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An Argument for Imposing Disclosure Requirements on Public Companies

Michael D. Guttentag
mdg@mdg.com

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AN ARGUMENT FOR IMPOSING DISCLOSURE REQUIREMENTS ON PUBLIC COMPANIES

MICHAEL D. GUTTENTAG*

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I. INTRODUCTION

Disclosure requirements appear to offer a simple way to regulate complex markets. When disclosure is required, the parties to a transaction are more fully informed, and so, presumably, made better off without the need for a regulator to evaluate the merits of particular transactions. But the appeal of disclosure requirements is illusory. The costs and benefits of imposing disclosure requirements are complex, highly dependent on the context in which they are imposed, and generally difficult to measure. The ramifications of requiring disclosure usually range well beyond what is intended.

Nowhere is this discord between the simplistic appeal and complex reality of requiring disclosure more evident than in the federal government's regulation of public company securities. Disclosure requirements are the primary tool the federal government uses to regulate public company securities.¹ To comply with disclosure requirements, U.S. public companies produce more than one million pages of information every month.² But neither the Securities and Exchange Commission (SEC), with its reliance on the amorphous goal of main-

1. See, e.g., *Basic Inc. v. Levinson*, 485 U.S. 224, 230 (1988) (“This Court ‘repeatedly has described the ‘fundamental purpose’ of the [Exchange] Act [of 1934] as implementing a ‘philosophy of full disclosure.’” (quoting *Santa Fe Indus., Inc. v. Green*, 430 U.S. 462, 477-78 (1977) (quoting *SEC v. Capital Gains Research Bureau, Inc.*, 375 U.S. 180, 186 (1963)))).

2. This estimate is based on the author's review of pages filed with the Securities and Exchange Commission (SEC) in May 2004. This estimate probably understates future filing levels, since it is based on filings made prior to the complete implementation of the Sarbanes-Oxley Act of 2002. Sarbanes-Oxley Act of 2002, 15 U.S.C. § 7241(a) (West Supp. 2003) (Corporate Responsibility for Financial Reports) [hereinafter Sarbanes-Oxley Act] (instituting mechanisms to improve the reliability of public companies' disclosures).

taining “investor confidence,”³ nor the academic community, offering market failure arguments that are, at best, incomplete,⁴ can provide an adequate justification for federally mandating the information public companies must disclose. An immense regulatory edifice is built on an unsubstantiated faith in the efficacy of requiring disclosure.⁵

This Article addresses the lack of adequate justification for federally imposed disclosure requirements by starting *de novo* and considering which, if any, disclosure requirements should be imposed on public companies. To do this, the significant costs and benefits of disclosure are identified. Then a market failure argument for regulating public company disclosures that weighs both the costs and benefits of regulatory intervention is developed. Finally, this framework is used to evaluate a specific disclosure requirement. The analysis leads to a surprising conclusion. Federal public company disclosure requirements are inadequate in at least one important respect, not because there are too many disclosure requirements, but because there are too few. Public company managers should be required to disclose substantially more of the information they use to manage their firms’ operations than they are currently required to disclose.

Requiring full and fair disclosure became the cornerstone of federal securities regulation without much preliminary analysis. Franklin Delano Roosevelt, during his 1932 Presidential campaign, promised to enact federal legislation to protect investors.⁶ Roosevelt cited the prophylactic benefits of requiring disclosure, echoing the sentiments of Louis Brandeis’ 1914 book, *Other People’s Money*.⁷ The for-

3. Stephen J. Choi & A.C. Pritchard, *Behavioral Economics and the SEC*, 56 STAN. L. REV. 1, 23 (2003) (noting an excessive reliance on disclosure requirements by the SEC and arguing that “disclosure’s continued allure for the SEC stems from its being a ‘compromise’ solution, midway between doing nothing and regulating substantive conduct” and that the SEC “instead prefers to remain above the grubbiness of empirical data, preferring to ground its policy prescriptions in ‘investor confidence’”); *see also* Donald C. Langevoort, *Taming the Animal Spirits of the Stock Markets: A Behavioral Approach to Securities Regulation*, 97 NW. U. L. REV. 135, 173 (2002) (noting the absence of empirical support for policies implemented by the SEC).

4. *See infra* Part II.C.

5. Many scholars reach a similar conclusion as to the inadequacy of justifications for federal intervention into the disclosure practices of public companies. *See, e.g.*, Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 VA. L. REV. 669, 715 (1984) (concluding about public company disclosure regulation “we cannot identify either benefit or detriment”); Paul M. Healy & Krishna G. Palepu, *Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature*, 31 J. ACCT. & ECON. 405, 414 (2001) (concluding after a review of the research on disclosure requirements that “surprisingly little is known about why financial reporting and disclosure is regulated in the capital market”).

6. JOEL SELIGMAN, *THE TRANSFORMATION OF WALL STREET: A HISTORY OF THE SECURITIES AND EXCHANGE COMMISSION AND MODERN CORPORATE FINANCE* 41-42 (1982) (describing the securities regulation aspect of Roosevelt’s campaign).

7. LOUIS D. BRANDEIS, *OTHER PEOPLE’S MONEY AND HOW THE BANKERS USE IT* (1914). Roosevelt referred to Brandeis’ argument that “publicity is justly commended as a

mative draft of what was to become the Securities Act of 1933 borrowed heavily from the English Companies Act, an act that required companies issuing public securities to disclose benefits granted to promoters and underwriters.⁸ So it was not surprising that the securities legislation enacted in 1933 required “full and fair” disclosure as *the way to protect investors*.⁹

But investor protection does not provide a sound justification for imposing federal disclosure requirements on public companies. Starting in the 1960s, economists asked straightforward questions that could not be answered. Would it not be more efficient to let investors and owners agree among themselves as to what information a company would disclose?¹⁰ Once disclosure practices are agreed upon, would not all investors be protected, since securities prices rapidly

remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman.” *Id.* at 92.

8. James M. Landis, *The Legislative History of the Securities Act of 1933*, 28 GEO. WASH. L. REV. 29, 34 (1959).

9. SEC v. Ralston Purina Co., 346 U.S. 119, 124 (1953) (holding that the Securities Act of 1933 was intended “to protect investors by promoting full disclosure of information thought necessary to informed investment decisions”); Alison Grey Anderson, *The Disclosure Process in Federal Securities Regulation: A Brief Review*, 25 HASTINGS L.J. 311, 316 (1974) (“[T]he overriding concern of Congress in passing the [Securities and Exchange Acts] was to provide protection for small investors”); Joel Seligman, *The Historical Need for a Mandatory Corporate Disclosure System*, 9 J. CORP. L. 1 (1983) (reviewing the justifications of investor protection and information dissemination that were provided for the enactment of the Securities and Exchange Acts). An earlier draft of this legislation required the federal government to also undertake an evaluation of the soundness of companies wishing to raise funds, but Congressman Sam Rayburn, whose Commerce Committee oversaw the proposed securities legislation in the House, objected to granting such broad substantive review power to a federal agency. SELIGMAN, *supra* note 6, at 53-57.

10. See Stephen A. Ross, *Disclosure Regulation in Financial Markets: Implications of Modern Finance Theory and Signaling Theory*, in ISSUES IN FINANCIAL REGULATION 177 (Franklin R. Edwards ed., 1979) (arguing that market mechanisms ensure that managers will provide an efficient level of disclosure). The specific arguments that Ross offers have proven problematic. First, Ross argues that market mechanisms will be effective because of managers’ desire to maintain their reputation. *Id.* at 183-85. But scenarios exist in which labor markets fail to lead to an efficient level of disclosure. For example, managers may choose not to disclose particularly “bad” news if the firm is near collapse. See Mitu Gulati, *When Corporate Managers Fear a Good Thing Is Coming to an End: The Case of Interim Nondisclosure*, 46 UCLA L. REV. 675, 691-702 (1999) (discussing the final-period problem, when managers assume they will be exiting the labor markets); see also Jennifer H. Arlen & William J. Carney, *Vicarious Liability for Fraud on Securities Markets: Theory and Evidence*, 1992 U. ILL. L. REV. 691 (finding an increased tendency for corporate managers to commit fraud in their last period of employment). Second, Ross argues that information unraveling (in certain circumstances all private information, whether good or bad, is disclosed lest others assume the worst) would lead to the disclosure of all relevant information about the firm without regulatory intervention. Ross, *supra*, at 185-88. But it now seems unlikely that unraveling will lead to the disclosure of all relevant information by public companies. See *infra* note 136 and accompanying text (providing one explanation for why unraveling does not occur); see also Joseph A. Franco, *Why Antifraud Prohibitions Are Not Enough: The Significance of Opportunism, Candor and Signaling in the Economic Case for Mandatory Securities Disclosure*, 2002 COLUM. BUS. L. REV. 223, 265-77 (2002) (providing alternative explanations for why complete unraveling does not occur in the disclosure of information by public companies).

