[135], in process providing the private plaintiff with more and better quality information than would otherwise have been available to him via the usual discovery process. The plaintiff would then vigorously prosecute his case once the SEC settlement had been made available (which is the pattern observed here).[136]

4. The Impact of Demutualization on the Regulation of SROs

4.1 The Introduction of Market Discipline

This paper has, to date, examined the economic and legal basis for SEC regulation of SROs. It has also considered use of enforcement actions by public enforcers, in particular, to align the objectives of the SROs more closely with those of investors.

As discussed in Section 2, stock exchanges have traditionally been organized as not-for-profit organizations, founded and owned by brokers and dealers. Although exchanges were prohibited from distributing profits they effected a similar result by reducing membership and service fees or by offering rebates to customers with the apportionment of these benefits based on usage.

In recent years, the globalization of international financial markets on the back of advancing technologies has resulted in a substantial restructuring of the business of exchanges. The demutualization of stock exchanges began with Stockholm Stock Exchange in 1993 and reached its zenith with the listing of the NYSE in 2006, shortly after its merger with Archipelago. Steil notes that the objective of private demutualized exchanges is ultimately to "reduce capital costs for a significant subset of companies, and raise investment returns for a significant subset of savers, relative to the next-best financing alternative (whether that be another stock exchange, the bond market, or the banking sector)."[137] Demutualized exchanges would reduce the cost of capital (and the transactional costs of trading) by implementing less intermediated trading structures,

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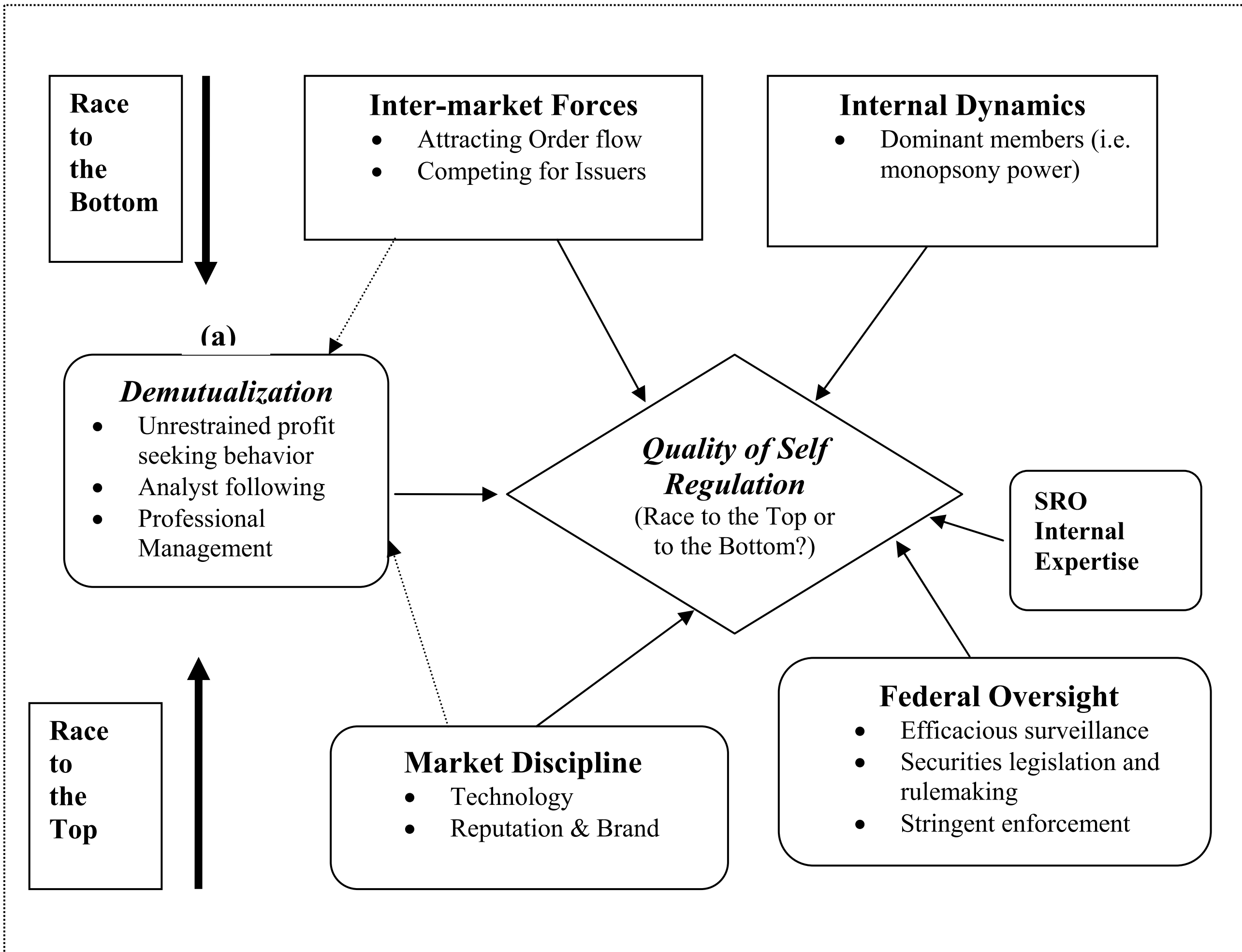
[135] The Securities Exchange Act of 1934 gives the SEC wide investigative powers not afforded to private plaintiffs including, in the case of SROs, the right to examine brokerage records and review trading data. Furthermore, once the Commission issues a formal order of investigation, it compel witnesses by subpoena to testify and produce books, records, and other relevant documents.

