THE COST OF SECURITIES FRAUD

Urska Velikonja*

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Under the dominant account, securities fraud by public firms harms the firms’ shareholders and, more generally, capital markets. Recent financial legislation—the JOBS Act and the Dodd-Frank Act—as well as the influential 2011 D.C. Circuit decision in Business Roundtable v. SEC reinforce that same worldview. This Article contends that the account is wrong. Misreporting distorts economic decision-making by all firms, both those committing fraud and not. False information, coupled with efforts to hide fraud and avoid detection, impairs risk assessment by providers of human and financial capital, suppliers and customers, and thus misdirects capital and labor to lower-value projects. If fraud is caught, managers externalize part of the cost of litigation and enforcement to employees, creditors, suppliers, and the government as the insurer of last resort. Mounting empirical evidence suggests that harm to non-shareholders dwarfs that suffered by defrauded shareholders. Moreover, unlike investors, who can limit their exposure to securities fraud by diversifying their holdings and demanding a fraud discount, other market participants cannot easily self-insure. The Article supplies both theoretical and empirical support for the assertion that defrauded investors are not the only victims of securities fraud. In conclusion, the Article outlines and assesses some alternative fraud deterrence and compensation mechanisms.

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* © 2012 Urska Velikonja, Assistant Professor of Law, University of Maryland Francis King Carey School of Law. J.D. Harvard; LL.M. Harvard; LL.B. University of Ljubljana. The Article received the Junior Faculty Scholarship Prize by the Center for Law, Economics, and Finance at George Washington University. The Article was selected in a competitive call for papers for presentation at the 2012 Midwest Law and Economics Annual Meeting, Canadian Law and Economics Annual Meeting, and the C-LEAF Junior Business and Financial Law Workshop at George Washington University. I would like to thank Jennifer Arlen, Peter Conti-Brown, Cynthia Glassman, Michelle Harner, Joan MacLeod Heminway, Christine Hurt, Ira Lindsay, Robert Rhee, Ganesh Sitaraman, Max Stearns, Joseph Yockey, and participants of the 2012 Law & Society Annual Meeting, 2012 Southeastern Law Schools Annual Meeting, 2012 ASU Legal Scholars Conference, faculty workshops at Loyola Law School and Villanova University School of Law, and the Junior Faculty Workshop at the University of Maryland Francis King Carey School of Law for their thoughtful comments. Any misleading, incorrect, or incomplete disclosures remain the responsibility of the author, to the extent they are material.
INTRODUCTION

Just over ten years ago, WorldCom announced that its financial disclosures were fiction. Accounting fraud at WorldCom ultimately
destroyed tens of billions of dollars in investors’ equity and pushed the firm into bankruptcy.1 When it emerged two years later as MCI, Inc., it had shed 33,000 employees, more than a third of its workforce.2 Its general unsecured creditors ultimately received only 36 cents on the dollar.3 While WorldCom was fabricating its financials, its rivals, Sprint and AT&T, made business decisions believing that WorldCom’s success was real. Under pressure from its own shareholders, AT&T cut $7.5 billion in costs and laid off 20,000 employees. Still unable to compete with WorldCom’s imaginary figures, AT&T split itself into three units, which were sold individually—a decision then, and now, widely viewed as value destroying. In fact, during the fraud, WorldCom’s true costs were higher than AT&T’s.4 Telecommunication equipment manufacturers, including Lucent Technologies and Nortel Networks, initially benefitted from WorldCom’s apparent success, but suffered when the industry retrenched after the fraud was revealed. Both suppliers fired workers and saw their equity shrink.5 In the aftermath of the WorldCom fraud, the telecommunications industry as a whole lost a quarter of its jobs, 300,000.6 WorldCom’s share price, the usual yardstick for measuring harm from securities fraud, captured none of these harms.

WorldCom might be an outlier, but it is hardly unique.7 By misreporting their firm’s financial results and prospects, managers credibly communicate

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1 Before fraud was unmasked, WorldCom was one of the largest telecommunications companies with $160 billion in assets. Ken Belson, WorldCom’s Audacious Failure and Its Toll on an Industry, N.Y. TIMES, Jan. 18, 2005, at C1.
3 See Official Comm’t of Unsecured Creditors of WorldCom v. SEC, 467 F.3d 73, 84–85 (2d Cir. 2006) (observing that general unsecured creditors recovered 36 cents on the dollar and limiting the distribution of the SEC Fair Fund proceeds to those investors who have recovered less).
6 Alexander, supra note 2, at D1.
to markets\(^8\) that the firm is less risky than it in fact is. Managers sell the lie by increasing hiring and investment, and cutting prices. Relying on false information, lenders underprice credit, employees make career and retirement decisions based on a false picture of their firm’s prosperity, and rivals make business decisions on a distorted playing field.\(^9\) Honest firms face the obverse effect of fraud and cannot fund and employ workers for valuable projects, producing additional deadweight losses borne by all workers, primary-market capital investors, and beyond.

If fraud is caught, fraudulent firms spend substantial resources on investigation, litigation, damages and fines. Many file for bankruptcy or make costly adjustments, that they often shift to employees, creditors, suppliers, customers, and the government (as the insurer of last resort). Rivals face doubts about their own financial reporting, which increases their cost of capital and further depresses hiring in the industry. The ripple effects are felt throughout the economy and, once aggregated, exceed the harms to defrauded shareholders by a substantial margin.\(^10\)

Not only are investors not the only victims of securities fraud, the Article contends that they are in the best position to reduce their exposure to fraud.\(^11\) They can eliminate firm-specific risk through diversification. Diversification cannot eliminate undiversifiable or market risk of fraud, but investors demand a fraud discount when purchasing securities as *ex ante* compensation. While investors as a group benefit if the prevalence of fraud decreases, they are indifferent to securities fraud if its impact remains stable. Those supplying labor, on the other hand, cannot diversify their human capital at all, and are exposed to the risk that securities fraud by their employer will eliminate their job and impair their earning potential.

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\(^8\) The Article uses the term “markets” broadly, to include capital and labor markets, product markets, as well as intermediate markets. An appropriate adjective is used whenever the term is used narrowly (*e.g.*, securities markets).


\(^11\) Assuming no primary offerings.
Surprisingly, the recognition that investors do not bear the full cost of securities fraud is largely missing from our securities laws, from statutes to rulemaking, to enforcement decisions to judicial opinions, policy debates to academic analysis. Corporate governance reforms adopted in the Sarbanes-Oxley Act after the rash of accounting scandals in 2001-02 were widely criticized because of their purportedly high cost for investors. One of the critics’ recent successes is the JOBS Act which relaxed reporting and audit requirements for newly-public firms on the supposition that lower cost of compliance must necessarily lead to job creation. Another success is the D.C. Circuit’s decision in Business Roundtable v. SEC which requires the SEC to demonstrate that the costs of corporate compliance necessarily lead to job creation.

That decision has brought to a standstill financial reform rulemaking, authorized by the Dodd-Frank Act—the Act that was adopted in the wake of a financial crisis that caused widely-dispersed economic pain.

Securities commentators frequently warn that “onerous disclosure obligations and their accompanying liability are like the rain—they fall on the good and the bad alike.” But securities fraud, too, harms honest and dishonest firms, and their employees, creditors, and other constituents. With all costs included and tallied, the following conclusions are inescapable: (1) false disclosure affects financial markets as well as markets for inputs, labor

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15 The most commonly used securities regulation textbook lists two dozen article for the proposition. JAMES D. COX, ROBERT W. HILLMAN & DONALD C. LANGEVOORT, SECURITIES REGULATION: CASES AND MATERIALS 745–47 (6th ed. 2009).


17 H.R. 3606 (112th Cong.).

18 Business Roundtable v. SEC, 647 F.3d 1144, 1150 (D.C. Cir. 2011).

19 COX, HILLMAN & LANGEVOORT, supra note 15, at 745.
and credit, and product markets; (2) framing securities fraud as fraud against investors understates the harm it causes; and (3) regulation and enforcement predicated on the assumption that securities fraud does not impose substantial negative externalities on non-shareholders leads to underregulation and underdeterrence of fraud, and offers remedies that do not redress the injury.  

In Part I, the Article provides a brief overview of securities laws that require disclosure and sanction fraud. It also describes the existing consensus that securities fraud harms primarily investors, by reducing capital market liquidity, depressing investor returns by misallocating capital, and impairing shareholder monitoring.

Parts II, III and IV constitute the major contributions that this Article makes to the literature. In Part II, the Article explains analytically how false securities disclosures distort and harm non-financial markets. First, public firms’ financial disclosures are made publicly, not only to present and future shareholders, and provide information that is useful to a variety of market participants. To avoid detection, managers also change the firms’ observable actions to match false disclosures. False disclosures lead suppliers of financial as well as human capital to underprice their inputs. Second, if unmasked, securities fraud is very costly for the firm, and managers often pass the cost onto non-shareholders. Third and finally, securities fraud interferes with economic learning, distorts real economic decisions by rivals, and impairs product markets. In Parts III and IV, the Article details how employees and rivals, specifically, are harmed by financial disclosures intended for shareholders. In each Part, the Article supplements the theoretical analysis with empirical evidence.

In Part V, the Article discusses the determinants of the cost of securities fraud. Not surprisingly, fraud by a larger firm and larger fraud relative to the size of the firm tends to produce a greater market distortion and cost.  

Less well known, competition has a profound effect on the prevalence and the cost of securities fraud. First, fraud is generally more likely in concentrated than in competitive markets. But, during investment booms, when competitive pressure disappears, previously competitive markets succumb to fraud. Second, false disclosure by firms in concentrated markets is more likely to distort decision-making by rivals. Third, market concentration amplifies the ability of managers to shift the cost of fraud from shareholders to non-shareholders.

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20 Even if the cost calculus were adjusted, enforcement strategies might still underdeter when the sanction is placed on the firm if the firm cannot effectively shift it to deter the individuals who commit fraud. See e.g., Urska Velikonja, Leverage, Sanctions, and Deterrence of Accounting Fraud, 44 U.C. DAVIS L. REV. 1281 (2011) [hereinafter Velikonja, Leveraged Sanctions].

21 See Langevoort & Thompson, supra note 7, at 44.
Finally, in Part VI, the Article proposes a few solutions. If false financial disclosures distort real economic decisions by market participants, either directly or indirectly as managers change investment, hiring and pricing, less public disclosure might reduce the harm to non-shareholders.\textsuperscript{22} Alternately, better disclosure at the same cost ought to reduce the likelihood and duration of fraud. Forensic audits, enforcement targeted at high-risk firms, and \textit{qui tam} actions for whistleblowers produce superior deterrence outcomes at the same cost, if traded off for costlier, but ineffective compliance tools. Finally, the negative externalities of financial misrepresentations are dispersed among many firms and individuals. Forcing fraudulent firms and their managers to internalize the cost of securities fraud would improve their incentives to avoid fraud. The Article considers whether victims of securities fraud other than shareholders could bring lawsuits for common law fraud against the fraudulent firm and its managers. It concludes that although possible, these suits face high hurdles of reliance and damages. Unlike private plaintiffs, the SEC does not need to show actual reliance or damages to find a violation and impose a civil fine. The Article considers whether the SEC has the authority, under the Fair Funds Statute in Section 308 of the Sarbanes-Oxley Act, to distribute civil fines and disgorged profits it collects from securities violators to non-shareholder victims.\textsuperscript{23} A close reading of the text of the statute and the legislative history suggests that the case for compensating non-shareholder victims is surprisingly strong.

I. THE REGULATION OF SECURITIES FRAUD

The Securities Act and the Securities Exchange Act were adopted in the wake of the 1929 stock market crash and the Great Depression that followed.\textsuperscript{24} The securities acts put in place safeguards to prevent history from repeating itself, including a system of mandatory public disclosure and sanctions for disclosure violations and fraud. This Part reviews both, the laws that mandate disclosure and punish missing, false, or fraudulent disclosures, and the existing literature on why we need to prevent securities fraud, which has revolved almost exclusively around the costs of fraud to investors.

A. A Summary of Regulation

\textsuperscript{22} The Article considers both, the same amount of disclosure that is less public and a reduced amount of public disclosure.

\textsuperscript{23} 15 U.S.C. §7246(a) (authorizing the SEC to distribute to victims of securities violations disgorgement funds and civil penalties it collects from defendants).

\textsuperscript{24} The crash harmed “thousands of individuals who invested their life savings, accumulated after years of effort.” H.R. Rep. No. 85, 73d Cong., 1st Sess. 2 (1933).
Modern American securities regulation is a system of disclosure regulation, coupled with the regulation of financial market intermediaries, such as exchanges and broker-dealers, and public firms. Disclosure-based regulation aims to reduce the information asymmetry between firms that offer securities and investors who buy them. It assumes that so long as investors have access to information about the issuers of securities and the rights those securities confer, they can assess the risks and the returns of investment products, and decide whether and at what price to buy or sell.

To that end, the securities acts and implementing regulations require firms to disclose relevant information about their financial condition, products and markets, management, and competitive and regulatory climate both episodically, whenever they offer securities to the public, and periodically thereafter (annually, quarterly, and whenever significant events warrant disclosure). Regulations S-K and S-X specify not only what information must be disclosed, but also when, and in what manner, to produce disclosures that are available and easily comparable across firms.

To induce compliance, securities laws prohibit and punish disclosures that are materially false, misleading, or, in some cases, missing, and entrust private and public agents with enforcement. The securities acts do not make firms liable for every inaccurate disclosure. A misrepresentation must be

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25 Santa Fe Indus. v. Green, 430 U.S. 462, 477 (1977) (explaining that the fundamental purpose of the Exchange Act was to substitute the policy of caveat emptor with full disclosure).

26 Few remember today that the original draft of federal securities laws proposed merit review of securities offerings. See S. 875 & H.R. 4314, 73d Cong. 1st Sess. §§ 6(c), (e), (f) (1933), reprinted in 3 LEGISLATIVE HISTORY OF THE SECURITIES ACT OF 1933 AND SECURITIES EXCHANGE ACT OF 1934, at Item 28 & 22, at 13 (1973) (authorizing revocation of an issuer’s registration upon a finding that “the enterprise or business of the issuer, or person, or the security is not based upon sound principles, and that the revocation is in the interest of the public welfare,” or that the issuer “is in any other way dishonest” or “in unsound condition or insolvent”).