incorporate information?¹¹ How do disclosure requirements protect investors from fraud when someone intent on defrauding investors can simply disclose false information? Numerous empirical studies failed to discern clear benefits from the imposition of federal disclosure requirements on public companies.¹²

More sophisticated justifications for the federal regulation of public company disclosure practices have followed. Some scholars argue that federal disclosure requirements are a useful way to address contracting problems that arise when companies and investors try to negotiate disclosure practices.¹³ A company's owner might otherwise have difficulty convincing investors that she would continue to make full and fair disclosures once funds are invested. However, recent scholarship has shown that there are better solutions to these contracting problems than mandatory federal disclosure regulation.¹⁴

11. Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549 (1984) (describing the various ways in which information about a firm is rapidly incorporated into public securities prices).

12. For an analysis of the effects of the Securities Act of 1933, see Gregg A. Jarrell, *The Economic Effects of Federal Regulation of the Market for New Security Issues*, 24 J.L. & ECON. 613 (1981); Carol J. Simon, *The Effect of the 1933 Securities Act on Investor Information and the Performance of New Issues*, 79 AM. ECON. REV. 295 (1989); George J. Stigler, *Public Regulation of the Securities Markets*, 37 J. BUS. 117 (1964). For an analysis of the effects of the Exchange Act of 1934, see George J. Benston, *Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934*, 63 AM. ECON. REV. 132 (1973); George J. Benston, *An Appraisal of the Costs and Benefits of Government-Required Disclosure: SEC and FTC Requirements*, L. & CONTEMP. PROBS., Summer 1977, at 30. For a discussion of these empirical analyses, see Merritt B. Fox, *Retaining Mandatory Securities Disclosure: Why Issuer Choice Is Not Investor Empowerment*, 85 VA. L. REV. 1335, 1341 (1999) [hereinafter Fox, *Retaining Mandatory Disclosure*] ("I find the results of these empirical studies to be inconclusive."); Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 YALE L.J. 2359, 2372 (1998) [hereinafter Romano, *Empowering Investors*] ("Even today, little empirical evidence suggests that the federal [securities regulation] regime has affirmatively benefited investors."). See generally Roberta Romano, *The Need for Competition in International Securities Regulation*, 2 THEORETICAL INQUIRIES L. 387, 464-93 (2001) [hereinafter Romano, *Need for Competition*] (reviewing the implications and limitations of the findings from these studies). But see Michael Greenstone, Paul Oyer & Annette Vissing-Jorgensen, *Mandated Disclosure, Stock Returns, and the 1962 Securities Act Amendments (March 2004)* (unpublished manuscript) (finding significant positive effects from the 1964 Securities Act Amendments, which imposed new disclosure requirements on firms whose securities were traded over the counter), available at <http://www.kellogg.nwu.edu/faculty/vissing/html/secotc3272.pdf> (last visited July 2, 2004).

13. See, e.g., Franco, *supra* note 10, at 289 (arguing that mandatory disclosure requirements provide a system that "significantly constrains issuer discretion to withhold information strategically"); Paul G. Mahoney, *Mandatory Disclosure as a Solution to Agency Problems*, 62 U. CHI. L. REV. 1047, 1090-93 (1995) (arguing that requiring the disclosure of information about transactions between a firm and its agents is so common that it should be made a mandatory rule); Edward Rock, *Securities Regulation as Lobster Trap: A Credible Commitment Theory of Mandatory Disclosure*, 23 CARDOZO L. REV. 675 (2002) (arguing that federally imposed requirements are the best way to address contracting problems).

14. For example, an issuer could select the domain under which its securities would be regulated, much as companies now select the state in which they will incorporate. Such a federalist approach would avoid the costs of establishing a regulatory monopoly. See

Others argue that regulatory intervention is justified because of a market failure in the disclosure practices of public companies. These scholars point to the fact that companies have difficulty capturing the benefits their disclosures provide either (1) to the disclosing firm's competitors (interfirm externalities)¹⁵ or (2) to investors who use the information disclosed, but do not own the firm's securities.¹⁶ But these market failure arguments do not weigh the costs of regulatory intervention or specify which particular disclosure requirements would ameliorate the identified market failure.¹⁷

Determining which, if any, disclosure requirements should be federally imposed on public companies is a matter of some urgency. Securities markets are increasingly global.¹⁸ As a result, scholars and regulators are in the midst of trying to determine how different national securities regulation regimes should be integrated.¹⁹ Also, the Sarbanes-Oxley Act, enacted in response to the dramatic stock market decline from 2000 through 2002²⁰ and the record-setting level of

Stephen J. Choi & Andrew T. Guzman, *Portable Reciprocity: Rethinking the International Reach of Securities Regulation*, 71 S. CAL. L. REV. 903 (1998) (arguing that regulatory competition would be beneficial because of the diversity of disclosure needs among firms); Romano, *Empowering Investors*, *supra* note 12. Another solution to this contracting problem would be for a public company to commit to abide by the disclosure requirements of the stock exchange on which its shares are listed. See Paul G. Mahoney, *The Exchange as Regulator*, 83 VA. L. REV. 1453, 1466-75 (1997).

15. Effects on the welfare of other firms from the disclosure of information by a firm, if the disclosing firm cannot capture them, are known as interfirm externalities. Interfirm externalities can be either positive or negative, depending on whether the disclosures benefit or harm other firms. See Fox, *Retaining Mandatory Disclosure*, *supra* note 12 (arguing that interfirm externalities justify federal regulation of disclosure requirements); see also Merritt B. Fox, *The Issuer Choice Debate*, 2 THEORETICAL INQUIRIES L. 563 (2001) [hereinafter Fox, *Issuer Choice*] (responding to Romano's objections to the interfirm externality justification for federal disclosure regulation).

16. John C. Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717 (1984); see also William H. Beaver, *The Nature of Mandated Disclosure*, in *ECONOMICS OF CORPORATION LAW AND SECURITIES REGULATION* 317, 320-21 (Richard A. Posner & Kenneth E. Scott eds., 1980).

17. See *infra* Part III.B.

18. See, e.g., John C. Coffee, Jr., *Racing Towards the Top?: The Impact of Cross-Listings and Stock Market Competition on International Corporate Governance*, 102 COLUM. L. REV. 1757, 1759-60 (2002) (describing how the globalization of financial markets is accelerating); Joel Seligman, *Götterdämmerung for the Securities Act?*, 75 WASH. U. L.Q. 887 (1997) (noting the increasing tendency of issuers to opt out of the U.S. securities regulation regime).

19. See, e.g., James D. Cox, *Regulatory Duopoly in U.S. Securities Markets*, 99 COLUM. L. REV. 1200 (1999) (considering whether U.S. securities registrants should be allowed to satisfy mandatory disclosure requirements by using International Accounting Standards); Merritt B. Fox, *Securities Disclosure in a Globalizing Market: Who Should Regulate Whom*, 95 MICH. L. REV. 2498 (1997) (considering how international securities regulation should be harmonized); Floyd Norris, *Companies Pushed To Adopt International Audit Standards*, N.Y. TIMES, March 12, 2004, at C6 (reporting on the SEC vote to encourage foreign companies to adopt international accounting standards).

20. Public equity markets in the United States experienced their largest percentage loss since the Great Depression during this period with a decline in value in excess of

bankruptcies in 2002,²¹ including the notable bankruptcies of firms such as Enron and Worldcom, is facing heightened scrutiny. Public companies are questioning whether the substantial costs of complying with the Sarbanes-Oxley Act, enacted in response to these collapses, can be justified.²² But the appropriate scope and content of public company disclosure requirements cannot be determined without first developing a method to evaluate when disclosure requirements are welfare-enhancing.