[136] These conjectures are in line with the findings from empirical study in Chapter One that examines the entire population of common actions brought by public and private enforcers, against all defendants.

[137] Benn Steil *Changes in the Ownership and Governance of Securities Exchanges: Causes and Consequences* (Brookings-Wharton Papers on Financial Services, 2002)

expanding direct trading access to foreigners and institutional investors, and merging with other exchanges to create economies of scale.[138]

Figure 2: The Effect of Demutualization on the Quality of Self Regulation



The effect of demutualization can be traced using of the quality of self regulation framework developed in section 2. Figure 2 *(above)* differs from figure 1 (on page 5) in that demutualization is represented as *new factor* impacting the quality of self-

[138] In dampening the demand for the services of trading intermediaries, who are also some of the most powerful members of exchanges, proponents of demutualization have faced fierce resistance. Although reducing the control of member-intermediaries over exchanges would lower the transactional costs of trading the parochial interest of (potentially redundant) members has served to slow this process, and the diffusion of its technological benefits, considerably.

regulation[139] as the objectives of a new stakeholder, namely private shareholders, must be taken into account.

Demutualization, itself, is merely the outcome of two forces – namely technology and inter-market competition - that already existed within the framework represented in figure 1. Going public, proponents argue, will allow exchanges access to capital markets[140] thereby enhancing their adoption of the most modern technologies, enabling their expansion into related areas like clearing, and generally providing the means for more effective competition and enhanced revenue streams among the major exchanges. Seen in this light demutualization is the strategic business outcome that follows from heightened inter-market competition among exchanges and technological advances.[141]

The concern for regulators is that the additional dimension of profit seeking behavior will impinge on efficacious self-regulation. It is feared that demutualized exchanges may skimp on the funding of regulatory operations, or abuse their investigative and enforcement powers (for example, by initiating baseless enforcement proceedings) as a means of victimizing member firms that operate competing trading systems (i.e. an exchange unfairly investigating or disciplining another exchange listed on its board).[142] Managers of the exchange also have at their disposal the tactics used by dominant members in mutualized exchanges to attract order flow and listings. Regulatory arbitrage, for example, is based on the notion that an exchange may operate in one jurisdiction rather than another in order to gain commercial advantage from more

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[139] See Box marked (a)

[140] The traditional mutual form exchange cannot meet all the capital requirements of modern exchanges, as ownership is restricted to brokers and dealers. This significantly limits the possible capital suppliers and makes it very challenging to obtain the funds necessary to maintain modern trading systems. Stock exchanges frequently point to their capital needs when explaining their reasons for demutualization, as stressed for instance by the New York Stock Exchange, the Pacific Exchange, the London Stock Exchange, and the NASDAQ Stock Market.

[141] One related way to understand the process of demutualization is see the early exchanges as operating in local markets so that they were, in effect, were local monopolies (although they were not explicitly profit-maximizing monopolies). They charged their members enough to cover costs, and on net the charges were lower more frequent customers. But with the advent of electronic funds transfer and global, computerized information the markets served by the exchanges became global, leading to heightened inter-market competition between the exchanges. This made the local "monopoly" model obsolete. It had been replaced by a competitive market in which profit maximization was a superior strategy.