29 Section 10(b) of the Exchange Act prohibits the use of “any manipulative or deceptive device” in connection with the purchase or sale of any security. It authorizes the SEC to develop more specific rules about prohibited activities, as necessary “in the public interest or for the protection of investors.” The SEC adopted Rule 10b–5 in which exercised its statutory authority to the fullest, prohibiting not only false statements of fact or omissions that make truthful affirmative statements misleading, but also schemes or artifices to defraud, and acts or practices that operate as frauds or deceits. 17 C.F.R. §240.10b–5. This Article focuses on false disclosures, not inaccurate stock prices that result from all three types of securities fraud.
important, or material in securities regulation parlance, and the materiality is measured by the significance of the misrepresentation to a reasonable investor.\textsuperscript{30}

In addition, the misrepresentation (or omission) must be related to a purchase or sale of securities. A firm may be held liable for securities fraud even if the purpose of the misleading statement was not to influence investors, but its customers, employees, or others, and even if defendants did not envision that investors would rely on the statement—only that a material misstatement was disseminated in a medium on which investors could rely.\textsuperscript{31}

Finally, securities laws prohibit not only fraudulent misrepresentations, but hold issuers and insiders liable for reckless, and in some cases negligent or innocent misrepresentations.\textsuperscript{32} The securities acts distinguish between issuer transactions or primary offerings, in which the firm offers new securities to investors, and trading or secondary market transactions in the firm’s securities between two investors. Innocent material financial misrepresentations must be corrected, or restated.\textsuperscript{33} In addition, innocent misrepresentations made during a primary offering expose the issuer itself to liability, but do not subject the issuer to fines or other sanctions. Negligent misrepresentations in primary offerings expose those involved in the offering, including the issuer’s officers, directors, underwriters, accountants, to both, liability and sanctions.\textsuperscript{34} Reckless or fraudulent misrepresentations expose firms and their agents to liability even when the firm does not benefit from fraud directly by selling overpriced securities, but merely discloses materially misleading information that leads its shareholders to trade.\textsuperscript{35}

\textsuperscript{30} For the most recent elaboration of the principle of materiality see Matrixx Initiatives v. Siracusano, 131 S.Ct. 1309 (2011) (quoting the standard as “a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of information made available”).

\textsuperscript{31} Semerenko v. Cendant Corp., 223 F.3d 165, 176 (3d Cir. 2000) (holding that acquirer shareholders could rely on statements made in a tender offer to target shareholders); In re Carter-Wallace Sec. Litig., 150 F.3d 153 (2d Cir. 1998) (holding that an advertisement in a medical journal is made “in connection with” the purchase or sale of securities).

\textsuperscript{32} In a fine recent article Samuel Buell explores the many different mental states that the courts have upheld as sufficient for establishing “securities fraud,” from requiring a showing of specific intent to defraud to mere lack of due care. \textit{See} Buell, supra note 29, at 556–57.

\textsuperscript{33} The SEC requires firms to disclose within four business days that prior financial statements should no longer be relied on by filing Form 8–K, followed by a restatement in a periodic or amended filing (i.e., annual report on Form 10–K or quarterly report on Form 10–Q). About 40 percent of all restatements are stealthy, revealed in a periodic report without a prior disclosure in Item 4.02 of a Form 8–K.


\textsuperscript{35} That is misrepresentation of a known fact made with the purpose to mislead. United States v. Piepgrass, 425 F.2d 194, 199–200 (9th Cir. 1970); Rice v. United States, 149 F.2d 601, 603 (10th Cir. 1945).
Securities laws authorize public agencies (i.e., the SEC, federal prosecutors), self-regulatory organizations (i.e., FINRA), and defrauded shareholders, who are considered the victims of misrepresentations, to enforce disclosure violations.\(^\text{36}\) While shareholders can only seek damages, other enforcement agents can seek a variety of remedies, from injunctions, disgorgements, and fines, to prison.

Two recent amendments to securities laws, in particular the Sarbanes-Oxley Act, and to a much lesser extent the Dodd-Frank Act, departed from the shareholder-centric approach.\(^\text{37}\) They imposed a mix of corporate governance and compliance requirements that were designed to improve the accuracy of disclosures and reduce the temptation of fraudulent disclosures. These include enhanced auditing and financial reporting, a ban on corporate loans to executives that might tempt them to cheat, increased reliance on independent directors as monitors, and whistleblower incentives.

B. Existing Thought on the Harm From Securities Fraud

Congress adopted the securities acts in the 1930s with two goals in mind: to protect investors, who “were unfairly robbed of their investments during the stock market collapse of 1929,”\(^\text{38}\) and to further the public interest by preventing securities fraud and manipulation, which “precipitate, intensify, and prolong” “[n]ational emergencies, which produce widespread unemployment and . . . affect the general welfare.”\(^\text{39}\)

Since then, courts and commentators have settled on a narrower understanding of who is harmed by securities fraud: securities markets.\(^\text{40}\) The


\(^{39}\) Section 2 of the Securities Exchange Act talks about manipulation, excessive speculation and “sudden and unreasonable fluctuations of security prices,” which has led some to argue that the Act was concerned primarily with manipulation and integrity of stock prices, not with “full and honest disclosure or the importance of information about issuers.” Steve Thel, *The Original Conception of Section 10(b) of the Securities Exchange Act*, 42 Stan. L. Rev. 385, 391–92 (1990). But surely, the Act as it has subsequently been applied by the Supreme Court is not *unconcerned* with misleading disclosures.

\(^{40}\) The courts have identified at least eight separate policies underlying the rule against securities fraud: “(1) maintaining free securities markets; (2) equalizing access to information; (3) insuring equal bargaining strength; (4) providing for disclosure; (5) protecting investors; (6) assuring fairness; (7) building investor confidence; and (8) deterring violations while compensating victims.” 5B Arnold S. Jacobs, *Disclosure and Remedies Under the*
general consensus posits that material misreporting, the most common variant of securities fraud, harms securities markets in three ways. First, misreporting in both primary offering and secondary market transactions transfers value from public investors to insiders: in the former by overpriced newly-issued securities and in the latter by insider trading. That transfer is not costless. Drawing an analogy with common law fraud, a number of commentators and courts have accepted that the net social cost of securities fraud is the value transferred from public investors to insiders.

The involuntary transfer of value affects how investors behave. Burglaries lead people to take precautions, including buying heavier locks, handguns, or safe deposit boxes, all of which are direct costs, and to reduce their willingness to buy expensive jewelry in the first place, an opportunity cost. Similarly, because of securities fraud, investors spend resources trying to verify the truthfulness of disclosures before investing. Some investors might stay away from equity markets for fear that they would lose systematically to better informed traders and insiders, thereby marginally reducing securities market liquidity and increasing the cost of assembling

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42 There is evidence that crooked managers reduce their stockholdings while cooking the books. See e.g., Simi Kedia & Thomas Philippon, The Economics of Fraudulent Accounting, 22 REV. FIN. STUD. 2169, 2170 & Fig.1 (2009) (noting that Enron insiders sold millions of dollars worth of Enron stock while fraud was ongoing).

43 A transfer of value from one party to another is not a social cost per se. But, a zero-cost transfer assumes perfect competition, information, substitution, and rationality, as well as zero transaction costs. When these assumptions are relaxed, as they must be, all transfers will produce social deadweight losses.

44 See Seibel v. Scott, 725 F.2d 995, 1002 (5th Cir.), cert. denied, 104 S. Ct. 3515 (1984); Janigan v. Taylor, 344 F.2d 781, 787 (1st Cir.), cert. denied, 382 U.S. 879 (1965). See also Janet Cooper Alexander, Rethinking Damages in Securities Class Actions, 48 STAN. L. REV. 1487, 1498 (“Aggregate class trading losses are probably greater than either the true net social cost of the violation or the benefits received by the violator, both of which are speculative in nature and difficult to calculate.”); Adam C. Pritchard, Stoneridge Investment Partners v. Scientific-Atlanta: The Political Economy of Securities Class Actions, 2007–08 CATO SUP. CT. REV. 217, 219 (arguing that disgorgement of unlawful gains is the right measure of damages for securities fraud because it approximates the social costs of fraud).

45 See Gary Becker, Crime and Punishment: An Economic Approach, 76 J. POL. ECON. 169, 207 (1968) (arguing that the largest element of the social cost of crime is spent on precaution).
and maintaining a diversified portfolio of securities. Both effects depress the price that investors are willing to pay for newly-issued and existing securities, thereby increasing the cost of new capital for firms and reducing returns for existing investors.

Second, managers and insiders benefit from false disclosures. To reduce their incentive to lie (or to look the other way), enforcement is necessary to confront the malefactors with the cost of their violation. Enforcements costs—the cost of unmasking the offense, conducting an internal and external investigation, and litigating about offenses—are substantial.

Third and finally, misrepresentations tend to inflate stock prices and thus upset the allocation of economic resources through two separate mechanisms. In an ideal society, all projects would be rank-ordered based on their risk-adjusted expected returns. Assuming that capital is scarce, not all projects can be funded. Fraudulent firms attract capital and overinvest in low-yield projects, while honest firms cannot fund good projects. The misallocation of capital reduces returns on equity investment and a deadweight loss to society from having foregone superior projects.

In addition, stock prices are used as a yardstick for managerial compensation and retention. Professors Jennifer Arlen and Bill Carney were the first to observe that managers commit fraud when they fear that but for the false disclosure, they would be fired. Inaccurate disclosures mask poor performance and prevent value-enhancing changes in management.

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47 A misrepresentation in a registration statement prepared for a primary offering yields an immediate and direct benefit to the firm as investors overpay for securities that the firm and its insiders sell. A misrepresentation in a firm’s periodic disclosure produces a less direct and usually smaller benefit to the firm because the firm does not capture the entire increase in its stock price, though it enables the firm to make cheap acquisitions using its own stock, or negotiate better loan terms. See e.g., Cenco v. Seidman & Seidman, 686 F.2d 449, 451 (7th Cir. 1982) (listing cheap acquisitions and lower borrowing costs among the benefits to the firm from fraudulent disclosure).

48 Richard A. Posner, Economic Analysis of the Law 349–50 (1972). It is irrelevant from the social welfare standpoint whether the violator pays the cost to the victims or into state coffers. Id.


51 Merritt B. Fox, Retaining Mandatory Securities Disclosure, supra note 29, at 1358.

addition, knowing that sanctions follow discovery, managers of fraudulent firms spend resources trying to conceal fraud and avoid punishment.\textsuperscript{53} Commentators have accepted and assumed that shareholders are the ones who bear the cost of impaired corporate governance.\textsuperscript{54}

Notably missing from the existing debate are considerations of the cost of financial misrepresentations to non-shareholder constituents. In an influential treatise, Judge Frank Easterbrook and Professor Daniel Fischel suggested that, except for investors, all stakeholders can protect themselves effectively by contract.\textsuperscript{55} Professor Ray Ball went further to suggest that employees, in particular, benefit when a firm’s managers engage in financial misreporting because misreporting delays business failure.\textsuperscript{56}

Other commentators have left room for the possibility, albeit remote, that widespread securities fraud could harm non-financial markets indirectly,\textsuperscript{57} or that fraud by the largest firms could result in large social harm, but not fraud by their smaller peers.\textsuperscript{58} But by and large, most commentators have

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\textsuperscript{53} Posner, supra note 47, at 170; Qi Zhou, Contractual Mistake and Misrepresentation 41, in \textit{Contract Law and Economics} (Gerrit De Geest ed., 2011).


\textsuperscript{57} Kahan, supra note 47, at 1034–35 (explaining that fraud could precipitate a recession). \textit{But see} MILTON FRIEDMAN & ANNA J. SCHWARTZ, \textit{A Monetary History of the United States}, 1867–1960 (1963) (arguing that misguided monetary policy caused the Great Depression).

\textsuperscript{58} In a recent paper, Professors Langevoort and Thompson observed that accounting frauds in WorldCom and Enron caused “immense pain to employees and retirees,” cost their competitors billions of dollars, and severely distorted the regulated markets in which the two firms operated. They suggested that the reason for the large social harm associated with the fraud was the firms’ size, while financial manipulation at smaller firms produces harms that are local and contained. Langevoort & Thompson, supra note 7, at 44–45.
dismissed the concern and concluded that the social welfare loss from the misallocation of economic resources is “small, and for many offenses the transfer of wealth [from shareholders to insiders] will be far and away the largest element of the net harm.”

The approach taken by the securities regulators has largely followed the commentators’ lead. Shareholders, who act on the false disclosure and change their position for the worse, are perceived as the primary victims of securities fraud. The law gives them a private right of action for damages and entitles them to the fair funds—disgorgements of wrongful profits and civil fines that the SEC collects from securities violators.

This narrow, injured-shareholder-centric understanding of the harm from false disclosures suggests that false disclosures cause relatively little harm, which has led lawmakers, regulators, the business community, and academic commentators to express concerns about the cost of compliance and overenforcement of fraud. Responding to the sentiment that the cost of compliance had depressed job growth, Congress recently passed the JOBS Act to allow newly-public companies to produce more limited disclosures.

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60 See Blue Chip Stamps v. Manor Drug Stores, 421 U.S. 723, 730–31 (1974) (affirming the rule first adopted in Birnbaum v. Newport Steel Corp., 193 F.2d 461 (9th Cir. 1952) that a person who is neither a purchaser nor a seller of securities may not bring an action under §10(b) of the Securities Exchange Act).


63 Coates, supra note 24, at 5.
than firms with a longer public tenure. The analysis and discussion in the Parts that follow suggest that the rush to deregulate was premised on an economically flawed assumption that investors bear the entire cost of securities fraud. Once that assumption is relaxed, the rationale for deregulation, as well as reforms designed to empower shareholders, largely disappears.

II. OVERVIEW OF FINANCIAL MISREPRESENTATIONS

This Article contends that fraudulent financial reporting generates negative externalities to non-shareholders and that these externalities exceed the losses suffered by defrauded shareholders by a significant margin. Fraudulent financial reporting impairs accurate risk assessment by shareholders and non-shareholder constituents (i.e., creditors, employees, suppliers, vendors, customers, communities), interferes with economic learning by rivals, distorts real economic decisions that misreporting firms and their honest peers make, and, on the margin, increases the risk that the firm will shrink or fail after the misrepresentation is unmasked, in particular if followed by an enforcement action. At the level of the overall economy, fraudulent financial reporting misallocates capital and labor among firms, producing social deadweight losses.

Securities fraud encompasses many different types of actions. This Article focuses on financial misrepresentations. They are not only the most common species in the menagerie of securities fraud, but also tend to be

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65 For example, the Dodd-Frank Act grants shareholders the right to vote on executive compensation. Dodd-Frank Act, supra note 12, at § 951.
66 See supra note 10 and accompanying text.
67 See Buell, supra note 29, at 556–57 (describing the various meanings of “securities fraud”).
68 Financial misrepresentations come in many shapes and sizes. Some require a restatement of previously released financial statements, others do not. Not all restatements suggest fraud, though eighty percent of restatements between 1997 and 2002 were negative. Kedia & Phillipon, supra note 43, at 2178. Not all accounting frauds are followed by a restatement. Dyck, Morse & Zingales, Pervasive Fraud, supra note 60, at 32–33 (estimating that 38 percent of caught frauds do not require a restatement, such as disclosures of half-truths or misleading forward-looking information). Even where a restatement would have been required, some firms do not survive long enough to file a restatement (e.g., Enron), some ignore the SEC’s instruction to file a restatement, and some take a one-time accounting charge in lieu of filing a restatement. See Jonathan M. Karpoff, D. Scott Lee & Gerald S. Martin, The Cost to Firms of Cooking the Books, 43 J. FIN. & QUANTITATIVE ANALYSIS 581, 585 & n.9 (2008).
69 See CORNERSTONE RESEARCH, supra note 42, at 28 fig.26.
particularly harmful for the firm’s constituents and its rivals. The Part begins with an overview of why managers misrepresent their firm’s financial performance, how misrepresentations distort economic decision-making, and how common is accounting fraud.