So the first step in answering the question of what, if any, information public companies should be required to disclose is to construct a comprehensive model of the costs and benefits of disclosures by a public company. Previous scholarship has identified various costs and benefits triggered when disclosure requirements are implemented; however, an integrated framework is notably absent. For example, disclosure requirements trigger trade-offs similar to those implicated when evaluating intellectual property protections because disclosure requirements eliminate the simplest form of intellectual property protection—keeping information secret.²³ Requiring public companies to disclose information may diminish social welfare by reducing incentives to invest in innovation.²⁴ But no one, prior to this Article, has shown how to systematically consider this, as well as the many other costs and benefits of disclosure regulation, when evaluating public company disclosure requirements.

A legitimate argument for disclosure regulation must also specify when regulatory intervention is preferable to a market outcome. A sound justification for regulation should (1) identify a market failure, (2) measure the significance of that market failure, and (3) weigh the costs and benefits of undertaking a corrective regulatory intervention. Existing scholarship is again helpful, but flawed. The potential

seven trillion dollars. Martin Zimmerman, *2002 Ends Mixed as Markets Register Third Year of Declines*, L.A. TIMES, Jan. 1, 2003, at C1.

21. Kathy M. Kristof, *A Long, Sad Chapter 11 in History: Bankruptcies in 2002 Set Record*, L.A. TIMES, Dec. 31, 2002, at C1.

22. Deborah Solomon & Cassell Bryan-Low, *Companies Complain About Cost of Corporate-Governance Rules*, WALL ST. J., Feb. 10, 2004, at A1 (reporting the results of a survey finding substantial costs to public companies to implement the provisions of the Sarbanes-Oxley Act).

23. Anthony Kronman at Yale Law School makes a comparable point with respect to the connection between disclosure requirements and intellectual property protections when parties enter into a contract; he argues that the common law limits disclosure requirements in certain contractual settings to protect investments in information-gathering activities. Anthony T. Kronman, *Mistake, Disclosure, Information, and the Law of Contracts*, 7 J. LEGAL STUD. 1 (1978); see also Steven Shavell, *Acquisition and Disclosure of Information Prior to Sale*, 25 RAND J. ECON. 20 (1994) (providing a formal model supporting Kronman's conclusion and adding as a consideration whether an investment in information-generating activities does or does not produce socially useful information).

24. This is the primary trade-off economists have identified as relevant when evaluating intellectual property protections. See generally WILLIAM D. NORDHAUS, *INVENTION, GROWTH, AND WELFARE: A THEORETICAL TREATMENT* (1969).

harm from a market failure in public company disclosure practices is much greater than previously realized. Both proponents and opponents of federal disclosure regulation have estimated the potential harm from interfirm externalities by looking at the *difference* between the costs to a company from disclosing proprietary information and the gains to other firms from receiving the disclosed information. This focus on the *net* of the costs to the disclosing firm and the gains to third parties is intuitive, but incorrect. The better measure of the potential cost of an externality is provided by looking at the *gross* potential gains to third parties that are not recognized by the company making disclosures, and in the case of interfirm externalities, these potential gains are quite substantial.²⁵ It may well be that “reading public company financial statements is like reading tea leaves,”²⁶ largely as the result of a market failure. Of course, imposing a regulatory solution to address even a significant market failure will engender its own set of costs, all of which must be properly considered. Such an analysis can only be carried out in the context of evaluating specific disclosure requirements.

Thus, the third step in determining what, if any, information public companies should be required to disclose is to consider the efficacy of a specific disclosure requirement. The disclosure requirement evaluated here is a requirement that public companies disclose substantially more of the information generated within the firm to manage operations than currently is required to be disclosed.²⁷ Information subject to such a disclosure requirement would include both quantitative measures of a firm’s performance, such as the contribution to a firm’s profits from its various products, and qualitative measures of the firm’s performance, such as the level of customer satisfaction. Two reference points prove useful in evaluating this proposed disclosure requirement. First, the disclosure practices in transactions where information shared with investors is not made available to the general public provides an important benchmark. In these “private” transactions investors are, for the most part, provided substantially more internal management information than is disclosed to investors in public companies. Second, the disclosure requirements currently imposed on public companies that have signifi-

25. See *infra* Part III.B.

26. Interview with Catherine Sellman, Director of Research, Barrington Partners, in Santa Monica, Cal. (Jan. 14, 2004).

27. The primary existing requirement to disclose information generated within the firm to manage operations is the Management Discussion and Analysis (“MD&A”) disclosure requirement of Regulation S-K. Item 303, 17 C.F.R. § 229.303 (1996) (calling for “Management’s discussion and analysis of financial condition and results of operations”). This narrative discussion of the company’s financial performance is required to consider “known trends” and “uncertainties” regarding its operations and short-term and long-term cash sources and uses. *Id.* § 229.303(a)(1)-(3).

cant oil and gas exploration operations provide a useful example of how the type of expanded disclosure regulation under consideration here can be implemented.²⁸

The analysis supports requiring public companies to disclose substantially more internal management information than they currently disclose. This finding also suggests that the SEC needs to change the way in which it develops mandatory disclosure requirements generally. Currently the SEC gives substantial weight to the concerns of public companies about the costs of disclosing proprietary information,²⁹ but these are precisely the concerns that this Article shows are most likely to lead to a costly market failure.

This finding presents a challenge to those who argue that companies should be granted the right to choose the regime under which their securities are regulated. Legal scholars, most notably Professors Stephen Choi and Andrew T. Guzman at the Boalt Law School and Professor Roberta Romano at Yale Law School, have proposed that companies issuing securities be allowed to choose the regime under which their securities are regulated, just as corporations can elect their state of incorporation.³⁰ These issuer-choice proponents argue that there is no valid justification for imposing federal disclosure requirements on public companies, and their arguments are based on a fair reading of current scholarship. But the analysis in this Article shows that there may be, in fact, a legitimate basis for federal disclosure regulation. In the face of the findings here, the issuer-choice proponents need to show either that the federal government cannot implement the disclosure requirements called for here or that the costs of imposing these requirements outweigh the substantial benefits identified.

28. 17 C.F.R. § 210.4–10 (1999) (requiring disclosure of the estimated value of an issuer's proven oil and gas reserves); see also Heather Timmons, *Shell Reduces Estimate of Reserves Again*, N.Y. TIMES, March 19, 2004, at C1 (describing how executives at Royal Dutch/Shell Group misled investors by overreporting reserves in violation of these disclosure provisions).

29. See, e.g., Item 101, 17 C.F.R. § 229.101(c)(ii) (1999) (providing that an issuer is not required to disclose narrative information concerning new business lines and products “the disclosure of which would affect adversely the registrant’s competitive position”); 17 C.F.R. § 230.406(b)(2)(iii) (1999) (granting issuers the right to seek confidential treatment from the SEC). See generally V. Gerard Comizio, *Keeping Corporate Information Secret: Confidential Treatment Under the Securities Act of 1933 and the Securities Exchange Act of 1934*, 18 NEW ENG. L. REV. 787 (1983). Nor do public firms have an ongoing obligation to disclose material information. See Dale Arthur Oesterle, *The Inexorable March Toward a Continuous Disclosure Requirement for Publicly Traded Corporations: “Are We There Yet?”*, 20 CARDOZO L. REV. 135, 140–58 (1998) (describing when public companies do or do not have a “duty to speak”).

30. See Choi & Guzman, *supra* note 14; Romano, *Empowering Investors*, *supra* note 12; Romano, *Need for Competition*, *supra* note 12.

II. THE ECONOMICS OF DISCLOSURES BY A FIRM

The first step in answering the question of what, if any, information public companies should be required to disclose is to develop a comprehensive model of the costs and benefits of disclosures by a public company. A number of eminent scholars have considered the economics of disclosures by a firm, including William H. Beaver at the Stanford Graduate School of Business,³¹ Judge Frank Easterbrook and Daniel Fischel at the University of Chicago Law School,³² Merritt Fox at Columbia Law School,³³ and Edmund Kitch at the University of Virginia Law School,³⁴ among others.³⁵

However, this scholarship treats the economics of disclosures by a firm as a pedagogical matter, intended to provide a hypothetical regulator with a list of issues to be considered. In fact, a comprehensive microeconomic analysis of disclosure actually can be used to determine the efficacy of specific disclosure requirements, as shown by this Article. To address this shortcoming in the current scholarship on disclosure, it is useful to separate the costs and benefits of disclosure into three categories: (1) costs and benefits realized whether or not a company has publicly traded securities, (2) costs and benefits realized only when a company has publicly traded securities,³⁶ and (3) costs and benefits from disclosure that are not realized by the company making the disclosure (externalities).³⁷

Before proceeding, a brief methodological clarification is in order. The objective here is to identify all of the significant costs and bene-

31. See WILLIAM H. BEAVER, FINANCIAL REPORTING: AN ACCOUNTING REVOLUTION 185-205 (1981); Beaver, *supra* note 16, at 629, 642-44.