[142]Comment Letters on NASDAQ Application: Comments of Instinet Corporation on File No. 10-131 http://www.sec.gov/rules/other/10-131/atkin1.htm

favorable. government regulation.[143] Aggressive brokerage practices, which include most prominently payment for order flow, are another set of practices aimed at attracting providers of liquidity to exchanges. However, these questionable tactics raise concerns that they may compromise trades occurring at the lowest possible price ("best execution"), increase portfolio turnover, and influence broker-dealers' recommendations to their customers.[144]

On the other hand, a demutualized exchange with a professional management may be more adept at maximizing the overall value of the exchange as an efficient, welfare-enhancing market place than the owner-members of mutualized exchanges who are most concerned with their own profitability. In the case of powerful exchanges that enjoy significant order flow members may be less inclined to expand their operations to include new members since this may involve sacrificing their own revenue, even though the interests of society would be would be served by the greater number of trades that a larger market place would facilitate. Furthermore, individual owner-members who have to share the profits for any improvements to efficiency that they undertake may consequently lack the incentive to effect efficiency-enhancing by themselves. A professional management team is likely to champion demutualization, and the adoption of newer technologies, to enhance efficiency and profitability even at the expense of historically powerful members that currently serve as (unnecessary) trading intermediaries.

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[143] For example, the IntercontinentalExchange (ICE) is a rapidly growing, fully electronic exchange now based in Atlanta which, for historical reasons, is regulated by the Britain's Financial Services Authority (FSA). The FSA is perceived to have a more lax regulatory approach than American regulators, who have largely exempted ICE from its oversight. One regulatory difference is that the FSA does not require the ICE to place a limit on the size of outstanding positions, making the ICE a more favorable place for oil futures trade than the its chief competitor, the New York Mercantile Exchange (NYMEX). (See The Economist 4/12/2006)

[144] An example of an aggressive brokerage practice is payment for order flow, which is the practice of either the exchange, or specialists on the exchange floor, paying brokerage firms to route their customer's orders to a specific exchange. The Philadelphia Stock Exchange, for example, initially opposed payment for order flow, but changed their position after losing significant market share. (http://www.phlx.com/news/Sandy_speech_0701.pdf). A second example of aggressive brokerage practices, at exchanges condoning such practices, are reciprocal agreements between specialists and brokerage firms by which the specialists send the firm their equity order flow in exchange for that firm's sending its retail options order flow to the specialists for execution. (See the SEC Special Report at http://www.sec.gov/news/studies/ordpay.htm#PAYMENT). The SEC has outlawed some directed brokerage practices but has refrained from outlawing all practices in the absence of firm empirical evidence to support claims of harm to investors.

The regulatory division in a mature, demutualized exchange may prefer diffuse ownership and consequent oversight over a professional management team, rather than having to regulate their owner-members. In other words, regulation may be easier when members are divested of the power of ownership of the market, even if this means that regulators have the additional task of overseeing profit-maximizing managers.

In their response to the SEC Concept Release Concerning Self Regulation the Chicago Mercantile Exchange (CME) also disputes the notion that demutualized exchanges will allow listing standards to fall to unacceptably low levels. Their clearly articulated belief is that "…self-regulation works with respect to demutualized exchanges because of the business incentive to operate a fair, financially sound and competitive marketplace. Reputation and competition are powerful motivating forces for ensuring proper behavior, especially in today's global environment where market participants have virtually immediate, around-the-clock access to a broad range of competing markets and products." Furthermore, as publicly traded companies, demutualized exchanges will be subject to intense scrutiny from the analyst community and institutional investors, serving as an additional check on imprudent behavior. The CME goes on to argue that the deep well of regulatory expertise in a range of areas, including risk management and financial supervision, has resulted in the development of an extensive, integrated oversight apparatus that enjoys the trust of market operators.

Finally, and to the extent that demutualization encourages the adoption of cutting-edge technologies, the quality of surveillance and can be expected to improve. By sidelining the human element in financial intermediation errors and the potential for malfeasance are minimized.