A. The Anatomy of a Misrepresentation

A rational manager might commit or conceal fraud when he believes that his personal gain exceeds the impact he would suffer if fraud was unmasked, discounted by the likelihood of detection. The most common reason that managers release false disclosures appears to be their desire to disguise disappointing performance. Managers face a lot of pressure to meet performance expectations: performance-based compensation, avoiding termination, increasing the odds of promotion, avoiding the downgrade in the firm’s debt or the violation of debt covenants, averting employee exodus. They know that stock prices of firms that miss even a single earnings target decline substantially, and fear that their job and reputation might be on the line. They might be concerned that creditors will cancel a line of credit and employees flee to other firms, pushing the firm over the brink if they reveal the truth. In particular when managers wishfully think that the shortfall is only temporary and that real performance will soon improve, the temptation to overstate earnings may be hard to resist. Concealing bad news buys time. In other cases, managers misreport their company’s performance because of greed: the structure of managerial compensation provides supercharged

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70 Arlen & Carney, supra note 53, at 701. Even in the largest frauds, managers rarely set out to commit the fraud that ultimately results. When performance disappoints, managers usually exhaust legal option before resorting to those that are illegal. See Patricia M. Dechow, Weili Ge, Chad R. Larson & Richard G. Sloan, Predicting Material Accounting Misstatements, 28 CONTEMPORARY Acct. Res. 17, 19 (2011). As Professor Don Langevoort and others have suggested, managers usually begin by manipulating “just a little,” perhaps to cover a temporary blip in performance, and hope that they can smooth over the manipulation in the next period. When the next period fails to bring good news, the slippery slope leads managers to ever greater manipulation. See Donald C. Langevoort, Resetting the Corporate Thermostat, Lessons from the Recent Financial Scandals about Self-Deception, Deceiving others and the Design of Internal Controls, 93 GEo. L.J. 285, 308 (2004); Michael Guttenagger, Stumbling Into Crime: Stochastic Process Models of Accounting Fraud, in RESEARCH HANDBOOK ON THE ECONOMICS OF CRIMINAL LAW (A. Harel & K. Hylton, eds. 2011).

71 Arlen & Carney, supra note 53, at 702–03 (identifying the “last period” problem as an important cause of accounting fraud); Dechow et al., supra note 71, at 19 (finding that alleged fraudulent firms had strong performance before the misrepresentation, and that true performance declined during periods of fraud).

incentives for fraud. They overstate the firm’s financials to inflate the stock price, exercise their stock options, and pocket millions of dollars. 73

Whatever the reason for the misrepresentation, all frauds are alike: the manager releases misleading information about the firm’s financial performance. That statement is usually accompanied by similarly misleading public pronouncements. 74 To avoid detection, communications with the investment community as well as the firm’s stakeholders must match the fraudulent financial disclosure. In addition, the manager must change the firm’s real actions to conform to its reported financial health. 75 Managers might sell output at a loss, announce new projects, overinvest in fixed assets, and overhire. 76 To better mask fraud, managers might choose projects with higher cash-flow volatility (i.e., “lottery tickets”) or projects whose returns are not correlated with existing investments. 77 They lie to their accountants, 78 and even pay taxes on non-existent earnings. 79

Unless and until fraud is discovered, it benefits the manager, as well as the firm’s current shareholders. The fraudulent firm can make cheap stock-for-stock acquisitions using its overpriced equity, negotiate better loan terms as a result of its perceived lower risk, and hire more talented workers, excited


75 See Sadka, supra note 4, at 447 (observing that managers will change their business decisions to conceal fraud, but only if fraud itself is punished).

76 See id. at 439, 457–58.

77 See Wang, Economic Analysis, supra note 51, at 14.


79 See Merle Erickson, Michelle Hanlon & Edward Maydew, How Much Will Firms Pay for Earnings That Do Not Exist? Evidence of Taxes Paid on Allegedly Fraudulent Earnings, 79 ACCT. Rev. 387, 389–90 (2004) (reporting that out of 27 firms subject to SEC enforcement actions during the studied period, 15 paid taxes on overstated earnings; the total amount of taxes paid represented 2.4% of the firms’ market value and 20% of the pretax value of overstated earnings).
about the firm’s bright future. The beneficiaries also include those who sell
the firm’s stock and debt in the secondary markets during fraud.

A misrepresentation communicates to those who contract with the firm
that the firm’s financial health is better than it really is, that the firm poses a
low credit risk and is less likely to terminate employees. Fraudulent
disclosures also interfere with other firms’ ability to understand the markets
in which they operate. Firms’ managers and directors do not know ex ante
which business strategy is optimal and so they look to their rivals as gauges
of what the market wants. Significant misreporting impairs rivals’ ability to
discern the value of new investments and may lead an entire industry may
adopt a misguided business strategy.

There is evidence that earnings manipulation is very common, and that
many frauds are never detected. Estimated detection rates vary from as high
as 100 percent to as low as 2.39 percent. In a recent study, Professors
Alexander Dyck, Adair Morse and Luigi Zingales suggest that about 75
percent of significant frauds are never caught. They found that, in any
given year, 1.3 percent of firms that are ultimately caught begin
misreporting, and 3.2 percent have ongoing fraud. Extrapolating from other
evidence the authors estimated that between 11.2 and 13.2 percent of firms
are manipulating their earnings.

B. If and After the Truth Is Revealed

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80 See Cenco v. Seidman & Seidman, 686 F.2d 449, 451 (7th Cir. 1982).
81 For example, Enron’s Lou Pai left the firm early in 2001 with $250 million in Enron
stock and stock options. As a result of a divorce settlement, he sold his holdings in May and
June 2001, a mere six months before Enron filed for bankruptcy. McLEAN & ELKIND, supra
note 79, at 124.
82 Abigail Brown & Simon D. Angus, Destroying Creative Destruction: The Social
Nelson & Sidney G. Winter, Evolutionary Theorizing in Economics, J. ECON. PERSP., Spring
2002, at 23 (explaining evolutionary economics and comparing it with neoclassical
assumptions).
83 Joseph Gerakos & Andrei Kovrijnykh, Reporting Bias and Economic Shocks (Univ. of
abstract=1546478/ (finding that, on average, 17–20% of firms with sufficient data on
COMPSTAT exhibit significant earnings manipulation).
84 Artur Filipe Ewald Wuerges & Jose Alonso Borba, Accounting Fraud Detection: Is it
Possible to Quantify Undiscovered Cases? 1 (Dec. 2010) (unpublished manuscript), available at
85 Dyck, Morse & Zingales, Pervasive Fraud, supra note 60, at 5.
86 The passage of the Sarbanes-Oxley Act significantly reduced the number of detected
frauds, from a high in 2001 when 5.3 percent of firms were committing fraud, to a post-SOX
low of 1.3 percent in 2004. Id.
87 Dyck, Morse & Zingales, Pervasive Fraud, supra note 60, at 11.
Empirical studies suggest that exposing fraudulent financial reporting is very costly for firms. About a third of the firms that are targets of SEC enforcement actions for misreporting file for bankruptcy. Because many firms that cooked their books were financially stressed beforehand, some number would have filed for bankruptcy anyway. But, many could have avoided bankruptcy in the absence of fraud, or alternately, would have filed for bankruptcy protection earlier, before things deteriorated beyond repair. A number of studies have found that a substantial percentage of firms, if not the majority, were financially healthy in the period before the financial manipulation. During fraud, that performance deteriorates, and managers’ costly efforts to avoid detection make things worse.

Estimating how many bankruptcies are caused by accounting fraud is difficult, but empirical evidence suggests that the number might be relatively high. Professors Karpoff, Martin, and Lee have found that being caught for accounting fraud is very costly for firms. Having studied all cases of financial misreporting that were subject to SEC and DOJ enforcement actions between 1978 and 2002, they found that for every dollar in increased market value due to fraudulent disclosure, the firm lost that dollar after unmasking of fraud, and an additional $3.08 ($3.83 for firms that did not file

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88 See Committee of Sponsoring Organizations of the Treadway Commission, Mark Beasley at al., Fraudulent Financial Reporting 1998–2007: An Analysis of U.S. Public Companies 40 & Tbl. 28 (2010) [hereinafter COSO Study] (reporting that 28% of the firms subject to an AAER between 1998 and 2007 filed for bankruptcy within two years); Karpoff, Lee & Martin, supra note 69, at 593 (reporting that 34% of firms subject to an SEC or Department of Justice enforcement action between 1978 and 2002 filed for bankruptcy).
89 See COSO Study, supra note 89, at 11 (reporting that the median net income of a fraudulent firm was $875,000, while the 25th percentile firms faced net losses of $2.1 million).
90 Not all fraud-induced bankruptcies result in liquidation. Rather, the business reorganizes, mitigating the harm of bankruptcy to the stakeholders (as well as the shareholders, who often receive an equity slice in the reorganized firm). See UCLA–LoPucki Bankruptcy Research Database, http://lopucki.law.ucla.edu/study_results.asp/ (suggesting that most fraud-induced bankruptcies resulted with a confirmed Chapter 11 plan of reorganization). The presence of a confirmed Chapter 11 plan, however, overstates the number of fraudulent firms that survived bankruptcy. Enron emerged with a confirmed Chapter 11 plan, but the sole purpose of the surviving entity, Enron Creditors Recovery Corp., is to liquidate Enron’s assets for the benefit of its creditors. See Enron Creditors Recovery Corp., About ECRC, http://www.enron.com/index.php?option=com_content&task=view&id=1&Itemid=9/ (last visited Aug. 4, 2012).
91 A 2010 study prepared by the Treadway Commission reported that a quarter of the firms subject to an SEC enforcement action for financial manipulation between 1998 and 2007 reported net income of over $18 million in the quarter before they began manipulating their earnings, while the highest net income firm in the sample reported almost $8.9 billion. COSO Study, supra note 89, at 11. Another study found that 25 percent of bankrupt companies with revenues over $1 billion were subject to an SEC enforcement action. Deloitte Forensic Center, Ten Things About Bankruptcy and Fraud: A Review of Bankruptcy Filings 9 (2008), available at http://www.bankruptcyfraud.typepad.com/Deloitte Report.pdf/.
92 Karpoff, Lee & Martin, supra note 69, at 581.
for bankruptcy). Of that additional loss, only 36 cents (or 8.8%) was due to expected legal penalties, while $2.71 was what they call lost “reputation.”

Some part of the “reputational loss” reflects the cost of conducting an internal investigation, defending the firm in litigation, and collateral consequences of the enforcement action, such as the loss of government contracts. A part reflects the “exodus of current customers and employees,” the firm’s expected lower sales, and higher cost of contracting and financing.

Professors Dyck, Morse, and Zingales looked instead at the reduction in the value of the enterprise, measured by sales and assets. After adjusting for the fact that firms commit fraud to hide bad news, they found that accounting fraud destroys about 40 percent of firm value.

In addition, disclosing fraud usually produces a sudden and significant shock to the firm, and the very suddenness is costly by itself, in particular to those firm constituents, such as employees, who have open-term and implicit contracts, and cannot exit quickly and cheaply.

Even those fraudulent firms that avoid bankruptcy often suffer other significant consequences: many delist (47% compared with 20% for non-fraud firms over a 10-year period) and are twice as likely as their honest peers to engage in material asset sales (63% vs. 31%).

Undiscovered fraud and its cost are largely invisible. We do not know whether undiscovered frauds are similar to discovered frauds or different in important respects, including their duration. It is possible that hidden earnings manipulation averts or delays some bankruptcies, by diverting capital and labor to fraudulent firms. But honest firms, from whom resources have been diverted, cannot go ahead with worthwhile projects. In addition, actions that managers take to conceal fraud are costly in and of themselves, and often very risky. It thus seems highly unlikely that undetected

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93 Id.
94 Id.
95 See Jennifer Arlen, Corporate Criminal Liability: Theory and Evidence 8–9, in RESEARCH HANDBOOK ON CRIMINAL LAW (Keith Hylton & Alon Harel, eds., forthcoming); Baer, supra note 41, at 1062–63 (observing that securities fraud may result in delisting or losing government contracts).
96 Baer, supra note 41, at 1062.
98 Dyck, Morse & Zingales, Pervasive Fraud, supra note 60, at 5.
100 COSO STUDY, supra note 89, at 40.
accounting fraud would on net benefit employees or creditors. There is no doubt that hidden fraud harms rivals, who adopt misguided strategies and invest in low-return projects based on projections informed by accounting misrepresentations of their peers.

III. FINANCIAL MISREPRESENTATIONS AND INTRA-FIRM COST

The nexus of contracts theory, which has been fantastically influential in shaping U.S. corporate law and securities regulation, assumes that the firm is a team of inputs, organized under a net of related contractual arrangements. The contracts require the firm to pay claimants fixed amounts, except the shareholders, whose claims are variable and depend on the residual value of the enterprise: the firm’s profits. The value of an investment in stock depends entirely on the estimates of profits the firm might generate in the future. Insiders, usually managers, can manipulate these estimates by releasing false but credible information. Fraudulent disclosures inflate the stock price, while eventual exposure of fraud returns the price to the correct level (reflecting fundamentals), which is what the price would have been absent fraud. Sellers win, buyers lose, and those who hold on are unaffected by fraud.

The neoclassical theory predicts that fixed claimants are also unaffected by false disclosures and securities fraud, because their claims are, by definition, fixed. The conclusion is premised on four assumptions. First, market competition determines the conditions under which fixed claimants, accounting fraud would on net benefit employees or creditors. There is no doubt that hidden fraud harms rivals, who adopt misguided strategies and invest in low-return projects based on projections informed by accounting misrepresentations of their peers.

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including employees, creditors, suppliers, and customers, enter into contracts with the firm. Employees’ or suppliers’ investment is generally not at risk, because they are paid the market rate for their services or goods. In a competitive market, employees and suppliers can find substitute jobs or contractual partners quickly and at no or low cost. Second, if their investment is at risk, such as long-term loans or firm-specific investments, they can accurately assess the risk \textit{ex ante} and demand compensation by contract. They can specify by contract what information they relied on when negotiating the risk-premium, and, if the information turns out to have been misrepresented, they can be compensated \textit{ex post} by holding the firm liable. Third, association with the fraudulent firm has no reputational effect on future contracts. And fourth and finally, if a firm fails or shrinks as a result of its managers’ fraudulent disclosures, rivals will immediately and costlessly acquire the fraudulent firm’s market share, hire its laid-off employees and take over its contracts with suppliers. The following sections explain why and to what extent these assumptions hold for two groups of fixed claimants: creditors and employees.