32. See Easterbrook & Fischel, *supra* note 5, at 707-14.

33. See Fox, *supra* note 19, at 2532-52; Fox, *Retaining Mandatory Disclosure*, *supra* note 12, at 1345-46, 1356-68.

34. See Edmund W. Kitch, *The Theory and Practice of Securities Disclosure*, 61 BROOK. L. REV. 763, 773-76 (1995).

35. There is an extensive literature in financial economics scholarship considering public company disclosures. This scholarship has focused primarily on determining (1) the extent to which disclosures influence share prices, see Healy & Palepu, *supra* note 5; Robert W. Holthausen & Ross L. Watts, *The Relevance of the Value-Relevance Literature for Financial Accounting Standard Setting*, 31 J. ACCT. & ECON. 3 (2001) (reviewing studies indicating which financial statement disclosures are relevant to a company's share price), and (2) explaining the theoretical dynamics involved in selecting disclosure practices, see Ronald A. Dye, *An Evaluation of "Essays on Disclosure" and the Disclosure Literature in Accounting*, 32 J. ACCT. & ECON. 181 (2001) (reviewing analytical models of firm disclosures); Robert E. Verrecchia, *Essays on Disclosure*, 32 J. ACCT. & ECON. 97 (2001) (reviewing analytical models of firm disclosures).

36. This category combines all types of public securities. Some of the costs and benefits of disclosure may only be realized by firms that have publicly traded equity, or perhaps only by those firms that have publicly traded equity distributed in a way that allows investors to directly influence manager behavior. Such refinements are not necessary to advance the analysis here.

37. This classification proves useful when determining what inferences about efficient public company disclosure practices can be drawn from disclosure practices in private transactions. See *infra* Part IV.C.1.

fits that could result from the disclosure of information by a company. Whether and to what extent a particular disclosure or disclosure requirement triggers some or all of the costs and benefits identified is considered later.³⁸

A. *Benefits from Disclosures by a Firm*

Scholarship on the economics of firm disclosure has identified numerous benefits from the disclosure of information by a firm, including reduced agency costs, a lower cost of capital, improved liquidity for the firm's shares, and a number of benefits that a company making a disclosure may not fully capture. This scholarship is summarized and supplemented here. The analysis starts with a consideration of the benefits from disclosures that can be captured by a firm making a disclosure, whether or not that firm has publicly traded securities.

1. *Benefits from Disclosures by Private or Public Firms*

Reducing agency costs, the costs that arise from the separation of management and ownership in business organizations,³⁹ is the primary benefit that firm disclosures provide whether or not a firm has publicly traded securities. Disclosures provide information that a firm's investors can use to monitor the performance and behavior of the firm's managers. As Fox explains, "[d]isclosure assists in the effective exercise of the shareholder franchise and in shareholder enforcement of management's fiduciary duties."⁴⁰ The more information a company discloses, the more effectively investors can evaluate how well the company's management is exploiting opportunities available to the firm.

One way to understand how increased disclosure can reduce agency costs is to consider what may result when disclosures are limited. In the absence of adequate disclosure, managers will focus on improving the limited set of their performance indicators that are observable by investors, even when improving these measures does not increase the value of the firm. The undue emphasis that managers at public firms place on reporting positive short-term financial results is one example of this cost. Public investors now rely primarily on summary financial results to monitor and reward manager performance. And, in turn, managers focus on improving these reported measures, even at the expense of creating value within the firm. Em-

38. See *infra* Part III.

39. See generally Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 J. FIN. ECON. 305 (1976).

40. Fox, *Retaining Mandatory Disclosure*, *supra* note 12, at 1364.

pirical⁴¹ and theoretical research,⁴² as well as anecdotal evidence,⁴³ suggests that the costs resulting from the opaqueness of summary financial information are significant. With increased disclosure, investors do not have to rely as much on indirect signals of value creation.

Publicly disclosing information will also reduce the amount of information to which managers have exclusive access. Managers can benefit from access to a company's undisclosed information at the expense of investors in several ways, even if the firm does not have public securities.⁴⁴ For example, managers can harm a firm by bringing this information with them to other companies. While much of the transfer of information in this way is prohibited,⁴⁵ there is some amount of this information that is either not legally protected or for which such protection is not effective. The cost of information transfers through labor markets may also be borne by a manager's current employer. An employee who remains with the same company may hold her company hostage to the extent that she has a credible threat of bringing this information to a competitor. In either scenario, the disclosure of information by a firm could reduce potential agency costs resulting from the expropriation of information by the firm's

41. See, e.g., Linda Elizabeth DeAngelo, *Managerial Competition, Information Costs, and Corporate Governance: The Use of Accounting Performance Measures in Proxy Contests*, 10 J. ACCT. & ECON. 3 (1988) (finding that incumbent managers use accounting discretion to improve reported financial performance during a proxy fight).

42. See, e.g., Jeremy C. Stein, *Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior*, 104 Q.J. ECON. 655 (1989).

43. The scandals at companies such as Enron and Global Crossing revealed that companies can and do enter into transactions that have a substantially greater impact on reported financial performance than on the value of the firm. While some of the transactions undertaken by these companies were clearly illegal, the surprising conclusion was that many of these types of transactions, though entered into to improve reported financial results, may have been legal and in accordance with GAAP. See, e.g., Randall Smith, *GAO Finds Hurdles to Linking Financial Firms to Fraud*, WALL ST. J., Mar. 17, 2003, at C1. But see Deborah Solomon & Randall Smith, *SEC Accuses Merrill of Fraud in Enron Deal*, WALL ST. J., Mar. 18, 2003, at C1. Former SEC Chairman Arthur Levitt observed:

For instance, many CEOs were paying more attention to managing their share price than to managing their business. Companies technically were following accounting rules, while in reality revealing as little as possible about their actual performance. The supposedly independent accounting firms were working hand in hand with corporate clients to try to water down accounting standards. When that wasn't enough, they were willing accomplices—helping companies disguise the true story behind the numbers.

ARTHUR LEVITT, TAKE ON THE STREET: WHAT WALL STREET AND CORPORATE AMERICA DON'T WANT YOU TO KNOW 8 (2002); see also ALEX BERENSON, THE NUMBER: HOW THE DRIVE FOR QUARTERLY EARNINGS CORRUPTED WALL STREET AND CORPORATE AMERICA (2003).

44. For a discussion of additional costs from managers' exclusive access to information when a firm does have public securities, see *infra* notes 52 to 54 and accompanying text.

45. See generally DONALD S. CHISUM & MICHAEL A. JACOBS, UNDERSTANDING INTELLECTUAL PROPERTY LAW § 1B, at 1-3 to 1-4.

managers.⁴⁶ Disclosure requirements may also deter fraud, as suggested by Brandeis, as long as there is a reliable mechanism in place to insure accurate and complete disclosure.⁴⁷

2. Benefits from Disclosures by Public Firms

There are additional agency cost savings from disclosures that may be realized when a firm has publicly traded securities. For one, increased disclosure by companies with public securities may facilitate the workings of the market for corporate control, which can reduce agency costs.⁴⁸ A potential acquirer can use disclosed information to refine her evaluation of the gains she could realize from an acquisition and to assist in arranging outside funding for the acquisition, if necessary. One example of how enhanced disclosure can improve corporate control markets is the way additional disclosure requirements imposed on companies with oil and gas exploration operations, starting in 1978,⁴⁹ facilitated the increase in hostile takeover activity in this industry sector, beginning in the early 1980s.⁵⁰

Disclosures also improve share price accuracy.⁵¹ Improved share price accuracy reduces agency costs by providing investors a more reliable indicator of manager performance, and a more efficient means to reward value creation within the firm. With improved share price accuracy, insiders also have fewer opportunities to trade profitably in their company's securities.⁵² This method of "expropriating" a public

46. Of course, publicly disclosing such information may also be costly to the firm, as discussed *infra* Part II.B.

47. See BRANDEIS, *supra* note 7.

48. See, e.g., Frank H. Easterbrook & Daniel R. Fischel, *Corporate Control Transactions*, 91 YALE L.J. 698, 705 (1982) ("Corporate control transactions can reduce agency costs if better managers obtain control of the firm's assets or if they alter the incentive structure facing existing managers. Corporate takeovers, and subsequent changes in management, increase the wealth of investors.").