4.2 The Impact of Demutualization on Private Litigation

One of the most interesting trends to observe after the demutualization of an exchange will be the extent to which the private class action becomes a disciplining force on the management of the exchange. The diffusion of ownership of the exchange will make the formation of a plaintiff class much easier. Investors seeking to maximize their return are likely to keep a keen watch for mismanagement and financial irregularities at the exchange. They will also be concerned with the future profitability of the exchange with the class action perhaps being used as a means to enforce minimum standards of self-regulation aimed at retaining and attracting listings.

4.3 The Regulatory Response to Demutualization

The mixed incentives for SROs to regulate their own dealings in a fair and efficient manner will be further highlighted by the advent of for profit exchanges. Demutualization has thrown another stakeholder into the mix, namely public shareholders, leading some regulators to advocate the removal of SRO functions into government. At the other extreme, some commentators[145] have urged that demutualized exchanges be allowed to continue to perform all their traditional self-regulatory functions. This section compares the responses to demutualization by United States and the United Kingdom as a means of examining the alternatives of major structural reforms of federal regulation *vis-à-vis* incremental changes.

4.3.1 Structural Reforms: The Case of the London Stock Exchange (LSE)

The British Financial Services Authority (FSA) was created in 1997, three years before the demutualization of the London Stock Exchange. Under the FSA all financial regulation has been consolidated under a single body that exercises jurisdiction over the banking, insurance and securities industries. The British equivalents of SROs have been abandoned and a new entity has been conferred with a wide range of rule-making, investigatory and enforcement powers.

The most enduring benefit of this direct approach is the removal of virtually all conflicts between SROs and their members, market operations, issuers and shareholders. Conflicting rules and their erratic application as well as duplicative regulatory functions are eliminated, and the bird's eye view of the entire financial services industry afforded to policymakers allows for greater consistency and clarity in rulemaking. Moreover, surveillance across markets becomes an achievable goal as all data is housed and examined within the FSA rather than by the uncoordinated, individual SROs.

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[145] See note 15 *supra*

4.3.2. Incremental Reforms: The U.S. Experience with the NYSE and NASDAQ

Policymakers in the United States have rejected the UK model of financial regulation ostensibly because of the costs, financial and political, involved in such a major overhaul of the existing system. Moreover, as was noted earlier, direct regulation of broker-dealers in the 1960's by the SEC proved to be an abysmal failure, in contrast with an SRO system that has worked somewhat more effectively. The advent of demutualization, with the added dimension of conflict between effective SRO functioning and shareholder wealth maximization, has nevertheless resulted in some rethinking by the SEC of the regulatory role of SROs.

The Commission has approved the legal separation of the regulatory and market functions by both the NYSE and NASDAQ following their recent conversion to for-profit exchanges. [146]

NASDAQ will now take on the mantle of being an SRO and will have its own rules regarding listing, membership, trading and regulation. NASDAQ has however contracted with NASD Regulation (NASDR) to provide member and market regulation capabilities on behalf of NASDAQ. NASDR will receive, review, and process membership applications under the NASDAQ membership rules (which are substantially similar to those of NASD). Appeals from the membership process will ultimately be reviewed by the NASDAQ Board. NASDR will also be responsible for disciplinary proceedings against NASDAQ members, although final appeals will be heard by the NASDAQ Review Council appointed by the NASDAQ Board.

NASD also acts as the SRO for Electronic Communication Networks (ECN) by ensuring the integrity of their trading via the examination of their tapes. However, given the electronic nature of the ECNs and the fact that they are not involved in listing companies, the role of NASDR in regulating NASDAQ is likely to be far more onerous than their obligations to the ECNs.

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[146] A quick note on the historical structure of the US broker-dealer market will be helpful for the purposes of this discussion. All broker-dealers are required to belong to an SRO with the result that NASD – the largest and most influential broker dealer SRO – has general regulatory authority over broker-dealers overlaps with the oversight authority of the exchanges over the broker-dealers that trade on its exchange. NASD has faced potential conflicts of interest to the extent that it polices its own members while owning a stock exchange, NASDAQ. Having recognized this NASD will soon sell its stake in order to focus exclusively on its regulatory role. In recent times NASD was party to the research analyst settlement and has been very involved with initiatives designed to regulate IPO allocations.

Following its demutualization the NYSE has adopted a slightly different model of self regulation. Under this arrangement virtually all regulatory functions – rulemaking, surveillance and enforcement – are conducted by a regulatory subsidiary, NYSE Regulation Inc. The NYSE Regulation board will be composed initially of five directors with no affiliation with the NYSE Group board, member organizations or listed companies, and three directors who are also NYSE Group directors. It is envisaged that such an organizational separation will foster an independent spirit within the self regulator while maintaining some input from the business operations of the NYSE.