\textbf{A. Intra-Firm Cost: Theory}

\textit{1. Creditors}

Declining value of collateral is the primary risk for secured lenders, and is often uncorrelated with the debtor’s business prospects. Unsecured lenders, on the other hand, face two risks correlated with the debtor’s performance: (1) that business will deteriorate, and (2) that the debtor will incur additional debt.

Banks and financial institutions use contract to mitigate the risk of default. They demand a higher interest rate when the risk of business failure is higher, but the rate alone does not prevent the debtor from borrowing more afterwards.\footnote{Leveraged buyouts are an example of opportunistic borrowing. During the buyout, the firm borrows a massive amount of debt at a high interest rate, but does not eliminate its prior debt that was priced for a firm that was much less risky.} Banks include loan covenants in the contract—for example, a leverage ratio ceiling—that allow the banks to declare default and demand immediate repayment if a covenant is violated. To facilitate the exercise of their contractual rights, banks require the debtor firm to supply its financial statements periodically and to notify the bank of any covenant violations. If the debtor fails to do so, or if it misrepresents its financial position at the time of borrowing, it is liable to the bank for its failure. Like equity investors, banks diversify their firm-specific risk by lending to many
different borrowers and by syndicating large loans. They remain exposed to market risk of fraud, but demand a fraud premium as ex ante compensation.

Institutional creditors fit the nexus theory of fixed claimants well. However, credit risk is relevant in agreements other than the traditional bank loan. Trade creditors—suppliers and vendors—are exposed to the risk of default. Unlike banks and institutional lenders, trade creditors do not specialize in managing credit risk. They also cannot eliminate the risk of fraud by as effectively as banks through diversification: they are exposed to the ups and downs of their industry. Finally, there are few economies of scale in monitoring counterparty credit risk. It is as costly for a supplier holding a $100,000 account receivable to monitor the buyer as it is for a lender with a $10 million loan.

Instead of detailed contracts, trade creditors rely more heavily on exit. They deliver supplies in batches, requiring payment periodically and frequently. If the buyer does not pay, a supplier will stop supplying the materials. A misrepresentation of the firm’s performance impedes accurate assessment of the firm’s creditworthiness and its liquidation value. But the amount at risk is relatively small, assuming that a supplier can easily and cheaply replace the lost business from the fraudulent firm if it fails.

2. Employees

Valuation methods for financial investments are equally useful to assess the value of employees’ human capital investment. The value of human capital is the net present value of future income streams from work. In a perfectly competitive labor market, where employees have made no firm-specific investments, salaries across firms are driven to their competitive floor. If employees can switch jobs quickly and at no cost, if none of their pay has been deferred, if working for a fraudulent firm does not impair their earning potential, and if the existence of misreporting has no impact on overall economic growth and employment levels, employees are indifferent to securities fraud in any firm: the value of their human capital is unaffected.

But all these assumptions must be relaxed and that has a profound impact on the cost of financial misreporting to employees. First, employees are often their employer’s creditors because they are promised contingent or deferred compensation. Contingent compensation usually conditional on the employee’s own and the firm’s performance, such as a year-end bonus. When the firm does poorly, it might pay no bonuses, even to its most

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107 But, as Professor Coffee has noted, there are many ways for managers to increase risk that real-life contracts cannot control. Coffee, Shareholders vs. Managers, supra note 9, at 69.

productive employees. Deferred compensation, such as a company pension or severance, are at risk if the firm performs poorly. Second, many jobs require employees to develop firm-specific skills, including good working relationships with co-workers, that are lost if the employee is terminated.\footnote{109} Third, labor is comparatively much more specialized than capital. Specialized, or non-homogenous markets have fewer buyers, and so it necessarily takes an employee longer to find acceptable substitute employment than it takes a shareholder to cash out.\footnote{110} Quick terminations that usually follow revelations of accounting fraud lead to periods of unemployment or force employees into accepting lower paying jobs—costs employees could have avoided if they had warning of the firm’s declining business prospects. The cost of exit increases if employees have made personal decisions in reliance on retaining the job, like buying a house.\footnote{111}

Finally, and most importantly, employees cannot diversify away the firm-specific risk of failure or fraud. For most workers, human capital constitutes a large percentage of their wealth, so the loss is substantial, even if the displacement is only temporary.\footnote{112} There is little reason to believe that workers can use contracts to protect against firm failure and/or fraud effectively, for structural and informational reasons.\footnote{113} Employers do not know whether the employee is likely to be productive at the time of hiring.\footnote{114} They rationally screen for “difficult” employees, including those who might try to negotiate too hard. Except for top executive employment contracts, there is little evidence that employees could negotiate contractual provisions other than perhaps pay.

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\footnote{109} Benjamin Klein, Robert G. Crawford & Armen A. Alchian, \textit{Vertical Integration, Appropriable Rents, and the Competitive Contracting Process}, 21 J. L. & Econ. 297, 299 (1978). Employees who develop firm-specific skills are usually paid a quasi-rent for making the investment, but the payment is deferred and paid either as a higher salary or as severance.


\footnote{111} Greenfield, \textit{Unjustified Absence}, supra note 111, at 719 (noting that companies seek such reliance).


\footnote{113} But see Stephen M. Bainbridge, \textit{In Defense of the Shareholder Wealth Maximization Norm: A Reply to Professor Green}, 50 Wash. & Lee L. Rev. 1423 (1993) (suggesting that employees can protect their interests either contractually or through regulatory pressure).

\footnote{114} Interviews continue to be used in hiring, although they are poor predictors of subsequent employee performance.
Informational asymmetries abound—it is nearly impossible for employees to verify at the time of hiring if the firm’s managers are honest. In addition, at-will employment is entrenched in the American labor market, but most employees and employers act as if employment is long-term. But because the term of employment is open, employees have no redress for early termination. Collective bargaining could mitigate contracting problems but unions “are in a period of historical weakness.”

Instead, employees rely on exit. Accurate and timely information about the firm’s performance and viability is crucial to assessing whether the expected risk-adjusted revenue stream from their current employer (minus the cost of exit) exceeds the opportunity cost, and whether and when the employee should start looking for a new job. Employees certainly rely on internal sources of information, including rumors and office gossip, to assess the firm’s likely future performance, but anecdotal evidence suggests that they also rely on the firm’s securities disclosures and the stock price itself. The larger the firm, the less complete and reliable the internal sources of information (perhaps with the exception of the firm’s top management and its internal audit group), and the more useful are the firm’s securities disclosures and communications by top management for employees’ own assessment of their likely returns from continued employment with the firm.

Concealing the firm’s decline upends employees’ ability to decide that it is time to quit because fraud credibly conveys to employees that the firm is doing better than it really is. Dishonest managers are aware of the risk of flight and try to reassure their workers, just as they reassure providers of capital: they sell the lie to mask fraud and to prevent employee exodus.

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116 Greenfield, Unjustified Absence, supra note 111, at 752. Only 6.9 percent of private sector workers were unionized in 2010. Overall union membership has been on the decline since the Bureau of Labor Statistics started collecting information in 1983. See U.S. Dep’t of Labor, Bureau of Labor Stats., Union Members—2010, Jan. 21, 2011.

117 See McLean & Elkind, supra note 79, at 97 (noting that employees’ elevators at Enron constantly displayed the current stock price).

118 See Greenfield, Unjustified Absence, supra note 111, at 739–40 (explaining the relationship between job security and pay). Of course, employees complicit in the scheme do not rely on the false financial picture of the firm’s health.

119 See Faith K. Stevelman, Bombing Markets, Subverting the Rule of Law: Enron, Financial Fraud, and September 11, 2001, 76 Tul. L. Rev. 1579, 1596 (2002) (“Lay reassured employees about the positive financial prospects of the firm and even suggested that they would benefit from purchasing more Enron stock.”). See also Greenfield, Unjustified Absence, supra note 111, at 718–19, 721 & n.26 (recounting numerous stories of employer fraud, usually featuring managers who reassured workers that the firm was profitable to prevent flight, even though they planned to shut down the factory).
When managers are caught manipulating a firm’s earnings, firms often unravel quickly (certainly more quickly than most business failures), exposing employees to sudden unemployment. If they knew the truth about the firm, employees would have looked for work sooner and avoided joblessness. Accounting fraud also harms employees’ reputations, and not just those of fraudsters. At least anecdotally, even innocent employees of Enron and Arthur Andersen, Enron’s auditor, reported being “mocked, criticized, and not trusted,” in addition to being unemployed. Finally, when firms shed many employees simultaneously, that extra supply will depress wages, at least locally.

One might argue, as did Professor Ball, that fraud benefits employees because it delays business failure, assuming that failure was inevitable. But fraud only benefits employees if the difference between their salary at the fraudulent firm during delay, and their opportunity cost (i.e., alternative job), exceeds the expected cost of fraud-induced delay and the reputational harm. If bankruptcy is delayed, management might squander more money that otherwise would have been available to pay severance. Delay might increase the odds of liquidation over reorganization and result in greater job losses overall. The job market might deteriorate in the interim. Finally, if managers choose fraud, there is a non-zero possibility that fraud will ultimately be unmasked and the firm will “implode in a wave of accounting scandals” and harm employees’ reputations.

But hidden fraud also harms employees. Financial misreporting distorts the allocation of labor between firms: it increases the relative cost of labor for non-fraud firms, just as it increases their cost of capital, and, on the margin, reduces hiring. Fraud in the secondary market for securities misallocates shares among traders, but does not misallocate capital between firms and does not distort funding for new projects. In contrast, the market

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121 Ball, *supra* note 57, at 298.

122 Assume that fraud delays bankruptcy by one year during which the employee earns $80,000. During that time, the best alternative job would have paid $70,000. When fraud is revealed, the employee loses her job, is unemployed for six months and then finds another job that pays $60,000 in another state, and incurs $10,000 in moving expenses. Without fraud, the employee would have been fired at the beginning of the year and taken the $70,000 job after six months of unemployment. In sum, the employee benefits $10,000 during fraud, but loses $15,000 after it is unmasked, a net loss of $5,000 compared with the no-fraud scenario.


124 See Greenfield, *Unjustified Absence*, *supra* note 111, at 743 (noting that “the cost of labor for the economy as a whole would rise because workers would have to be compensated for being subject to fraud by their employers”).

125 Assuming no new debt or primary equity offerings.
for labor is a primary market. Fraud misallocates labor from a “higher-value use to a lower-value use [and thus] inflicts a deadweight loss on society in every case.”\textsuperscript{126} Overall, fewer workers are hired than would be in a world without securities fraud.

As a result, accounting fraud is costly for employees, who cannot reduce that risk through diversification. The discussion about the implications of financial misrepresentations on employees applies equally to suppliers, vendors, and customers that make firm-specific investments or operate in markets where changing contractual partners is particularly costly. Suppliers, vendors, or customers that are organized as firms might pass on the cost to their providers of financial and labor capital, and perhaps down the chain—producing second and third order effects of financial misrepresentations.\textsuperscript{127}

### 3. Do Non-Shareholders Care About Financial Disclosures?

One might argue that employees, for example, do not read and rely on financial disclosures. Even if they did, a public firm’s disclosures are directed at the shareholders, not employees, so employee reliance is irrelevant. This Article offers four related responses.

First, the business community and some commentators seem to believe that public disclosures “are increasingly useless as sources of information.”\textsuperscript{128} There is no empirical evidence that this is in fact true. Public disclosures, and in particular audited financial statements, are generally perceived as cheap to find, comprehensive, and reliable because they are audited and certified, and carry a non-trivial risk of liability if found to be false.\textsuperscript{129}

But even if it were true that audited financial statements were irrelevant to investors, that says little about whether they are relevant to a firm’s employees. Many employees have access to private information about their employers, but the information is often incomplete and unverified. The larger, the more complex, and the more diversified the firm, the less useful is employees’ private information about their employer. It is rational for employees to rely on publicly-disclosed information unless they believe their private information is more accurate (\textit{e.g.,} because they are involved in or

\textsuperscript{126} Greenfield, \textit{Unjustified Absence}, supra note 111, at 749.

\textsuperscript{127} Welfare economics recognizes the existence of second and third order effects as firms pass on the cost to their counterparties, workers and customers, as customers cut-back on or shift to cheaper substitutes. Hal R. Varian, \textit{Intermediate Microeconomics: A Modern Approach} 635–38 (8th ed. 2009).


\textsuperscript{129} See Sadka, supra note 4, at 447 (noting that “enforcement makes financial statements credible”).
aware of the fraudulent scheme).\textsuperscript{130} Most public firms are sufficiently large that the vast majority of their employees really do not have access to the sort of internal information that would flag fraud.\textsuperscript{131}

Second, fraud begets more fraud. When a firm releases a false financial statement, its voluntary disclosures and its observable actions must be consistent with the false statement, or else fraud will be discovered.\textsuperscript{132} Mass layoffs at a time that a firm is reporting exponentially growing revenues are suspicious, at the least.

Firms’ managers recognize that employees read publicly disclosed information about the firm. For example, the auditor of Groupon, an online daily deal vendor, recently identified material weaknesses in the firm’s internal controls, which usually signals more serious problems. Shortly after the disclosure, Groupon’s CEO Andrew Mason addressed the firm’s 11,000 employees in a town hall meeting in order to reassure them that the firm was taking steps to fix the problem.\textsuperscript{133} Surely, the rank-and-file employees were not only concerned about the value of their Groupon stock, but also about their jobs.

Third, it is true that investors, creditors, and employees care about different information. Any information that moves the stock price is arguably relevant to investors. Banks and institutional creditors care about the risk of default and the liquidation value of their claims, so they are largely indifferent to firm performance above a certain threshold. For example, institutional creditors are very sensitive to a firm’s systemic weaknesses in internal controls that affect the firm’s overall control environment and financial reporting process, because they increase the uncertainty about the

\textsuperscript{130} The Arthur Andersen example, which is often used to argue against corporate criminal liability, is useful to illustrate the point. Most of the auditors working for Arthur Andersen had no idea that their firm was involved in the Enron fraud, yet all lost their jobs when the firm was indicted. See Elizabeth K. Ainslie, \textit{Indicting Corporations Revisited: Lessons of the Arthur Andersen Prosecution}, 43 AM. CRIM. L. REV. 107, 107 (2006). Cf. Stephen Morris & Hyun Song Shin, \textit{Social Value of Public Information}, 92 AM. ECON. REV. 1521, 1522 (2002) (explaining that it is rational for individuals to rely on public information when it is more reliable, but that overreliance on public information in the presence of precise private information reduces social welfare).