49. See *supra* note 28.

50. The author used this newly disclosed financial information when working as an investment banker on several of these transactions.

51. Share price accuracy refers to the extent to which share prices provide a reliable indicator of the underlying value of a firm's assets. See generally Jeffrey N. Gordon & Lewis A. Kornhauser, *Efficient Markets, Costly Information, and Securities Research*, 60 N.Y.U. L. REV. 761 (1985). The extent to which share price accuracy improves with increased disclosure is difficult to calculate because a company's "true" value is not directly observable. This limits the inferences that can be drawn from the numerous studies that show that disclosures do have an impact on a company's stock price. See, e.g., Healy & Palepu, *supra* note 5; Holthausen & Watts, *supra* note 35.

52. See, e.g., H. Nejat Seyhun, *The Effectiveness of the Insider-Trading Sanctions*, 35 J.L. & ECON. 149, 158-67 (1992) (showing that insiders generate abnormal positive returns from trading in their own company's stock). See generally Jesse M. Fried, *Reducing the Profitability of Corporate Insider Trading Through Pretrading Disclosure*, 71 S. CAL. L. REV. 303, 321-22 (1998) (citing several empirical studies showing that insiders earn significant returns through insider trading and hypothesizing that "the most plausible explanation for this result is that insiders are trading on information that is not available to the rest of the market").

firm's information by a firm's agents is generally considered contrary to the firm's interest,⁵³ as evidenced by insider-trading restrictions.⁵⁴

In addition to reducing agency costs, there are other benefits from increasing the accuracy of share prices. Ian Ayres at Yale Law School has shown how improving share price accuracy benefits a firm's shareholders by reducing uncertainty when a shareholder wants to sell shares.⁵⁵ Increased disclosure by a firm can also lower a firm's cost of raising capital and improve the trading liquidity for the firm's securities.⁵⁶

3. *Benefits from Disclosures Not Captured by the Disclosing Firm*

There are several benefits from the disclosure of information that the firm making the disclosure may not be able to fully capture. Legal scholars have identified these disclosure externalities in their attempts to show that market failures justify federal disclosure regulation. These externalities can be categorized based on the different third-party beneficiaries identified, including (1) a company's competitors, who may benefit from the disclosure of proprietary information (interfirm externalities), (2) the economy as a whole, which could benefit from an improved allocation of assets, and (3) investors, some of whom may use disclosed information despite not owning shares in the disclosing firm. Each category of externalities is now considered in turn.

Professor Fox is the leading proponent of the argument that companies disclosing proprietary information are not able to capture the benefits their disclosures provide to the company's "competitors, major suppliers and major customers."⁵⁷ Fox argues that companies disclose less of this proprietary information than would be socially optimal because of these interfirm externalities.⁵⁸ Fox is correct that companies do not internalize all of the effects their disclosures have on their competitors, and so there is an externality at play.⁵⁹ Fox does

53. Fried, *supra* note 52, at 306-08 (summarizing the arguments for why insider trading should be prohibited).

54. *Id.* at 308-10 (summarizing the "system of rules designed to reduce the profits from [insider] trading").

55. Ian Ayres, *Back to Basics: Regulating How Corporations Speak to the Market*, 77 VA. L. REV. 945, 987-92 (1991) (modeling the benefit to selling shareholders from improved share price accuracy).

56. See Healy & Palepu, *supra* note 5, at 429-31 (summarizing theoretical arguments for and empirical evidence of the connection between enhanced disclosure, improved stock liquidity, and a lower cost of capital).

57. Fox, *Retaining Mandatory Disclosure*, *supra* note 12, at 1345. For narrative simplicity I refer to these three potential beneficiaries collectively as the "company's competitors" throughout the rest of this Article. See also Easterbrook & Fischel, *supra* note 5, at 697-98 (noting that firm externalities may justify federal disclosure regulation).

58. Fox, *Retaining Mandatory Disclosure*, *supra* note 12, at 1339.

59. See *infra* Part III.A.

not, however, provide a convincing argument that these interfirm effects are always positive or that this externality can or should be rectified through regulatory intervention.⁶⁰

Public company disclosures may also benefit the economy as a whole in ways that are not fully realized by the firm making the disclosures. For example, investors and managers at other firms might use public company valuations to decide whether to commit resources to business opportunities similar to those of highly-valued public companies. There are two steps to the argument that disclosures produce an externality by improving the allocation of assets throughout the economy. The first step is that increased disclosure improves the accuracy of share prices.⁶¹ The second step is that more accurate share prices lead to more efficient asset allocation throughout the economy in ways that are not captured by the firm making such disclosures.⁶² While each step in this argument is reasonable, it proves difficult to quantify the scale of either of these effects.⁶³ Arguments that relate asset allocation in the economy with public company disclosure requirements are, at best, anecdotal.⁶⁴

Finally, commentators have offered several arguments as to why there is a market failure with respect to the production of useful information to investors.⁶⁵ One argument is that without regulatory in-

60. See *infra* notes 90-100 and accompanying text.

61. See *supra* note 51 and accompanying text.

62. See Randall Morck, Andrei Shleifer & Robert Vishny, *The Stock Market and Investment: Is the Market a Sideshow?*, in 2 BROOKINGS PAPERS ON ECON. ACTIVITY 157 (1990); see also Marcel Kahan, *Securities Laws and the Social Costs of "Inaccurate" Stock Prices*, 41 DUKE L.J. 977 (1992) (analyzing the costs of various inaccuracies in share prices); Lynn A. Stout, *The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Regulation*, 87 MICH. L. REV. 613 (1988) (arguing that efficient stock markets do not have a significant effect on economic productivity).

63. The decline in technology equity values in the United States after March 2000 provides an anecdotal way to explore this effect. In 1999 and 2000, substantial funds were invested in the Internet and telecommunications industries, investments that were motivated in large part by the public market valuations of companies operating in these sectors. These investments now appear to be somewhere between ill-advised and wasteful. While the extent to which real investment activity appeared to be driven by public company valuations during this period was striking, this observation is of little evidentiary value. On one hand, if these valuations were the result of irrational exuberance, the disclosure of additional information may not have altered these valuations. On the other hand, if these valuations were rational at the time, increased disclosure should not have systematically impacted these valuations.

64. The improved asset allocation rationale for regulatory intervention also fails to provide guidance as to what the content of disclosure requirements should be. The objective of improving asset allocation in the economy would suggest that public companies disclose information that would make share prices more accurate, but this objective provides no added insight on how to weigh the costs of disclosure against these benefits.

65. There is also a related line of arguments based on the observation that the firm may be the low-cost producer of firm-specific information, and so the firm should produce and distribute this information rather than investors. But this is not an externality argument, and so it is not included here. See Douglas W. Diamond, *Optimal Release of Information by Firms*, 40 J. FIN. 1071 (1985); see also, Easterbrook & Fischel, *supra* note 5, at 684

tervention, information about the firm will be overproduced because investors will expend resources to gain an advantage over other investors, such expenditures in “foreknowledge” do not increase social welfare.⁶⁶ Another argument, whose leading proponent is John Coffee at Columbia Law School, points to the fact some investors benefit from information disclosed by the firm, without bearing the cost of generating this information, if they do not own that company’s securities.⁶⁷ This public goods problem could lead to the underproduction of information about the firm.

While both the social waste and public goods arguments suggest that the firm should disclose additional information to ameliorate a market failure, these arguments also suggest that increased disclosure will have the opposite effects on the total amount of information produced about the firm. Because it is difficult to determine the scale of the social waste or public goods effects, it is not clear in what direction the combination of these two effects will point.⁶⁸ It may be that without any regulatory intervention, the overproduction of information by investors attempting to “beat the market” is just enough to offset the underproduction of information that results from the public goods nature of this information. Because of this uncertainty, the impact of disclosure on the production of information for investors is not included as an economic benefit of disclosure here.⁶⁹

4. *Insights from Intellectual Property Economics*

Benefits implicit in the relationship between disclosure requirements and intellectual property protections also need to be included as a potential gain from disclosure. Information held within a com-

(“[F]or most information about a firm, the firm itself can create and distribute the knowledge at less cost than the shareholders . . .”).