As the SEC notes[147], however, the changes adopted by NASD and the NYSE are no more than an incremental changes to the standard model in which regulation occurs within a separate division of the exchange. The regulator continues, in some form at least, to be subject to the same inter-market competitive pressures as the exchange. The level of funding for the regulatory subsidiary, despite ostensibly lying with an independent board committee, is still likely to be impacted by the will of dominant owners or monopsonistic members.

5. A Market-Based Alternative to SROs [148]

Thus far this paper has examined the self-regulatory role of stock exchanges in the United States. It has argued that both private and public ownership of exchanges create a number of substantial conflicts of interest that make the notion of "self-regulation" a flawed one.

This section proposes a competitive solution as a means of reducing the conflicts that arise when exchanges self-regulate (in addition to the disciplining effects from the watchful eye of the federal regulators and, in the case of demutualized exchanges, shareholders). In essence, there are three basic regulatory functions that exchanges conduct viz. rulemaking, surveillance, and enforcement. Each of these major functions is considered within the framework of a market-based solution to the surveillance of SROs.

[147] SEC Concept Release Concerning Self-Regulation; Release No. 34-50700

[148] The idea for this solution developed during class discussions at the International Finance Seminar at Harvard Law School during the Spring Semester of 2006. This piece fleshes out the solution in greater detail.

5.1 Rulemaking

The parameters of rulemaking include, broadly, those governing markets and individual member conduct. Specifically, these rules address fundamental issues such as the financial condition of issuers and brokers, trading practices, margin practices, handling of customer accounts, and sales practices. The SEC has developed a substantial rulemaking expertise over time and exchange SROs would continue to actively negotiate their rules directly with the SEC under Section 19 of the Exchange Act.[149]

5.2 Surveillance

The surveillance function would no longer be housed within exchanges but would be outsourced to private companies that specialized in the auditing and surveillance of exchanges ("exchange-auditors"). Inspections would be conducted on the basis of the rules developed by the exchange in consultation with the SEC, while audit trail systems and software would be developed jointly by the SEC, the exchange and the exchange-auditor. In contrast to the NASDAQ-NASDR affiliation discussed earlier, whereby NASD has contracted with NASDAQ to fulfill its regulatory function, I envisage that the private regulators would be totally independent of any broker or dealer organization.

It may take several years for these private organizations to build the expertise required for the complexities of the audit so that some "phase-in" period may be considered by the Commission during which the SRO would be expected to maintain a core surveillance function. During the initial period the exchange-auditors may be partially staffed by former SRO and SEC employees who bring an intimate knowledge of the systems of the exchange, although their continued tenure in the long run should be discouraged due to fears of regulatory or auditor capture.

The exchange-auditors would be expected to conduct a review of and make findings regarding the internal controls, policies, practices, and procedures of the SRO. They may also be asked to conduct a review of supervisory, compliance, and other policies and procedures designed to prevent and detect federal securities law violations

[149] Thus, as far as rulemaking is concerned, the status quo would be maintained.

As economies of scale and scope begin to develop over time it is quite possible that a few, consolidated exchange-auditors would remain. They would be the most efficient exchange regulators that had managed to build a substantial well of talent and expertise. In this case, the Commission should nevertheless ensure that a sufficient number of exchange regulators exist to be able to fulfill the auditing duties of an exchange-auditor that failed or was dismissed by the SEC.

Funding concerns would not be as acute as is the case with internal regulators, since the private firms would charge a market price for their services.[150] The regulatory skills housed in SROs would not be lost immediately and the phase-in period would allow for some substantial skills transfer.

The role of the SEC would be to develop standards of professionalism for exchange-auditors and closely monitor their performance to ensure the quality of the audit. The SEC's control of audit process would be enhanced by their ability to hold the auditor directly responsible for failures that it reasonably should have uncovered at exchanges that it had oversight responsibilities for.

5.3 Enforcement

Where an exchange was found to be in violation of the market or listing rules it had negotiated with the SEC, the exchange-auditor would make recommendations for policies and procedures to address these deficiencies. The recommendations would be subject to approval by the SEC.