\textsuperscript{131} Morris & Shin, supra note 131, at 1532.


firm’s creditworthiness and liquidation value. Creditors are substantially less concerned about improper accounting of individual transactions.

On the other hand, most employees, suppliers, and vendors have open-term and implicit contracts with the firm. As a result, they are sensitive to specific information that makes contract termination more likely, such as declining sales or revenues of particular divisions and mounting debt burden, but they also care about general risk that the firm will lay off people on a large scale and shrink production. When faced with high debt payments, firms usually terminate employees first, before they default on a loan. As a result, at-will employees are quite sensitive to information about the performance of the firm and its divisions, as well as the firm’s loan burden.

And finally, one might contend that firms disclose their financial information to investors, and thus other market participants have no right to rely on it: their reliance is not justifiable in a legal sense. That may be, but that is only an argument against private causes of action, not against taking the total cost of securities fraud into account in public regulation and enforcement. Once relevant information is publicly disclosed, market participants will use it and relying on it. Moreover, it is social welfare enhancing for market participants to rely on accurate disclosures and make better-informed investment decisions. Conversely, their reliance on fraudulent financial disclosures reduces social welfare. Even if the disclosing firm’s employees have no legal right to sue for financial misrepresentations, the harms they suffer ought to be included in the calculation of the total harm that the false disclosure causes.

B. Intra-firm Cost: Evidence

No doubt, financial misrepresentations harm the firm’s shareholders. Dozens of studies report median stock-price declines ranging from 6
percent\textsuperscript{139} to a high of 38 percent.\textsuperscript{140} But as the theoretical discussion above suggests, financial manipulation harms the firm’s non-shareholder constituents also. Not surprisingly, the value of the firm’s debt usually declines when fraud is revealed.\textsuperscript{141} Thus far underappreciated has been the harm to employees. 

First, a couple caveats are in order. Most of the studies reported in this Article focus on the effects of recent restatements, issued between 1997 and 2002. It is possible that the period was significantly different because the frequency of manipulation was relatively high. Between 1988 and 2008, on average 21 firms per year faced an SEC enforcement action for securities fraud. Between 1997 and 2002, the average was 50 percent higher, or 32 firms per year.\textsuperscript{142} As a result, the findings reported below might not be representative of accounting fraud generally. 

In addition, most studies discussed report effects of all restatements, not just restatements accompanied by an enforcement action. An enforcement action is usually a strong signal for fraud, but a restatement without an enforcement action does not necessarily signal the absence of fraud. The SEC has historically used its limited budget to target smaller frauds and "the more obvious and spectacular cases of earnings manipulation."\textsuperscript{143}

This warrants two further observations. First, social welfare losses accompany even entirely innocent misstatements, but fraudulent misrepresentations ought to produce greater losses.\textsuperscript{144} If a misrepresentation is truly innocent, managers have no incentive to engage in costly masking strategies to avoid detection. An error might induce them to pursue an ill-informed business strategy, but will not lead to investments specifically chosen to disguise fraud. In addition, if managers do not try to conceal errors, it is plausible that the errors are detected and corrected sooner. Moreover, it is likely that honest managers will notice a discrepancy that is significant, suggesting that erroneous misstatements should also be smaller than those that are fraudulent. Finally, if innocent errors are distributed normally, they should cancel each other out (at least to some extent), some overstating earnings and others understating them. One would not expect entire industries to be distorted. As a result, measuring the effects of accounting fraud by looking at all restatements understates social welfare

\textsuperscript{139} Particia M. Dechow, Robert G. Sloan & A.P. Sweeney, Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC, 13 CONTEMP. ACCT. RES. 1 (1996).

\textsuperscript{140} Karpoff, Lee & Martin, supra note 69, at 582.

\textsuperscript{141} Tang, Tian & Yan, supra note 109, at 8–9.

\textsuperscript{142} Goldman, Stefanescu & Peyer, supra note 10, at 30 & tbl.3.

\textsuperscript{143} Dechow, Sloan & Sweeney, supra note 140, at 1.

\textsuperscript{144} Reasons include: if innocent, it is likely to be corrected sooner because firms do not avoid detection; managers are less likely to take on highly risky project hoping to hide fraud.
losses that each incident of fraud causes (assuming that at least some restatements are entirely innocent).  

1. The Cost of Fraud to Employees

Few studies have attempted to study whether and how harmful is accounting fraud to the firm’s employees and labor markets generally. Professors Kedia and Philippon estimated the real economic costs of financial misstatements to labor markets by examining a large sample of restating firms between January 1997 and June 2002, when about ten percent of all listed firms restated their earnings at least once. They found that restating firms hired and invested more than comparable firms during periods of suspicious accounting, and reduced labor and borrowing, and sold capital assets after the restatement. To maintain consistency between reported numbers and their business operations, restating firms mimicked firms that were growing as fast as the numbers would suggest. The authors showed that overinvestment would not have been possible but for the financial misrepresentation.

The implications of the Kedia and Philippon study are significant. Restating firms overhired and overinvested during the period of the misrepresentation and reduced both labor and investment thereafter. The subsequent decline is not offset by the earlier growth—it exceeds it and exceeds substantially the trends in the economy. While all non-farm payrolls increased by 6.7% between 1997 and 1999 and then declined by 1.5% in 2000 to 2002, employment in restating firms increased by 500,000 (25%) and then fell by 600,000.

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145 Not all restatements suggest fraud, not all accounting frauds are followed by a restatement or an enforcement action. Using restatements alone overstates, but using enforcement actions understates fraud. Professor Karpoff and his collaborators report that public enforcement actions accompany 40.2% of all restatements in their sample; they also note that many firms subject to an enforcement action do not survive long enough to file a restatement, and some simply ignore SEC’s instruction to file a restatement. Karpoff, Lee & Martin, supra note, at 585 & n.9.

146 See Kedia & Philippon, supra note 43, at 2172 (noting that theirs is the first article to study the “effect of earnings management on the allocation of resources”).

147 Id. at 2171, 2183, 2184 & tbl. 3 (finding that employment growth during the period of fraudulent reporting is 4.1% higher than in comparable non-fraud firms, and 4.4% lower in post-restatement periods; similarly with investments—4.4% higher during fraud and 5.6% lower thereafter).

148 Id. at 2185–87 (showing that “the magnitude of the earnings management and the degree of distortions in employment and investment are related, and that it is unlikely that a similar dynamic of employment and investment could happen without earnings manipulation”).

149 Id. at 2171.

150 Id. at 2193, 2194 & fig. 3.
More troubling is that industries marred by restatements lost jobs permanently, even where rivals were able to reclaim the restating firms’ market share—an expected boon for the shareholders. Instead of expanding their employment and investment to compensate for the losses of restating firms, rivals, too, reported negative employment and investment growth, coupled with strong labor productivity growth, compared with non-restating firms in more honest industries.\(^{151}\) However, increased labor productivity was not offset by higher wages.\(^{152}\)

IV. FINANCIAL MISREPRESENTATIONS AND EXTERNAL COST

A. The Cost of Fraud to Rivals: Theory

1. Economic Learning

Securities laws require firms to disclose specific information about lines of business, the cost of sales, and market share, which is useful to that firm’s present and potential rivals. Unlike in a stylized financial model where risk and expected returns of each project can be accurately calculated in advance, real-life managers do not know \textit{ex ante} which business strategy is optimal, and so they look to their rivals as gauges of what the market wants. Other firms’ financial disclosures and annual reports are “excellent source document[s]” that mitigate uncertainty about industry-level demand and costs, help firms in the same industry make strategic decisions, and distinguish good projects from bad ones.\(^{153}\) They are also cheap (certainly cheaper that industrial espionage), comprehensive, and relatively reliable,

\(^{151}\) In other words, non-restating firms increase their sales per employee (i.e., claim some of the restating firms’ market share), but do not hire any new employees. See id. at 2195, 2197.

\(^{152}\) See id. at 2193.

because they are audited and certified, and carry a non-trivial risk of liability if found to be false.154

If the market appears to reward particular strategies reported in financial disclosures, rivals will mimic what they perceive to be the best performer. If a line of business appears to be profitable, others firms might be attracted to enter the same market. While mandatory disclosure might reduce (monopolistic) profit margins and thus harm disclosing firms, it plays an important role in technology development, which is critical to growth.

Significant misreporting, particularly one of “core accounts, such as sales, market share, and cost,” 155 impairs rivals’ ability to discern the value of new business strategies, and other market participants’ ability to understand the markets in which they operate.156 As a result of a misrepresentation, an entire industry might overinvest, overborrow, and overhire.157

2. Distorted Competition

Fraudulent firms often adopt inefficient pricing or output to mask fraud, to which their rivals respond. Unless the fraudulent firm operates a monopoly without complements or substitutes, its pricing or quantity decisions—distorted to correspond with fraudulent financial reporting—distort product markets.158 Professor Gil Sadka found that while WorldCom was misreporting its financials, it charged low prices and increased its market share.159 Its competitors, Sprint and AT&T, responded by cutting their prices, and saw a substantial decline in their operating margins.160 Professors Bower and Gilson estimate that if WorldCom had set prices according to its real earnings, the industry could have generated an additional $40 billion in profit.161 Consumers might benefit from product market

154 See J. Gregory Sidak, The Failure of Good Intentions: The WorldCom Fraud and the Collapse of American Telecommunications After Deregulation, 20 YALE J. ON REG. 207, 209–10 (2003) (arguing that because WorldCom’s reporting about the growth of its business was subject to regulatory oversight, “it was reasonable to rival carriers to believe WorldCom’s misrepresentation”).

155 Durnev & Mangen, supra note 10, at 681.


157 See Brown & Angus, supra note 83, at 4–5 (describing the process of learning and economic growth). For example, WorldCom and the telecommunications industry significantly overinvested in long-distance capacity and Internet cable capacity as a result of WorldCom’s false reports about internet traffic. See Sidak, supra note 155, at 228–31.

158 Sadka, supra note 4, at 441.

159 Id. at 455–56.

160 Id. at 457.

161 Bower & Gilson, supra note 139, at 20.
distortions in the short-term. But if fraud bankrupts an entire industry, consumers are harmed in the long run, especially if the goods are durable.\textsuperscript{162} Alternately, fraud might “work” and allow the firm to cement a dominant position in the industry. Waste Management, a company that “fostered a culture of fraudulent accounting,” was charged with fraud not once, but twice.\textsuperscript{163} Yet it survived relatively unscathed and today dominates the market for solid waste removal, often charging monopolistic prices for its services—great for its shareholders, less so for consumers.

Professor Patricia Dechow and her collaborators confirmed empirically that fraudulent firms generally increased their scale during fraud.\textsuperscript{164} But, the size of the increase depended on the competitiveness of the industry. Fraud can substantially distort non-competitive product markets and produce billions of dollars in deadweight losses, as World-Com and its impact on the telecommunications industry demonstrate.\textsuperscript{165} In truly competitive markets where price is set by marginal cost, managers cannot as easily expand their firm’s market share either by lowering prices or increasing sales. If they do, they will quickly bankrupt the firm and fraud will be exposed.

Product market competition thus affects the size of the distortion from fraud, but not its existence: one firm’s change in price or output will always shift the equilibrium and affect the prices or output of other firms’ products.\textsuperscript{166}

\textbf{3. Contagion}

Assuming that fraud is an idiosyncratic event, rivals should, in theory, benefit, not lose, from its unmasking. Discovery of accounting fraud is costly for the firm, and so its rivals could use that opportunity to grab that firm’s market share, which should increase their stock price and employment.\textsuperscript{167}

\textsuperscript{162} Sadka, supra note 4, at 442 & n.4. For example, when American carmakers were near bankruptcy during the 2008–09 financial crisis, consumers were wary of buying GM cars for fear they would not be covered by the warranty. To allay their concerns, the federal government guaranteed their warranty claims.


\textsuperscript{164} Dechow et al., supra note 71, at 20.

\textsuperscript{165} Sadka, supra note 4, at 461.

\textsuperscript{166} Id. at 441.

On the other hand, providers of capital do not know if rivals of the fraudulent firm are misreporting also, so they demand higher risk premia or sell their stock in rival firms, which depresses their stock prices. In the accounting literature, the negative effect of discovery of accounting fraud in one firm on equity prices of rival firms is called contagion. Two factors cause contagion: investor concerns about rivals’ accounting quality, and the expected higher cost for new capital.\textsuperscript{168}

In addition to contagion, unmasking of fraud discloses that the prospects of a particular industry are less rosy than previously believed. In response, firms in that industry reevaluate their expected returns from existing investment and reduce current investment, thereby reducing their demand for labor and capital. Lower expected returns are reflected in lower equity prices.

\textbf{B. The Cost of Fraud to Rivals: Evidence}

\textit{1. Equity Market Externalities}

False disclosures affect rivals in several ways. First, after the false disclosure is released but before its falsity is revealed, rivals both, misinvest and face a relatively higher cost of capital as compared with the fraudulent firm. If investors are led to believe that the industry has good prospects, the cost of capital might decline for all industry firms, to some extent offsetting the cost of fraud to rivals (but, \textit{ceteribus paribus}, increasing the cost to non-industry firms). After the financial misrepresentation is corrected, rivals face contagion. In addition, rivals reduce their investment levels after a restatement because of changed opportunities for external financing, both equity and debt, and because they reassess the expected profitability of future projects.