66. See Jack Hirshleifer, *The Private and Social Value of Information and the Reward to Inventive Activity*, 61 AM. ECON. REV. 561, 565-66 (1971).

67. See Coffee, *supra* note 16, at 732; see also Beaver, *supra* note 16, at 626-28.

68. Coffee undertakes a valiant effort to make this calculation and suggests that the problem of underproduction of information, as compared with overproduction of information, is probably greater, at least in the context of companies that are not “covered” by Wall Street analysts. Coffee, *supra* note 16, at 731-32. *But see* Beaver, *supra* note 16, at 636 (noting that the “tendency for an excessive amount of information” to be produced has “the converse [implication] of the public good argument which implies an inadequate amount of disclosure”); Easterbrook & Fischel, *supra* note 5, at 681-82; Romano, *Empowering Investors*, *supra* note 12, at 2367 n.20 (“The economic theory underlying the argument concerning information production is ambiguous, however: Capital markets can overproduce information as well as underproduce it.”).

69. Even if the underproduction of information about the firm were accepted as a basis for regulatory intervention, it is unclear what guidance this argument would provide as to what information should be subject to public company disclosure requirements. The logical implication would be that the firm should produce more information that is useful to investors. But such a recommendation provides little guidance as to how to balance the costs of disclosure with its usefulness to those who do not own the firm’s securities.

pany can create monopoly power for the firm, comparable to the monopoly power conferred under intellectual property law.⁷⁰ Disclosures can reduce a firm's monopoly power, which could lead to a gain in consumer welfare.⁷¹ A simple example illustrates this potential benefit. Consider the consequences of eliminating the *de jure* protection provided by intellectual property rights rather than reducing the *de facto* protection provided by nondisclosure. There would be a welfare gain as companies would no longer be able to charge premia for patented products or copyrighted materials. Of course, there would be costs as the incentives to invest in creating patented products or copyrighted materials are reduced. These costs, considered separately, are discussed below.⁷²

B. Costs of Disclosures by a Firm

As with the benefits from disclosure, the costs from the disclosure of information by a firm can be separated into three categories: (1) those costs incurred whether or not a company has publicly traded securities, (2) those costs incurred when a company has publicly traded securities,⁷³ and (3) the costs that disclosure may impose on parties other than the firm making the disclosure.

1. Costs of Disclosure for Private or Public Firms

Some of the costs of disclosure are incurred whether or not the information disclosed is made available to the public.⁷⁴ The primary *production cost* is the "direct" cost of preparing and disseminating information about the firm.⁷⁵ While disclosure production costs are in-

70. The essential difference is that in the case of undisclosed information the protection is *de facto*, provided simply by maintaining secrecy, while in the case of intellectual property law the protection is provided *de jure*.

71. See F.M. SCHERER & DAVID ROSS, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE* 21-29 (3d ed. 1990) (describing how reducing monopoly power increases social welfare).

72. See *infra* notes 84-87 and accompanying text.

73. It is assumed for expository simplicity that information disclosed by a firm generally will be made available to the public if, and only if, the firm has publicly traded securities. It is also assumed that information cannot be selectively disclosed by public firms to some members of the public but not others. This is consistent with the requirements of Regulation FD, 17 C.F.R. §§ 243.100-103 (2000) (restricting the ability of public firms to selectively disclose nonpublic material information to certain market participants); see Stephen J. Choi, *Selective Disclosures in the Public Capital Markets*, 35 U.C. DAVIS L. REV. 533, 537-40 (2002) (describing the operation of Regulation FD).

74. The distinction here between private disclosure and public disclosure is necessarily one of degree, since even a private disclosure involves sharing information with parties who may be outside the firm.

75. This distinction follows Beaver, *supra* note 16, at 629 (distinguishing between the direct costs of disclosure which "include the costs of the production, certification, dissemination, and interpretation of disclosures," and the indirect costs of disclosure which "include the adverse effects of disclosure on competitive advantage"), and Fox, *Retaining*

curred whether or not a firm has publicly traded securities, such costs will usually be greater for firms with publicly traded securities for several reasons. First, public companies typically have a larger number of shareholders to whom materials need to be distributed. Second, heightened diligence is usually applied in preparing materials when a firm has publicly traded securities because of the risk of revealing competitively disadvantaging information and because of increased concerns about liability.⁷⁶

2. *Costs of Disclosure for Public Firms*

Some of the costs of disclosure result primarily from providing the public-at-large access to the information disclosed by the firm. The primary “publication cost”⁷⁷ is the competitive disadvantage that may result when a firm discloses proprietary information. The example typically offered of such a publication cost is the entry of competitors when it is disclosed that a certain business is particularly profitable.⁷⁸ With new entrants, the firm making the disclosure is likely to see profits decline.

Two other publication costs that scholars have identified, litigation costs⁷⁹ and the risk that increased disclosures facilitate anticompetitive behavior,⁸⁰ are not included in the microeconomic model of disclosure offered here. Litigation costs are not included here because it is unclear as a practical or theoretical matter that increased disclosure leads to increased litigation costs. One could imagine a system where even inaccurate disclosures create a safe harbor from litigation or, perhaps, substantial protection from litigation risks resulting from such disclosures. For example, the SEC granted such protection for forward-looking statements starting in 1978, as long as “meaningful cautionary statements” were also provided.⁸¹ In such circumstances, increased disclosure could reduce rather than increase litigation costs. As for the risk of facilitating anticompetitive activity, there is little evidence available to address this issue.

3. *Costs of Disclosure Imposed on Other Firms*

Publication costs can also fall on companies other than the firm

Mandatory Disclosure, *supra* note 12, at 1345 (distinguishing between “operational” costs of disclosure and “interfirm” costs of disclosure).

76. See Kitch, *supra* note 34, at 770-72.

77. Instead of the term “publication costs”, Beaver, *supra* note 16, at 629, defines these costs as the “indirect costs” of disclosure, and Fox, *Retaining Mandatory Disclosure*, *supra* note 12, at 1345, uses the term “interfirm” costs.

78. See *infra* note 136 and accompanying text; Beaver, *supra* note 16, at 627.

79. See Kitch, *supra* note 34, at 770-72.

80. See Romano, *Need for Competition*, *supra* note 12, at 389.

81. See 17 C.F.R. § 230.175 (1999).

making a disclosure. A simple example illustrates this possibility.⁸² Suppose that before any disclosures are made, two firms have information that provides these firms an unassailable competitive advantage, and that they jointly exploit this advantage in an oligopolistic fashion. Now suppose that one of these firms is required to disclose this information. The public dissemination of this information would reduce the competitive advantage previously shared by these firms, and so would reduce the profits of both the disclosing firm and the other firm. Of course, despite the harm to both the disclosing firm and its competitor in this situation, the disclosure could be welfare-enhancing, because of the economic gains that result from reducing monopoly power.⁸³

Publication costs may also fall more broadly. The economic analysis of intellectual property rights helps to clarify the impact that disclosure requirements can have on investment decisions. A company that knows that it may be required to disclose proprietary information in the future will reduce its estimate of the returns that it expects to receive from investments in gathering this information. This, in turn, will reduce investments in innovation.

There is, however, an important caveat here. There are many ways by which competitors gain access to competitive information other than through public disclosure filings. Much of the information within a firm is at some point manifested in public behavior, such as the building of a new factory or the release of a new product. In addition, industrial espionage is a large industry.⁸⁴ Finally, information transfers between firms can be carried out through labor markets without public disclosure.⁸⁵

It was an acknowledgement of the fact that companies might already have access to much of their competitors' proprietary information that kept legislators from including a competitive-harm exemption in the disclosure requirements of the original Securities Act.⁸⁶ In 1933 testimony before the Senate Committee on Banking and Currency in support of what was to become the Securities Act, Thomas Cochran, one of the proponents of the legislation, explained:

82. See Romano, *Need for Competition*, *supra* note 12, at 397-98, 431-35 (providing other examples of how disclosures by one firm may harm another firm). *But see* Fox, *Issuer Choice*, *supra* note 15, at 575-80 (challenging the validity of the examples Romano offers).

83. See SCHERER & ROSS, *supra* note 71, at 21-29. Because there are other costs and benefits involved in making a disclosure, it is not possible to ascertain that such a disclosure would be welfare-enhancing in this hypothetical.