With respect to any recommendation or proposal with which the company and the exchange regulator did not agree both parties would undertake to make a good faith effort to reach an agreement. The SEC would be solely in charge of imposing sanctions.

Several core rules would help maintain the independence of the exchange-auditor and prevent capture:

1. The exchange would not have the authority to terminate the exchange-auditor without the prior written approval of the Commission's staff

[150] A particular level of surveillance, in line with the Commission's statutory requirements, would nevertheless have to be maintained.

2. The exchange would compensate the exchange-auditors, and persons engaged to assist the exchange regulator, at their reasonable and customary rates
3. The relationship between the exchange-auditors and the exchange would not be an attorney-client relationship, and no other doctrine or privilege should be invoked to prevent the exchange regulator from transmitting any information to the SEC
4. Any employee of the exchange regulator would agree not to be employed by the exchange in any capacity for a period, say two years, after the end of the engagement

6. Conclusion

Inherent conflicts of interest have always existed between the market operations of exchanges and their self regulatory role. Competition for listings, it is argued, brings regulatory arbitrage while the omnipresent specter of a cartel of monopsonistic owner-member further clouds the efficacy and integrity of self-regulation. Certainly, in the race for listings, exchanges are keenly aware of the reputational benefits that accrue to issuers who list on assiduously regulated markets and, to some extent, this market disciplining force acts as counterweight to potential impairments to regulation. Moreover, improving technology that is able to accurately recreate audit trails has made it increasingly difficult to conceal wrongdoing for any length of time. Nevertheless, vigilant surveillance of SROs seems to be lacking from cash strapped federal regulators. Insiders and the available empirical evidence from enforcement actions lead one to believe that the SEC's powers to detect wrongdoing within SROs are on the wane. The plaintiff bar has also had uncharacteristically muted history in uncovering malfeasance within SROs, due partly to the substantial technical expertise required to detect wrongdoing as well as the mutualized form of ownership that has made the formation of a plaintiff class a virtual impossibility.

In this respect, the trend towards the demutualization of exchanges may represent an important turning point, as another stakeholder has been thrown into the mix, namely profit seeking public shareholders. Regulators of exchanges will have to adjust their strategies to accommodate the profit maximization objectives of investors although private investors, themselves concerned with the future profitability of the exchange, may use the class action to punish wrongdoing and as a means to enforce minimum standards of self-regulation aimed at retaining and attracting listings. The extent of restructuring in this regard will ultimately depend on the particular characteristics of the exchange, its relationship with federal regulators and the political will of policymakers to effect sometimes painful change. One competitive solution to reduce the conflicts that arise when exchanges self-regulate (in addition to the disciplining effects from the watchful eye of the federal regulators and, in the case of demutualized exchanges, shareholders) may be the outsourcing of the surveillance and enforcement functions of SROs to private exchange-auditors.

Chapter 5: Conclusion

A primary aim of this study has been to provide an empirical analysis of recent joint securities enforcement in the United States. As Seligman (1994), Grundfest (1994), and Helland (2004) have noted, the policy debate surrounding joint enforcement has been characterized by a decisive lack of theoretical or empirical evidence. By providing a detailed qualitative and empirical analysis of the terrain, it is hoped that this study has provided the building blocks to inform future policy analyses on this subject. In particular, this study has sought to provide answers to specific policy research questions dealing with corporate governance reforms, the impact of SOX on joint litigation, and the current status of oversight at SROs.

The descriptive analysis yields several concrete insights to guide policymakers in the hitherto theoretical, academic debate on the subject. Grundfest (1994), for example, has argued that private rights of action should be "disimplied", with federal authorities being the sole enforcer of securities laws. This analysis suggests that such a policy choice would be misguided. Against a backdrop of limited resources, the Commission's stated policy of reviewing a broad cross-section of regulatory filings by issuers, so as to maximize the breadth and deterrence effects of its enforcement activities, has meant that its ability to unearth and prosecute fraud public companies is limited. Settling class actions against public companies outnumbered successful enforcement actions by a factor of six, suggesting that a massive scale-up of SEC enforcement activities would be required if federal authorities sought to emulate the deterrent effect of class actions. Furthermore, in suits against common defendants based on identical infractions, private attorneys obtained more than four times the restitution than the corresponding enforcement action. Unlike class actions lawyers, the Commission has also proved to be inept at distributing funds that had been recovered on behalf of investors – by late 2005 less than 3.5% of recovered funds had been returned to aggrieved investors. A cornerstone of any policy that encourages public investment in the capital markets should be to ensure adequate investor restitution should there be wrongdoing. Class actions play a vital role in helping to achieve this aim, and this analysis suggests that the SEC is unequipped to shoulder the burden of securities enforcement single-handedly.