Several studies find that a restatement (whether accompanied by an SEC or DOJ enforcement action or not) has a negative effect on stock prices of non-restating firms in the same industry. Professors Gleason, Jenkins and Johnson, who reviewed all restatements between 1997 and 2002, found that restating firms’ stock prices declined on average by 19.8 percent around the announcement date,\textsuperscript{169} and their rivals’ stock prices declined by a half percent.\textsuperscript{170} The effect on rivals of financial services firms was more pronounced, 1.5 percent.\textsuperscript{171}

\begin{itemize}
  \item \textsuperscript{168} See Xu, Najand & Ziegenfuss, \textit{supra} note 168, at 698 (explaining the causes and mechanics of the contagion effect).
  \item \textsuperscript{169} Christi A. Gleason, Nicole Thorne Jenkins & W. Bruce Johnson, \textit{The Contagion Effects of Accounting Restatements}, 83 ACCT. REV. 83, 91 (2008).
  \item \textsuperscript{170} Id. at 93.
  \item \textsuperscript{171} Id.
\end{itemize}
Professors Durnev and Mangen looked at a similar sample and confirmed the findings of the Gleason study. They found that both, the restating firms and their rivals experienced significantly negative abnormal returns around the announcement date—8.28% and 0.34% respectively. But the aggregate loss to rivals (and their shareholders) was much greater than the harm to shareholders in the restating firm: in one case that they looked at, the restating firm lost $141 million in market capitalization while its rivals lost $581 million.\textsuperscript{172}

Professors Goldman, Stefanescu, and Peyer’s study supplemented these findings.\textsuperscript{173} Looking only at restatements accompanied by an SEC enforcement action, the authors found that rivals’ stock price on average dropped by 0.54 percent around the date that fraud is unmasked.\textsuperscript{174} Declines were more pronounced in competitive industries, while in the most concentrated industries rivals’ stock prices on average increased after discovery of fraud. In the aggregate, rivals in the most competitive industries lost almost 4-times what the restating firms lost: $295 billion vs. $80 billion, measured by market capitalization. Rivals in the most concentrated industries, however, gained $0.69 billion, whereas the restating firms lost $39 billion.\textsuperscript{175}

The authors argued that rivals in competitive industries are less able to capture the fraudulent firm’s market share, both because there are many similarly situated firms vying for customers and because firms in competitive industries are resource-constrained.\textsuperscript{176} In contrast, rivals in concentrated industries can use their product market power to pass along the costs of the shock to their customers (protecting their profits and their stock price), while rivals in competitive industries cannot do so.\textsuperscript{177}

While all studies found a correlation between a restatement and a stock-price decline by rivals, they provided different explanations for that decline. Professor Gleason and her collaborators attributed the decline to two factors: contagion and learning. Not surprisingly, the authors found that the effect was more pronounced when the restating firm was relatively large and when restating and non-restating firms used the same external auditor.\textsuperscript{178} They also found that firms with high accruals—sales recorded before cash is received,

\begin{footnotesize}
\textsuperscript{172} Durnev & Mangen, supra note 10, at 699. The authors did not disaggregate how much of that loss is the result of shareholders’ concerns about the firms’ accounting and how much of the expected changes in investment strategy.
\textsuperscript{173} Goldman, Stefanescu & Peyer, supra note 10.
\textsuperscript{174} Id. at 4.
\textsuperscript{175} Id. at 4.
\textsuperscript{176} Id. at 4.
\textsuperscript{178} Gleason, Jenkins & Johnson, supra note 170, at 84.
\end{footnotesize}
also known as accounts receivable—suffered greater losses than those with relatively low accruals.\footnote{Id. at 83. Accruals more accurately reflect the business prospects of a firm, but they are less reliable than measuring sales by cash flow because management can exercise more discretion in accounting for accruals.}

Professor Gleason and her collaborators also found evidence that fraud interferes with economic learning: a restatement conveys new information about deteriorating industry conditions and suggests that the misrepresentation produced overinvestment by both, the restating firm and the industry.\footnote{Id. at 94.} Durnev and Mangen complemented the Gleason et al. findings and showed that rivals significantly reduce their investments within three years after the restatement.\footnote{Durnev & Mangen, supra note 10, at 697 (finding that competitors on average reduce investments by 5.6% in the year of the restatement, by 5.2% the following year, by 2.6% the year thereafter and by 16.2% in the third year after the restatement in the industry).} They argued that rivals rely on their peers’ financial statements in deciding whether and how much to invest. A restatement thus conveys new information, namely that the rivals overinvented in reliance on the false financial statements issued by peers.\footnote{Id. at 703.} Rivals reevaluate their expected return from existing investments and reduce current investment in response.\footnote{Id. at 680–81.}

Durnev and Mangen also found that restatements have a greater impact on rivals’ investments when restating firms have a larger market share.\footnote{Id. at 706.} The finding makes sense because there are fewer firms in more concentrated industries, and so a misrepresentation by an industry leader is more likely to be relied on and copied.

2. Debt Market Externalities

In addition to contagion and investment reconsideration, false financial disclosures increase the cost of debt for fraudulent firms and their rivals both before and after fraud is unmasked.

No empirical studies to date have estimated cost of the debt-market distortion during fraud. Assuming that the supply of capital is limited, fraud should distort the allocation of debt between firms. As fraudulent firms appear healthier than they really are, they can negotiate better borrowing terms than justified. Conversely, honest firms should face relatively worse borrowing terms than they would absent fraud.\footnote{Bar–Gill & Bebchuk, supra note 102, at 24.} In a competitive market, higher costs of capital translate into lower levels of investment by honest firms, depressing their employment and reducing their market share. Because
fraudulent firms are riskier than they appear, the net cost of misallocated debt capital is positive.

Professors Files and Gurun studied what happens to the cost of debt for rivals, suppliers, and customers of fraudulent firms after a restatement. The authors reviewed the loan terms of firms that borrowed within a year of a rivals’ restatement and found that lenders increased loan costs by five to nine basis points.\textsuperscript{186} They found similar effects when looking at loans to firms whose major suppliers or customers restated their earnings.\textsuperscript{187} In addition to demanding a higher interest rate, the lenders were more likely to ask for collateral and impose more restrictive financial covenants.\textsuperscript{188}

The authors demonstrated that lenders overreact to misreporting within the industry and along the supply chain: lenders tighten lending standards on firms regardless of the rivals’ accounting quality or overall economic health.\textsuperscript{189} The authors argued that higher cost of borrowing is caused by contagion,\textsuperscript{190} but additional explanations are possible. First, a restatement is correlated with bankruptcy, which usually leads to only partial loan repayment. Banks face reserve requirements, and a default reduces their ability to extend new credit. Assuming that the supply of capital is not unlimited, the price of credit must increase after a restatement even in the absence of contagion. Second, fraud reveals that the prospects of an industry are less rosy than previously believed, and thus rivals’ and suppliers’ risk profile worse, even if they never engaged in accounting improprieties themselves.

Professors Files and Gurun reported that lenders imposed relatively stricter post-restatement loan terms in competitive industries than in concentrated industries (measured by firms’ relative market shares).\textsuperscript{191} The authors attributed it to two factors: the fact that it is more difficult for firms in competitive industries to capture the restating firm’s market share, and contagion—the perception that firms in competitive industries are more likely to mimic accounting practices of their peers.\textsuperscript{192} But there is another possible explanation: firms in concentrated industries are able to pass the cost of business shocks, like a restatement or fraud, onto employees.

\textsuperscript{187} See id. at 32 (reporting an increase in the interest rate spread by at least seven basis points).
\textsuperscript{188} Id. at 27–28.
\textsuperscript{189} Id. at 29.
\textsuperscript{190} Id. at 21–22.
\textsuperscript{191} Id.
\textsuperscript{192} Id. at 21.
suppliers, and customers, and thus protect their profits.\(^{193}\) Knowing that, lenders demand a lower risk premium.

**C. The Cost of Fraud to the Government and Communities**

Finally, fraud distorts government policy, reduces the tax base, produces unemployment, and harms communities. Government often bases policy decisions on required disclosures. Gregory Sidak argues that WorldCom’s fraud distorted government policy, in addition to wreaking havoc on the firm’s rivals.\(^{194}\) Quoting former FCC Chairman Michael K. Powell, Sidak notes that federal and state governments use disclosures to set regulatory fees, determine interstate access charges for telecommunications, set rates for unbundled services, evaluate whether the division of federal-state jurisdiction is proper, and perform many other activities.\(^{195}\)

When fraud results in business exit or reduces profits and incomes, all levels of government suffer from reduced tax revenues and increased demand for social spending. A large firm’s failure or retrenchment causes disproportionate impacts on the community in which it is located. After Enron declared bankruptcy and several other local companies reported fraud, Houston, an otherwise prosperous and growing city, experienced a recession that was both longer and deeper than the national recession.\(^{196}\) Houston’s unemployment rate is generally lower than the national average. The Houston economy is dependent on oil prices and rises and falls with the price of crude. From 2000 to 2006, the price of crude tripled, and so Houston should have boomed.\(^{197}\) Instead, Houston’s unemployment increased in early 2002 (Enron declared bankruptcy in December 2001) and remained between 0.5 and 1 percent above the national average until late 2006.\(^{198}\)

**V. Determinants of the Cost’s Magnitude**

Not all financial misrepresentations are created equal. Some firms are more likely to misrepresent their performance than others, and some

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\(^{193}\) See discussion *infra* in Part V.


\(^{195}\) Id. at 236.


financial misrepresentations are more harmful than others. This Part briefly explains what factors increase the likelihood that a firm will commit fraud. It then analyzes what factors increase the social welfare effects of each occurrence of fraud.

A. The Likelihood of Fraud

The observed prevalence of fraud produces a biased estimate of its actual prevalence, and there is evidence that many frauds go undetected. Nevertheless, some observations are worth noting. Larger firms are more likely to face an SEC enforcement action for earnings manipulation: the largest 10.0% of firms by market capitalization accounted for 14.7% of SEC enforcement actions for fraud between 1982 and 2005, while the smallest decile featured in 5.1% of accounting and auditing enforcement releases (“AAERs”). Greater visibility and scrutiny might explain more detection among the larger firms, but their ability to afford the best auditors should mitigate against fraud in the first place.

Firms in growth industries, like computer software and hardware, retail and services, and those with substantial investments in intangible assets also are more likely to commit accounting fraud than firms in stable industries with substantial fixed assets the value of which depends less on managers’ judgment calls (such as refining or utilities). Firms with high P/E ratios, those seeking to raise new capital and those where managers’ pay is closely-linked to stock-price performance relative to rivals’ performance (e.g., indexed stock options) also are more likely to misstate their financials.

Finally, economists generally believe that product market competition should reduce the firms’ proclivity for fraud because it reduces agency costs, but the relationship “is not as easy to formalize as one might

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199 Gerakos & Kovrijnykh, supra note 84, at 1 (finding that on average, 17–20% of firms with sufficient data on COMPUSTAT exhibit significant earnings manipulation); Dyck, Morse & Zingales, Pervasive Fraud, supra note 60, at 7 (suggesting that three out of four frauds avoid detection).
200 Dechow et al., supra note 71, at 32 & tbl.2A.
201 Id. at 32 & tbl.2B, 34.
203 See Milton Friedman, Essays in Positive Economics (1953); Xavier Giroud & Holger M. Mueller, Does Corporate Governance Matter in Competitive Industries?, 95 J. Fin. Econ. 312 (2010) (showing that protections from hostile takeovers reduce market value of firms in concentrated industries, but not of those in competitive industries, suggesting that product market competitions disciplines management); K.J. Martijn Cremers, Vinay B. Nair &
Professors Wang and Winton find evidence that there is a kernel of truth to the notion: firms in competitive industries during periods of normal growth are generally about half as likely as their peers in concentrated industries to commit fraud. The effect is most pronounced in those competitive industries where financial statements are highly comparable: each firm’s disclosure provides information about other firms’ financial disclosures. If a manager misrepresents the firm’s earnings, outsiders can more easily detect that the disclosure is false by comparing it with the disclosures of honest rivals.

During periods of growth, however, the propensity of oligopolies for fraud remains unchanged, while in competitive industries the likelihood of fraud quadruples (as compared with its normal rate), and exceeds that of firms in concentrated industries. Periods of growth eliminate the constraints that competitive product markets ordinarily impose. The combination of easy money and a need for external financing to increase capacity creates a powerful incentive to misrepresent financials. Misrepresentations that paint a rosier picture than true further spur overinvestment in capacity. The bust that inevitably follows exposes both the fraud and the overinvestment, leading to business failure and significant distortion in product markets as well as markets for labor and capital.

B. The Size of the Distortion from Fraud

Several factors affect the costliness of accounting fraud: (a) size, duration and type of the misrepresentation; (b) characteristics of the

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204 Urs Peyer, Takeover Defenses and Competition: The Role of Takeovers, 5 J. EMP. LEGAL STUD. 791 (2008) (reporting similar findings).


207 Wang & Winton, supra note 203, at 39 & tbl.3.

208 Id. at 21.

209 The internet and telecommunication booms are recent examples. An older example includes railroads: extensive miles of track were laid (including spurs to future towns not yet built) by firms in the railroad industry only to be followed by numerous bankruptcies in the late 1870s. See ILLINOIS RAILROAD BOOM, 1865–73, http://www.eslarp.uiuc.edu/ibex/archive/vignettes/rrboom.htm. The Chicago Sun Times wrote in 1872 that wealth from the railroads “will so overflow our coffers with gold that our paupers will be millionaires. . . .” Id.
fraudulent firm, and (c) characteristics of the markets in which the firm operates.

1. Fraud Characteristics

A number of studies suggest that duration affects the cost of the misrepresentation: the longer fraud remains undetected, the greater the distortion.\(^{211}\) Even though a single-period misrepresentation can inflate the stock price substantially, persistent misrepresentations distort economic decisions more.\(^{212}\) Making things worse, managers announce income-decreasing restatements of greater magnitude more slowly than they announce restatements of smaller magnitude or those that increase income.\(^{213}\)

Professors Yu and Yu find evidence that firms’ political spending also delays discovery of fraud. They report that fraud persists longer and is less likely to be detected if the firm lobbies that if it does not. Moreover, they find that firms spend more on lobbying while the fraud is ongoing, both, compared with non-fraud lobbying peers and compared with their own lobbying expenditures before fraud.\(^{214}\)

The type of the misrepresentation matters also. Rivals, suppliers, and large customers are more likely to use and rely on a misstatement of core accounts, such as revenues, sales, market share, and cost of goods sold, than on the firm’s pension fund returns.\(^{215}\)

The size of the misrepresentation, and not just its duration or type, increases the distortion, but the correlation is weaker. A quantitatively large financial misstatement can substantially inflate the value of the company and distort capital and labor market allocation, as well as the firm’s product market decisions. The discovery of fraud immediately causes the stock price to fall substantially, lenders to accelerate their loans, and customers to flee, which might lead to insolvency.\(^{216}\) The large size also suggests that

\(^{211}\) See Brown & Angus, supra note 83, at 28 (observing that persistent fraud is far more damaging than intermittent fraud); James J. Park, Assessing the Materiality of Financial Misstatements, 34 J. CORP. L. 513, 550 (2009) [hereinafter Park, Materiality] (using fundamental analysis to argue that persistent misstatements ought to be presumptively material).

\(^{212}\) Cf. William Kinney et al., Earnings Surprise "Materiality" as Measured by Stock Returns, 40 J. ACCT. RES. 1297, 1310 (2002) (finding that the consequences of missing an earnings target by one cent vary widely, depending on context).

\(^{213}\) Myers, Scholz & Sharp, supra note 154, at 25.

\(^{214}\) Frank Yu & Xiaoyun Yu, Corporate Lobbying and Fraud Detection, J. FIN. & QUANT. ANAL. (forthcoming), available at http://ssrn.com/abstract=954368/ (finding that lobbying firms evade fraud detection 117 days longer, and are 38% less likely to be detected by regulators; and that they spend 77% on lobbying that non-fraud firms and 29% more during fraud periods than during non-fraud periods).

\(^{215}\) Dechow et al., supra note 71, at 19.