84. The estimated size of the industrial espionage industry in 2001 was \$2 billion. The Society of Competitive Intelligence Professionals, *Frequently Asked Questions at* <http://www.scip.org/ci/faq.asp> (last visited July 4, 2004).

85. See *supra* notes 44-46 and accompanying text.

86. On the other hand, the Exchange Act did provide an explicit exemption from disclosure for trade secrets, § 24(c) ch. 404, 15 U.S.C. § 78 (2001).

Parenthetically, every one who has ever dealt with industrial engineers knows that the system of commercial espionage that exists at the present time in the United States is so perfect that normally the directors of a corporation know much more about their competitors' business than they do even about their own⁸⁷

While this conclusion is certainly too strong, it is also true that given the extent of competitive knowledge available in other ways, the disincentive to invest caused by a disclosure requirement may not be as large as one might, at first, believe.

C. Summary of the Costs and Benefits from Disclosures by a Firm

The costs and benefits of disclosures by a firm are summarized in Table 1.

TABLE 1

Benefits from Disclosure	Costs of Disclosure
Private and Public Firms: <ul style="list-style-type: none"> • Reduced agency costs: improved monitoring of managers. 	Private and Public Firms: <ul style="list-style-type: none"> • Direct costs of preparing and disseminating information about the firm.
Public Firms Only: <ul style="list-style-type: none"> • Reduced agency costs: facilitate corporate control market; fewer insider trading opportunities. • More accurate share prices. • Lower cost of capital. • Improved liquidity. 	Public Firms Only: <ul style="list-style-type: none"> • Competitive disadvantaging.
Gains Realized by Third-Parties: <ul style="list-style-type: none"> • Competitor gains. • Improved economy-wide asset allocation. • Consumer surplus gains. 	Costs Imposed on Third-Parties: <ul style="list-style-type: none"> • Competitors may lose oligopoly-pricing power. • Disincentive to invest in innovation.

87. *Stock Exchange Practices, Part 15: National Securities Exchange Act 1934, Hearings on S. Res. 84, 72d Cong. and S. Res. 56 and S. Res. 97, 73d Cong., Before the Senate Comm. on Banking and Currency, 73d Cong., 1st Sess. 6533 (1934), reprinted in 6 LEGISLATIVE HISTORY OF THE SECURITIES ACT OF 1933 AND THE SECURITIES EXCHANGE ACT OF 1934 (J.S. Ellenberger & Ellen Mahar eds., 1973).*

1. *Inadequacy of Sweeping Claims About the Efficacy of Disclosure Requirements*

This summary of the economics of the disclosure of information by public companies suggests how difficult it would be to reach a sweeping conclusion about the efficacy of federal disclosure regulation. A generic argument for imposing disclosure requirements on public companies is unlikely to be able to address the numerous trade-offs identified here.⁸⁸ For example, the argument that Fox offers for mandatory disclosure regulation based on interfirm externalities cannot withstand the scrutiny suggested by the delineation of the costs and benefits of disclosure regulation provided here. Fox claims that mandatory public company disclosure regulations are welfare-enhancing, because a company disclosing “competitively disadvantaging” information is not able to capture the benefits these disclosures create for its competitors.⁸⁹ Fox’s argument can be separated into two components: (1) interfirm externalities cause a market failure in disclosure practices, and (2) federal disclosure regulation is an appropriate method to address this market failure.

It is the second component of Fox’s argument, namely that federal disclosure regulation can be justified by a market failure resulting from interfirm externalities in disclosure practices, that is rejected here.⁹⁰ Let us assume that interfirm externalities do lead to a market failure.⁹¹ The issue here is whether Fox is able to justify mandatory disclosure regulation as an appropriate response to this market failure without evaluating the efficacy of specific disclosure requirements.

Romano has identified several shortcomings in this second component of Fox’s argument.⁹² First, Romano points out that Fox’s call

88. This is consistent with the conclusion that Romano reaches from her review of financial economics models of disclosure regulation and interfirm externalities:

There is, accordingly, one conclusion that can be drawn assuredly from the results of the two models of disclosure policy in the context of interfirm externalities, and this is the reason for reviewing the models in considerable detail: it is inappropriate to assert with any appreciable confidence, particularly the certainty that Fox conveys, that government intervention to mandate disclosure in order to remedy interfirm externalities will always maximize social welfare.

Romano, *Need for Competition*, *supra* note 12, at 439.

89. See Fox, *Retaining Mandatory Disclosure*, *supra* note 12; and Fox, *Issuer Choice*, *supra* note 15.

90. The first claim, that interfirm externalities lead to a market failure in public company disclosure practices, is considered below, see *infra* Part III.A. The second claim, that the SEC imposes disclosure requirements to address interfirm externalities, is considered further below, see *infra* notes 107-08 and accompanying text.

91. See *infra* Part III.A. (supporting this conclusion).

92. Another criticism of this component of Fox’s argument is offered by Franco, *supra* note 10, at 346-48 (arguing that Fox’s interfirm externality argument fails to provide guidance as to what specific types of information should be subject to mandatory disclosure requirements).

for regulation does not include a consideration of the costs of regulatory intervention.⁹³ As Romano explains: “Fox has committed a common fallacy of disclosure market-failure proponents, which . . . occurs because the proponents assume that the government alternative achieves the optimal output without examining that government alternative as closely as they scrutinize market outcomes.”⁹⁴ Second, Romano raises the possibility that the disclosure of information by a firm may have an adverse, as well as a positive, impact on other firms.⁹⁵ Romano argues that this possibility suggests that a more refined analysis is necessary before recommending regulatory intervention.⁹⁶ To support this claim, Romano points to several analytic models of disclosure practices that suggest that mandatory disclosure regulation need not increase social welfare, even in the presence of interfirm externalities.⁹⁷

The microeconomic model of disclosure developed here provides a simpler explanation of why Fox’s argument fails. Fox ignores the cost of disclosure that the comparison with the economics of intellectual property protections highlights, namely the effect disclosure requirements can have on returns to investments in information-

93. More accurately, in this context, the question is the cost of establishing a regulatory monopoly, as compared with the cost of the federalist approach to securities regulation that Romano proposes.

94. Romano, *Need for Competition*, *supra* note 12, at 439.

95. *See id.* at 431-35, 555-62.

96. *See also* STEPHEN BREYER, REGULATION AND ITS REFORM 26 (1982) (“[T]he [externalities] rationale, if it is to be intellectually useful, should be confined to instances where the spillover is large, fairly concrete, and roughly monetizable.”). Fox counters that positive interfirm externalities are much more likely than negative interfirm externalities: “[T]here are overwhelming reasons to believe that for any item of issuer information that is relevant to this debate, its disclosure is likely to have a positive effect on one or more of the other firms in the economy and will have a negative effect on none.” Fox, *Issuer Choice*, *supra* note 15, at 569. Based on this, Fox concludes that his recommendation is valid even if, in some odd circumstances, there may be negative interfirm externalities.

97. *See* Romano, *Need for Competition*, *supra* note 12, at 439. Romano, however, goes on to conclude too much from Fox’s failure. Romano argues that it would be impossible to develop any mandatory disclosure requirements in order to address interfirm externalities. Romano’s concern is with how “a government regulator would be able to make this laborious calculation for each piece of information for each firm.” *Id.* at 435. But Romano’s description of the challenge facing a regulator ignores an alternative approach, namely applying disclosure requirements to certain classes of information. By analogy, when determining the scope and duration of intellectual property protections, the government undertakes an estimate of the trade-offs between granting monopoly power and increasing incentives to invest in innovation based on the category of information involved. Fox’s argument, in this context, is akin to concluding that because there are benefits from intellectual property protections, it is necessarily true that intellectual property should be protected. This is certainly too broad a conclusion. But the opposite is not necessarily true either. Simply because intellectual property protections cannot be justified without including more nuanced considerations, one should not conclude that intellectual property protections should never be granted. *See infra* Part IV (providing an example of the type of analysis that Romano’s conclusion overlooks).

gathering activities.⁹⁸ Even if interfirm externalities are always positive, it is still impossible to know *a priori* how these benefits might compare with the costs of reducing returns on innovation from implementing disclosure requirements.

A simple example shows how problematic these trade-offs are for the broad conclusion that Fox wants to reach. Suppose public companies were required to disclose all of their trade secrets. Such a disclosure requirement would likely benefit a firm's competitors. Fox's analysis provides no basis for rejecting such a disclosure requirement. But should the disclosure of all trade secrets be required? Such a recommendation cannot be evaluated without also considering the effect such a requirement would have on investments in innovation.