However, this study has unearthed the potential for policymakers to indirectly regulate class action filings by expanding the Commission's enforcement mandate. Although jointly enforced suits are not especially common, constituting just 4.1% of all SEC enforcement actions and 8.25% of all class actions, this subset of suits represent 56.79% and 47.33% of *total* recoveries by public and private enforcement mechanisms respectively. This study has offered empirical evidence in support of the proposition that an increase in the volume of evidence collected by the SEC during a joint enforcement proceeding will reduce the quantum of evidence proffered by the investor-plaintiff during the subsequent class action litigation. Policymakers who are reluctant to expand the overall mandate of the plaintiff bar - by altering pleading and evidentiary standards for example - may nevertheless support enhanced investor restitution in instances of the most harmful and widespread securities violations. One way to achieve these seemingly competing ends may be to expand the Commission's powers, thus providing a spur to investor recoveries in jointly litigated suits which, as has been noted, is the subset of the most egregious corporate wrongdoing.

From a corporate governance perspective, many commentators have argued that block institutional holdings at large public companies is beneficial, as management is subjected to more intense scrutiny by shareholders with the means to do so. This fosters a closer alignment between the actions of management and the financial interests of shareholders, provided that the institutional ownership does not become so large as to result in the expropriation of the private benefits of control by the major shareholder. Although this is a nascent trend, the empirical evidence on corporate governance reforms supports the policy argument that institutional investors have the potential to act as diligently as the Commission as custodians of investor interests. Where governance reforms are pursued by public and private enforcement mechanisms, private investors have been successful in obtaining a wider range of reforms from settling defendants than the SEC. Public and private enforcers are also equally likely to pursue more stringent governance reforms. Providing incentives to institutional shareholders to monitor the affairs of companies more closely may be an attractive policy lever for those decision-makers keen to improve the governance structures at reporting companies with minimal government invasiveness.

With the advent of demutualization, a growing concern for policymakers is the Commission's limited capacity to detect and prosecute wrongdoing at self-regulatory organizations. Given the complexity in detecting trading violations at exchanges it is plausible to believe that the future scope of investor class actions as a disciplining device may also be limited. As an alternative to devoting substantial resources to improve this aspect of SEC surveillance, policymakers should consider a competitive solution to this problem. One way of reducing the conflicts that arise when exchanges self-regulate may be the outsourcing of the surveillance and enforcement functions of SROs to private "exchange-auditors". Under this model, the SEC would maintain oversight of the exchange-auditor and the enforcement process, but the costs of surveillance would fall on market participants thereby allowing the Commission to more optimally leverage its scare resources.

The primary aim of this research has been to provide an independent factual foundation that would give policymakers basis from which to examine the joint securities litigation. In additional to examining a few key policy questions, it is hoped that this research ultimately serves as the gateway for a policy examination of the optimal division of securities litigation between public and private enforcement mechanisms. In assessing the optimal balance of litigation, there is much scope for future research providing empirical estimates on the actual probability of detection of corporate malfeasance as well as the actual deterrent effect of specific SEC enforcement actions and private class actions.

There is also great scope for research that tackles the question of whether there has been a sub-optimal level of litigation measured in terms of the number and type of suits brought by private and/or public enforcers, and an assessment of the legal and economic domains in which public and private mechanisms holds a comparative advantage. Such an analysis would encourage an examination of whether there has been a "misallocation" of suits, in the sense that private litigators are bringing suits that would be more effectively dealt with by the federal authorities or vice versa.

An objective examination of the tradeoffs that exist between private and public enforcement will also help to soften the rhetoric in what has become a very polarized debate between plaintiff trial lawyers, on one hand, advocating wider legal rights for shareholders and defendant companies, on the other, urging the legislature and securities regulators to better protect the interests of defendant firms. By focusing on synergies that may exist between public and private enforcers this study, together with future research, will play a crucial role in reframing the analytical question from “which form of enforcement is better” to “how can these alternative enforcement mechanisms best work together.”