\(^{216}\) Park, Materiality supra note 212, at 553.
management was aware of the misstatement, further increasing the capital-market penalty, and causing a larger post-fraud adjustment in business activities.\(^{217}\)

2. **Fraudulent Firm Characteristics**

Firm size affects the cost of financial misrepresentations. Larger firms, like Enron and WorldCom, use more human and financial capital, and produce a larger displacement in the aggregate.\(^{218}\) Rivals are more likely to rely on and copy dominant firms’ behavior than they are to copy smaller firms, including their accounting practices.\(^{219}\)

3. **Market Characteristics**

The effect of competition in the markets for inputs and outputs on the cost of securities fraud is complicated. Product market competition generally reduces the likelihood that a firm’s managers will commit fraud.\(^{220}\) Similarly, if committed, accounting fraud in concentrated industries is more likely to distort rivals’ economic behavior.\(^{221}\) In markets with low barriers to entry, fraud encourages inefficient business entry.\(^{222}\) In addition, market concentration affects the size of the distortion from fraud as fraudulent firms change their pricing and output.

Empirical evidence suggests that rivals in concentrated markets are better able to capture the fraudulent firm’s market share after it is caught, but that the product market itself often shrinks in the aftermath of accounting fraud.\(^{223}\) In contrast, demand for audit, legal, and consulting services often increases after financial scandals.

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\(^{217}\) See id. at 554 (suggesting that when misstatements are large, it is more likely that management was aware of them, or at least should have been aware). The notion that large frauds are worse than small frauds produced the rule-like quantitative standard that a financial misstatement is immaterial unless it misrepresented net income by more than five percent. See Matthew J. Barrett, *The SEC and Accounting, in Part Through the Eyes of Pacioli*, 80 NOTRE DAME L. REV. 837, 874 (2005). That standard has since been replaced with a qualitative standard for materiality of a financial misstatement. SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45,150, 45,152 (1999).

\(^{218}\) Langevoort & Thompson, *supra* note 7, at 44–45.

\(^{219}\) See Gleason, Jenkins & Johnson, *supra* note 170, at 103–04 (finding that competitors’ stock prices decline significantly when the restating firm is large, but show no effect so when the restating firm is small); Wang & Winton, *supra* note 203, at 2.


\(^{221}\) See Balakrishnan & Cohen, *supra* note 205, at 9.

\(^{222}\) *Id.*

\(^{223}\) A misrepresentation of sales figures, for example causes firms in the industry to overestimate demand for their product and overinvest. Price competition below marginal cost
Relative market competition also affects who ultimately bears the cost of fraud. The conventional wisdom assumes that investors as residual owners bear the cost of securities fraud. But this conclusion is true only for firms in truly competitive industries, and in truly competitive, perfectly informed, and frictionless markets for labor, capital, and products. In all other cases—the vast majority—fraudulent firms, their rivals, and suppliers are able to shield their profits and their stock price, and pass along the cost of business shocks from the more competitive market for securities to the relatively less competitive markets for labor and product markets.\footnote{224}

Peress finds support for the relative competitiveness hypothesis in the product markets: firms use market power to pass on business shocks to customers and insulate profits.\footnote{225} Profits and stock prices in concentrated industries are more stable than expected, while product prices fluctuate wildly. Kedia and Philippon show that fraudulent firms and their rivals shift some of the post-disclosure cost of fraud onto employees.\footnote{226} After discovery of fraud, rivals capture the fraudulent firm’s market share, but do not increase employment.\footnote{227} Files and Gurun suggest that the lack of product market competition enables borrowers to negotiate better terms than their peers in more competitive industries in the aftermath of fraud, presumably because they can pass the cost onto their customers or employees.\footnote{228}

4. Summary

Accounting fraud at WorldCom was a perfect storm of factors that increased its economic destructiveness. The firm was very large, with a market capitalization of $186 billion at its peak. It misrepresented salient information, used to evaluate its and its rivals’ performance; it capitalized current expenses and reported line costs far below its rivals’, who were hard pressed to compete. The misrepresentation was substantial, over $12 billion, and went on for a while.\footnote{229} And finally, WorldCom operated in a highly

\footnote{224} Cf. Andrei Shleifer & Lawrence H. Summers, Breach of Trust in Hostile Takeovers, at 34, in CORPORATE TAKEOVERS: CAUSES AND CONSEQUENCES (Alan J. Auerbach ed., 1988) (observing that firms can transfer rents from employees to shareholders).
\footnote{225} See Peress, supra note 178, at 4–5. See also Annie Gasparro, Starbucks Bumps Up Prices, WALL ST. J., Jan. 4, 2012, at B2 (reporting that the firm’s customers were less sensitive to price increases than its rivals and so the firm decided to raise prices of brewed-coffee to offset higher costs caused by futures contracts for coffee—in other words, to shield investors from its market misjudgment by passing along the cost to its customers).
\footnote{226} See Kedia & Philippon, supra note 43, at 2195, 2197.
\footnote{227} Id.
\footnote{228} See Files & Gurun, supra note 187, at 21–22.
\footnote{229} Bower & Gilson, supra note 139, at 21.
concentrated and regulated telecommunications market. Its falsely-reported actions were copied by rivals and adopted by the government in developing telecommunications policy.\textsuperscript{230} Smaller frauds of shorter duration by smaller firms in competitive markets will inevitably cause losses that are more contained, but no less painful for terminated employees, creditors, or contractual partners.

VI. IMPLICATIONS AND SOLUTIONS

A. Implications

Financial misrepresentations generate costs above and beyond those suffered by shareholders of fraud-committing firms because they (1) induce socially-wasteful investments by creditors, employees, and other stakeholders (such as vendors, suppliers) while fraud is ongoing; (2) distort fraudulent firm’s decisions as managers try to mask fraud; (3) interfere with rivals’ ability to learn from fraudulent firm’s disclosures; (4) after fraud is revealed, it produces contagion to rivals and other firms, and a costly adjustment by shareholders and non-shareholder constituents to new information.

Combined, these four claims lead to several tentative conclusions for fraud regulation and enforcement. First, false disclosures cause intra-firm harms to shareholders and non-shareholder constituents, as well as external harms to rivals, non-rivals, and their constituents. Diffuse harms suggest that no single private party (or class of private parties) has optimal incentives to cause managers to internalize the cost of fraud: not investors,\textsuperscript{231} not

\textsuperscript{230} See Sidak, supra note 155, at 236–37.

exchanges, and not analysts and others who trade on information they have gathered.

Second, shareholders may be the theoretical residual owners, but because of diversification and the fraud discount, their exposure to securities fraud is quite limited. Employees and trade creditors, on the other hand, are at risk of securities fraud, in particular in concentrated industries, in industries where they make substantial firm-specific investments, and where exit is costly.

Third, for every fraud that is caught, there are many that remain hidden. While investors are indifferent to hidden fraud, firms are not. They rely on financial disclosures of other firms to devise their business strategy, and make misguided investments when other firms’ disclosures are false. They pay more for capital than their fraudulent peers. That cost is borne to some extent by providers of capital, but also by managers and employees of honest firms. Under current law, they are not compensated for their harm even when frauds are exposed, let alone for those that remain hidden.

Employees, trade creditors, and rival firms could, in general, rely less on their firm’s or their peers’ financial statements (a costly proposition as reliable information about the business environment is costly to obtain), particularly when those statements appear too good to be true. But that is exactly the problem with accounting fraud. If it is to work, it must be convincing. The best frauds were “successful” precisely because managers were able to fool the many markets in which the firm operated that their statements were truthful. The firm’s contracting parties may want to believe the information that is being disclosed because of their optimism bias. And even if rivals did doubt a fraudulent firms’ numbers, their own shareholders and market analysts might push them toward fudging their numbers.

B. Solutions

Many of the existing mechanisms designed to protect investors by increasing transparency and reducing the incentive to commit fraud also

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232 See Paul G. Mahoney, The Exchange as Regulator, 83 VA. L. REV. 1453, 1455 (1997) [hereinafter Mahoney, The Exchange as Regulator] (arguing that the benefits of regulatory competition would best be achieved by devolving more authority to securities exchanges); Pritchard, Markets as Monitors, supra note 74, at 928–29 (arguing that exchanges could enforce anti-fraud rules at lower cost than private litigation or securities regulators).


234 In an environment with low enforcement and high rewards for fraud, all competitors may find it optimal to commit fraud, even though the market overall would be better off if no-one committed fraud. See Ing-Haw Chen, Corporate Governance Spillovers 1 (unpublished manuscript), available at http://ssrn.com/abstract=1299652/ (observing that fraud at one firm can lead to increased misbehavior at other firms).
reduce the cost of fraud to non-shareholders, including requirements for auditor independence and SEC enforcement actions.

A common theme in why fraud harms non-shareholders is their reliance on false information. The following sections consider both less public disclosure and better disclosure as possible remedies. The Article singled out employees as a class of non-shareholders that is consistently harmed by fraud and particularly powerless to diversify that risk. The last section in this Part thus considers a couple compensation mechanisms, both private rights of action and an administrative victim compensation fund.

1. Is Less Public Disclosure the Answer?

Disclosure has been the preferred regulatory tool of American securities lawmakers since the 1930s. In addition to providing information to investors, increased disclosure enhances competition, and hence static efficiency, by informing rivals of profit opportunities and leading to production levels more consistent with marginal cost pricing.\(^{235}\) Disclosure of relevant business information produces a positive externality to the disclosing firm’s rivals, who learn about profitable business opportunities, its suppliers and customers, who can drive harder bargains, and its employees, who demand higher pay or leave.\(^{236}\)

But producing disclosures is costly for firms. The recently adopted JOBS Act is premised on the supposition the cost of disclosure and compliance exceeds its benefit to investors, in particular for “smaller” newly-public firms. The JOBS Act reduces disclosure and audit obligations for five years from the initial public offering for “emerging growth companies,” that is companies with less than $1 billion in annual revenues.\(^{237}\) Some have predicted that the Act will result in more fraud and thereby harm investors.\(^{238}\)

But what about the effect on non-shareholders? If accurate disclosures generate positive externalities, conversely, false disclosures must be bad for rivals, employees, and creditors because they misdirect their investments. If so, making disclosure less public or reducing the amount of information to be publicly disclosed could reduce the relative share of the cost of accounting fraud borne by non-shareholders, assuming all else is equal.

Although firms provide disclosures for their present and future shareholders, the Exchange Act requires public firms to must file their quarterly and annual reports with the SEC, which makes them publicly available through its online database EDGAR. If information were provided


\(^{236}\) *Id.* at 1345–46.


\(^{238}\) Coates, *supra* note 24, at 7.
to current shareholders directly, as is the case with privately-held firms, one might expect the external cost of fraud to be smaller. Rivals would make economic decisions independently of their peers, and with fewer eyes looking, fraudulent managers would be under less pressure to change hiring, investment, and pricing to mask fraud. Less scrutiny, however, would likely increase the prevalence of fraud. More fraud would, in turn, increase the cost of capital for all firms and depress overall economic growth.

Instead, the amount of information that firms are required to disclose publicly could be limited to information that is unlikely to be of interest to rivals, for example, such as the cost of sales (but still be disclosed to current shareholders and audited). Even assuming that the prevalence of fraud would not increase—likely an unrealistic assumption—reducing the amount of useful publicly disclosed information would also reduce the positive externality of disclosure. At least superficially, it would appear highly unlikely that less disclosure will on net increase social welfare.

2. Improving Disclosure

The current disclosure, audit, and compliance regime is not cheap. If the same resources could be deployed more efficiently, better disclosure ought to reduce the incidence and the cost of accounting fraud. This section briefly considers forensic audits, targeted enforcement, and qui tam actions for securities fraud as tools to improve disclosure.

Under the current regime, managers select their firms’ auditor, but managers are usually very loyal. A firm changes its auditor only in the aftermath of scandal. As a result, auditors know the managers that they audit and rely on the information that managers provide. The symbiotic relationship at best, dampens the auditor’s appetite for suspicious questioning, and at worst, leads auditors to rubber-stamping fraud.

Severing the agency relationship between management, who selects the auditor, provides the information, and pays for the audit, and the auditor ought to reduce the conflict of interest and improve audit quality. Forensic audits are usually commissioned by courts or enforcement agencies during an investigation into accounting improprieties, such as during the Lehman

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239 Fox, Retaining Mandatory Securities Disclosure, supra note 29, at 1345–46. Private firms, for example, disclose publicly very little information.

240 A senior auditor with one of the Big Four suggested that all four firms let their largest clients get away with suspicious accounting for fear of losing their business. Interview with Anonymous, Manager, KPMG, in Annapolis, MD (Apr. 27, 2012).

Brothers bankruptcy. While they are expensive and time-consuming, they are also very effective.

For example, ten percent of public firms could be randomly selected every year and required to undergo a forensic audit.\(^{242}\) Accounting fraud is both, more common and more harmful to non-shareholders in concentrated industries, so those could be targeted more often. Alternately, a forensic audit could be ordered if red flags are raised, such as bankruptcy,\(^ {243}\) or certain accounting practices that have been found to signal fraud, for example high and/or spiking accruals.\(^ {244}\) The SEC might not have the resources to conduct many forensic audits, but the cost could be shifted to firms. In exchange, other compliance requirements could be lifted, such as the controversial auditor attestation to management’s assessment of the firm’s internal controls under Sarbanes-Oxley Act’s Section 404.\(^ {245}\)

In addition, the SEC and judges could take into account aggregate social losses from fraud when choosing sanctions for fraudulent firms and their managers. The SEC declared in 2006 that it would consider “the extent of societal harm” when penalizing firms and managers for securities fraud, but it is yet to consider harm beyond that suffered by the shareholders.\(^ {246}\) Similarly, the Federal Sentencing Guidelines allow judges to take into consideration total economic harm caused by the offense, but the author is not aware that any judge had looked beyond the shareholders.\(^ {247}\) In addition, shifting the sanction onto managers ought to reduce the likelihood of fraud.\(^ {248}\)


\(^ {243}\) About one-third of firms charged with accounting fraud end in bankruptcy, and of the firms that file for bankruptcy, about a third is found to have committed fraud before filing. See source cited supra in note 89. This suggests that courts reviewing bankruptcy petitions should routinely look for securities fraud. But see Kelli Alces, Limiting the SEC’s Role in Bankruptcy, 18 AM. BANKR. INST. L. REV. 631 (2010) (arguing that SEC should not investigate and punish bankrupt firms).

\(^ {244}\) COSO STUDY, supra note 89, at 45 (noting that revenue fraud is consistently the most common variety of accounting fraud).

\(^ {245}\) Section 404(b) of the Sarbanes-Oxley Act requires the public firm’s auditor to attest to, and report on, management’s assessment of its internal controls. The Dodd-Frank Act exempted small firms with less that $75 million in equity from having to comply with 404(b) (4,700 public firms) because of the common perception that the cost of compliance exceeded the benefit to investors.


\(^ {247}\) U.S. Sentencing Guidelines, §2B1.1(b).

\(^ {248}\) See Velikonja, Leveraged Sanctions, supra note 20, at 2183–84.
Finally, in *Who Blows the Whistle on Corporate Fraud*, Dyck, Morse, and Zingales found that employees discovered and reported 19 percent of all frauds, more than any other group, including financial regulators, auditors, and securities analysts. Employees blew the whistle even before the Sarbanes-Oxley Act protected them from retaliation and before any monetary incentives were available.

The Dodd-Frank Act authorized monetary awards for whistleblowers whose tips lead to a successful SEC enforcement action. While awards for whistleblowers do not prevent fraud per se, they might reduce its duration, at least on the margin. If employees are deterred from reporting fraud because they might never work again, compensation is a useful incentive. The awards under the Dodd-Frank Act are conditional on the SEC successfully pursuing the enforcement action and are limited to the SEC’s discretion. A true *qui tam* action that would eliminate the SEC as the intermediary and allow employees to sue for fraud directly would strengthen employees’ incentives and give them greater control over the process. Fraud duration is an important determinant of the cost of fraud to non-shareholders. It is fair to assume that, on the margin, employee *qui tam* actions would expose fraud sooner and thus decrease the social welfare losses.

### 3. Victim Compensation

As this Article suggests, employees (and trade creditors, suppliers, vendors, customers, and their employees to the extent that firms externalize the cost) are among the victims of securities fraud who cannot diversify the risk of loss from fraud. To the extent that firms shift some of the cost of fraud from shareholders to employees—by reneging on implicit contracts not to fire, cut pay, or extract more work for the same pay—it would make not only practical, but also economic sense to require shareholders to internalize the cost of the firm’s activity. Requiring fraudulent firms and their managers to compensate all victims of fraud would seem to be the next rational step. This section considers employee lawsuits and a compensation fund, administered by a public agency, as possible remedies.

#### a. Victim Lawsuits

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250 Pub. L. No. 111-203, § 922(a), 124 Stat. 1841 (2010). The SEC has since adopted rules implementing the statutory provision. See 17 C.F.R. Part 240 and 249 (providing for a reward when the enforcement action yields a monetary sanction of $1,000,000 or more).

251 See discussion *supra* in Part V.
Rallying against securities fraud class actions is a favorite pastime of securities law professors. Class actions are costly, they overcompensate shareholders, who can diversify away the cost of fraud, and fail to deter the dishonest managers, since they never pay out of pocket.\footnote{See e.g., Alexander, supra note 45, at 1508–14 (proposing that damages be replaced with fines); Arlen & Carney, supra note 53, at 720 (proposing that firm-level liability be eliminated); Baer, supra note 41, at 1035 (proposing that insurance replace private actions); Bratton & Wachter, FOTM, supra note 73, at 69–70 (proposing that FOTM be abolished and the SEC step up its enforcement efforts); John C. Coffee, Jr., Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms, 84 B.U.L. REV. 301, 349–53 (2004) (proposing shifting liability to auditors); John C. Coffee, Jr., Reforming the Securities Class Action: An Essay on Deterrence and Its Implementation, 106 COLUM. L. REV. 1534, 1582–84 (2006); Alicia Davis Evans, Investor Compensation Fund, 33 J. CORP. L. 101 (2007) (proposing insurance in lieu of the class action); Donald C. Langevoort, Capping Damages for Open-Market Securities Fraud, 38 ARIZ. L. REV. 639, 641–42 (1996) (proposing capping damages in securities class actions); Frank Partnoy, Barbarians at the Gatekeepers?: A Proposal for a Modified Strict Liability Regime, 79 WASH. U.L.Q. 491, 540–46 (2001); Pritchard, Markets as Monitors, supra note 74, at 983 (proposing penalties instead of damages to be imposed by exchanges instead of individual plaintiffs); Amanda M. Rose, Reforming Securities Litigation Reform: Restructuring the Relationship Between Public and Private Enforcement of Rule 10b–5, 108 COLUM. L. REV. 1301, 1301 (2008) (proposing that the SEC screen securities class actions).} Employees, on the other hand, are harmed by fraud because they stay with the fraudulent firm in reliance on the false picture of its prosperity. When the firm discloses fraud, they lose their jobs and their investment in the firm. Could employees either individually or as a class bring an action for fraud?

Without a federal cause of action like the shareholder class action, employees would have to rely on the common law cause of action for fraud.\footnote{See Greenfield, Unjustified Absence, supra note 111, at 754 (discussing the lack of a federal remedy for defrauded employees).} Courts have been extremely reluctant to allow employees to sue firms for common law fraud by managers. Courts have held either, that the vague statements firms made about the firm’s prospects were not enforceable promises that induced reliance (e.g., “The plant is now profitable.”), or were forward-looking statements on which legal reliance is unwarranted (e.g., “We will not close the plant if it remains profitable.”).\footnote{Id. at 755.} Even if employees could somehow overcome the reliance hurdle by showing that they in fact relied on specific fraudulent financial disclosures, managers and the firm could defeat their claim by arguing that any disclosures were intended for investors, not employees. Employees’ reliance would not be legally justifiable.

Moreover, proving damages would pose severe evidentiary problems. The value of shareholders’ residual claims can be determined with relative ease by looking at the stock price. But serious event studies are needed in
fraud-on-the-market cases to suss out precisely what part of the stock price decline was caused by fraud and what is noise. Employment contracts are not tradeable and their value not ascertainable with ease, let alone any loss in the value of their human capital that results from fraud. Fraud causes employees to lose firm-specific investments. What is the value of that investment, and for how much have employees already been compensated? Many managers commit fraud when firms are faltering. How would employees prove that their jobs would not have been among those eliminated in the face of poor firm performance? If employees refrained from job search, how would they show their opportunity cost? What is the cost of reputational harm and how to disaggregate it from noise in the labor market? Inevitably, firms would worry that if workers are compensated for joblessness, they will stop looking for work. Should employees’ claims receive priority in bankruptcy, similar to shareholder settlements in WorldCom and Enron?

Finally, the fact-specific nature of these actions would likely make it cost-prohibitive if brought individually; the cost of litigation would exceed the loss to any individual employee. Could a class action be certified? The recent Supreme Court decision in *WalMart v. Dukes* suggests that class certification would be difficult. The fraud-on-the-market presumption of reliance used by public shareholders would not be available for employee claims. Employees would probably have to show actual reliance on particular false disclosures or statements, and the facts surrounding reliance would inevitably vary from employee to employee. Without commonality, a class action could not be certified.

The high cost of enforcement coupled with serious information problems suggests that a private right of action for employees might not be a cost-effective tool to reduce the incidence of fraud, even if legal obstacles could somehow be overcome.

b. Victim Compensation Fund

If private remedies are unlikely to succeed, public ones might do better. When pursuing fraudulent firms, the SEC does not need to show reliance nor damages, the barriers to private employee fraud actions. The SEC can impose civil fines against firms so long as the misrepresentation was material, was related to the sale of securities, and was made with scienter. The Sarbanes-Oxley Act also authorized the SEC to distribute civil fines that it collects from fraudulent firms to the victims of fraud, and the SEC has

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255 *See* Bratton & Wachter, *FOTM*, *supra* note 73, at 84–93 (discussing the difficulty in calculating shareholder losses).

distributed funds to defrauded shareholders in a number of high-profile cases.\textsuperscript{257}

As the Article argues, the shareholders are not the only victims of fraud. Thus, this Article proposes that Fair Funds be distributed to non-shareholder victims or securities fraud as a mechanism to force shareholders to internalize the cost of securities fraud. Forced cost-internalization is a more elegant solution, and one that is more likely to stick, than hoping that directors and managers will maximize social welfare, instead of shareholder welfare.\textsuperscript{258}

The victim compensation fund would be modeled after the fair fund for defrauded shareholders. It would be created at the public agency’s discretion whenever it appeared that non-shareholders were harmed when a firm misrepresented its financial performance. When making the decision to establish the fund, the administering agency would take into account factors that suggest high employee losses, such as substantial firm-specific investment and employee specialization, termination of a substantial number of employees and their inability to find alternative jobs, reputational harms, and whether fraud caused bankruptcy or merely delayed it. The agency would decide the size of the compensation fund as well as simple distribution rules. For example, terminated employees could receive three-, six, twelve- or more months’ salary depending on how long they remained jobless. Employees who could prove greater losses could collect more.

In the current political climate, it is implausible that a new agency could be created to protect the interests of employees during securities fraud.\textsuperscript{259} Creative reading of the securities acts and their legislative history, however, suggests that the SEC could adopt a rule authorizing the creation of the victim compensation fund.

Section 308 of the Sarbanes-Oxley Act, entitled “Fair Funds for Investors,” authorizes the SEC to distribute civil penalties collected from securities violators to “the victims of such violation.”\textsuperscript{260} Elsewhere in the same section, the statute quite clearly limits its scope to “injured

\textsuperscript{257} Barbara Black, \textit{Should the SEC Be a Collection Agency for Defrauded Investors}, 63 BUS. LAW. 317 (2008).

\textsuperscript{258} Adolf A. Berle, \textit{Corporate Powers As Powers In Trust}, 44 HARV. L. REV. 1049 (1931); E. Merrick Dodd, Jr., \textit{For Whom Are Corporate Managers Trustees?}, 45 HARV. L. REV. 1145 (1932); Adolf A. Berle, \textit{For Whom Corporate Managers Are Trustees: A Note}, 45 HARV. L. REV. 1365 (1932). Professors Hansmann and Kraakman concluded in 2001 that the debate had been resolved, but the financial crisis of 2008 has reignited the interest. See Henry Hansmann & Reirier Kraakman, \textit{The End of History for Corporate Law}, 89 GEO. L.J. 439, 439 (2001) (“There is no longer any serious competitor to the view that corporate law should principally strive to increase long-term shareholder value.”).

\textsuperscript{259} The Consumer Financial Protection Bureau has faced inordinate opposition from congressional Republicans.

investors," but not in the provision that authorizes the SEC to distribute funds collected from fraudulent firms and individuals to the victims. At the least, the text of the Fair Funds Statute does not preclude the inclusion of employees among the victims of securities fraud.

The “words of the statute should be read in context, the statute's place in the overall statutory scheme should be considered, and the problem Congress sought to solve should be taken into account.” The broader statutory structure of securities regulation suggests that honest securities markets serve an important resource allocation function in the economy. The Exchange Act itself notes that fraud and manipulation “precipitate, intensify, and prolong” national emergencies, which produce widespread unemployment and . . . affect the general welfare.” Moreover, the Sarbanes-Oxley Act that adopted the Fair Funds Statute was motivated by “social and economic dislocation, not simply investor losses.” It “refused shareholders any more governance power, either in terms of voting rights . . . or private litigation,” and instead increased public firms’ public accountability.

In the light of the text of the Fair Funds Statute and the purpose of the Sarbanes-Oxley Act as well as securities regulation more generally, Section 308(a) could be said to be ambiguous under *Chevron U.S.A. v. NRDC*. If so, a regulatory interpretation that includes employees among those harmed by securities fraud and thus plausibly “the victims of such violation,” should pass constitutional muster.

Realistically, however, such a rule might not survive judicial review without clear statutory authorization. In *Goldstein v. SEC*, the D.C. Circuit invalidated the SEC’s rule that provided that investors in hedge funds are “clients” of the hedge fund’s investment adviser. Instead, the Court reasoned that the hedge fund itself is the client, and denied individual investors redress against the investment adviser for fiduciary violations. By doing that, the Court signaled that it considered the SEC’s authority to interpret statutes to be very limited.

Even with statutory authorization, the D.C. Circuit might vacate a rule authorizing the victim compensation fund if the rule fails the cost-benefit analysis, as illustrated by *Business Roundtable v. SEC*. Section 971 of the

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261 15 U.S.C. § 7246(c)(1)(A) and (B).
262 *PDK Labs. Inc. v. DEA*, 362 F.3d 786, 796 (D.C.Cir.2004) (internal quotations omitted).
263 15 U.S.C. § 78b(4)
264 *Langevoort, Social Construction, supra* note 37, at 1828.
265 *Id.* at 1829.
266 *Id.* at 1828.
269 647 F.3d 1144 (D.C. Cir. 2011).
Dodd-Frank Act authorized the SEC to adopt a rule requiring companies to include shareholder nominees for the board of directors in the companies’ proxy solicitation. After a lengthy notice-and-comment period, the SEC adopted a rule requiring proxy access. The D.C. Circuit panel struck down the rule, arguing that the costs to investors exceeded the benefits. Measuring the victim compensation fund rule by the same yardstick—the costs and the benefits to investors—would inevitably doom it.

Nonetheless, the Article suggests that the SEC claim the power it has under the enabling legislation. Alternately, the Article proposes that the SEC use its authority to distribute fair funds to shareholders sparingly. Unless shareholders bear the full cost of fraud, the SEC should pay fines to the Treasury. Assuming that at least some employees displaced by securities fraud are eligible for unemployment and welfare benefits, shareholders of fraudulent firms ought to contribute to covering the Treasury’s cost.

c. Eliminating Securities Fraud Class Actions

Few legal instruments have been criticized for as long and by as many different authors as the shareholder class action, and for good reason. Class actions are costly, they overcompensate shareholders, who can diversify away the cost of fraud, and fail to deter the wrongdoer managers, since they virtually never pay out of pocket. In a recent article, Professors Bill Bratton and Michael Wachter proposed eliminating private shareholder class actions in exchange for strengthened public enforcement. This Article supplies yet another reason in favor of getting rid of the shareholder class action: the cost and the distraction associated with litigation further harms the firm’s employees, suppliers, and creditors.

CONCLUSION

This Article makes and supports, theoretically and empirically, a set of controversial claims. First, shareholders are not the only group harmed by false securities disclosures. Second, shareholders are in the best position to

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272 Business Roundtable, 647 F.3d at 1150.
273 Securities Exchange Act, Sec. 21(d)(3)(C)(i) (“A [civil] penalty imposed under this section shall be payable into the Treasury of the United States, except as otherwise provided in [the fair funds] section. . .”).
274 Bratton & Wachter, FOTM, supra note 73, at 69–70.
limit their exposure to fraud in the secondary market. The firm’s employees, its suppliers, vendors, customers, and rivals cannot as easily self-insure against fraud.

If so, then much of the modern debate whether the benefit of securities regulation to investors exceeds its cost is hopelessly confused. The misunderstanding of the economic cost of securities fraud has lead to misguided legislative, enforcement, and policy choices, including the JOBS Act’s reduced disclosure and compliance requirements, and the diminishing appetite for criminal and administrative enforcement against firms. Hopefully, this Article can redirect the debate and policy-making to a more complete understanding of the cost of fraud.