It is ironic that Fox should make this error; he is one of the few scholars who even mention the potential ramifications of disclosure policies on investment decisions.⁹⁹ Fox addresses this inconsistency in a footnote in which he explains, "disclosure's impacts on both static and dynamic efficiency are incidental effects outside of the ordinary domain of financial economics, and how they balance out is something that a country's governmental authorities should decide."¹⁰⁰ But this is not convincing. Is it reasonable for a scholar to ignore the costs of reducing incentives to invest in innovation when recommending disclosure requirements because such considerations are "outside the ordinary domain of financial economics?" What relevant information is the regulator presumed to have access to that the scholar does not? A better way to proceed is to evaluate the costs and benefits of imposing specific disclosure requirements.

2. *Redistributive Effects of Public Firm Disclosures*

Disclosure requirements may also have significant redistributive effects. Companies that do not have to make public disclosures may benefit from increased disclosures by U.S. public companies without incurring commensurate disclosure costs. This could put U.S. public companies at a competitive disadvantage compared to private firms, many foreign firms, and, in some cases, larger firms.¹⁰¹ But the significance of these redistributive effects is not obvious. First, this question needs to be understood in a broader context. United States capital markets have put a premium on maintaining high levels of

98. See *supra* notes 84-87 and accompanying text.

99. Fox, *Retaining Mandatory Disclosure*, *supra* note 12, at 1346 n.20; see also Franco, *supra* note 10, at 347 n.256.

100. Fox, *Issuer Choice*, *supra* note 15, at 574 n.29.

101. Under the current implementation of the materiality standard, smaller firms may be required to disclose more detailed information than a larger firm would be required to disclose.

disclosure in public capital markets,¹⁰² and this approach may be one factor in the success of U.S. capital markets.¹⁰³ While there are disclosure costs imposed on U.S. public companies, there are benefits as well. The conclusion that increased disclosure will inevitably hurt U.S. public companies is too simplistic.

There also are adjustments to the current disclosure regime that could alter these redistributive costs. First, the demarcation line between public and private companies could be adjusted.¹⁰⁴ Second, comparable disclosure requirements could be implemented internationally. The feasibility or desirability of those changes is beyond the scope of this Article, but either of those adjustments could reduce the redistributive effects of imposing disclosure requirements on U.S. public companies.

III. THE REGULATION OF DISCLOSURES BY PUBLIC COMPANIES

With an understanding of the costs and benefits of public company disclosures in place, the next step in determining what information a public company should be required to disclose is to specify the circumstances under which regulatory intervention into the disclosure practices of public companies could make sense. A sound justification for regulation should: (1) identify a market failure; (2) evaluate the significance of that market failure; and (3) weigh the costs and benefits of undertaking a corrective regulatory intervention.¹⁰⁵ This Section addresses each of these issues in turn. First, the existence of a market failure in public company disclosure practices resulting from interfirm externalities is confirmed. Second, the potential costs of this market failure are shown to be much more substantial than previously realized. Third, a calculation is provided to evaluate when a regulatory intervention to correct this market failure would make sense.

102. See *supra* note 1 and accompanying text. Except perhaps for a bias towards protecting corporations' interests over investors' interests. See, e.g., Joseph A. Grundfest, *Subordination of American Capital*, 27 J. FIN. ECON. 27, 89 (1990); MARK ROE, STRONG MANAGERS, WEAK OWNERS: THE POLITICAL ROOTS OF AMERICAN CORPORATE FINANCE (1994).

103. Note, for example, that some foreign firms elect to register securities in the United States, despite the fact that U.S. securities disclosure requirements are more expansive than those elsewhere. See Coffee, *supra* note 18, at 1779-1800 (discussing the economic motivations for this type of "cross-listing").

104. See Seligman, *supra* note 18, at 889 (describing the current basis for differentiating between private and public offerings).

105. For a similar set of criteria, see, for example, Roger G. Noll, *Economic Perspectives on the Politics of Regulation*, in 2 HANDBOOK OF INDUSTRIAL ORGANIZATION 1253 (R. Schmalensee & R.D. Willig eds., 1989).

A. *Interfirm Externalities in the Disclosure Practices of Public Companies*

Concerns about the competitive harm that may result from disclosures do cause a significant market failure in the disclosure practices of public companies. As noted above, Fox's argument for regulatory intervention based on interfirm externalities can be separated into two claims: (1) that interfirm externalities lead to a market failure in disclosure practices; and (2) that federal disclosure regulation is an appropriate method to address this market failure.¹⁰⁶ It was shown above that the argument that Fox uses to justify mandatory public company disclosure requirements based on interfirm externalities, the second component of his argument, is overbroad.¹⁰⁷ Moreover, current U.S. public company disclosure requirements are too limited in some respects and too broad in other respects to be understood solely as an effort to correct a market failure resulting from interfirm externalities. If the objective of U.S. disclosure requirements were to address interfirm externalities, then there should not be exemptions explicitly granted to allow companies to avoid disclosing proprietary information, but there are.¹⁰⁸ Nor can an interfirm externality rationale explain requirements, for example, that companies disclose the details of transactions between a firm and its agents, since this information is unlikely to be of value to a firm's competitors.¹⁰⁹

However, the first component of Fox's argument, that interfirm externalities lead to a market failure, is correct, with much evidence to support it. That said, the particular evidence that Fox offers to support the conclusion that interfirm externalities lead to a market failure is problematic. Fox appears to rely primarily on the fact that the information disclosed by one firm is provided at no cost to other firms,¹¹⁰ but as shown above, this does not eliminate the possibility of disclosures imposing costs, as well as benefits, on other firms.¹¹¹

A more convincing argument that there is a market failure in public company disclosure practices as a result of interfirm externalities would show (1) that companies have difficulty capturing all the benefits that their disclosures provide to competitors, and (2) that concerns about releasing competitively disadvantaging information substantially reduce public company disclosures. If firms were able to

106. See *supra* note 89 and accompanying text.

107. See *supra* notes 90-100 and accompanying text.

108. See *supra* note 29.

109. Such a requirement is better explained by the usefulness of disclosure of this information in terms of reduced agency costs. See Mahoney, *supra* note 13.

110. Fox, *Issuer Choice*, *supra* note 15, at 571 n.25 ("The value of information, which in this case is received for free . . .").

111. See *supra* Part II.B.3.

capture the benefits their disclosures provided to third parties, then there would not be evidence of a market failure. If firms did not alter their disclosure practices to avoid disclosing proprietary information, then, even if there were a market failure, it would probably not be significant. But both of these effects are evident, and so there does appear to be a substantial market failure in public company disclosure practices resulting from interfirm externalities.

1. Evidence that All Competitor Gains Are Not Captured by a Disclosing Firm

To ascertain that there is a market failure, it must be shown that there is no effective way for companies making disclosures to capture all of the benefits that their disclosures provide competitors. While there are some circumstances in which a company can capture the benefits their disclosures provide to other firms, such as licensing arrangements or the sale of customer lists,¹¹² the idiosyncratic nature of these arrangements illustrates just how difficult it is for companies to capture such benefits generally. For example, firms sell customer lists to their competitors, but also include several “dummy” listings that send materials back to the owner of the list under an alias. By including these aliases, the owner of the list can inexpensively and accurately monitor how frequently the list is used.

In most circumstances, there are severe constraints on the ability of companies to capture the benefits generated by disclosing competitively valuable information. First, it may be difficult to identify who the beneficiaries of such disclosures might be. The disclosure of an attractive business opportunity may bring into a market companies that were not previously competitors in that arena.¹¹³ Second, the interested parties to those transactions, when they do know each other, are likely to be business competitors who face both legal¹¹⁴ and practical¹¹⁵ hurdles to cooperation. Third, when disclosures reduce a company’s monopoly power, the benefits from disclosure are provided in the form of gains in consumer surplus.¹¹⁶ Such gains are particularly difficult to monetize.¹¹⁷ Fourth, it is more difficult to create a market

112. George Foster, *Externalities and Financial Reporting*, 35 J. FIN. 521, 526 (1980) (providing these as examples of situations where firms can capture benefits their disclosures provide to competitors).

113. It should be noted that some form of public auction could ameliorate this particular difficulty in the absence of the other obstacles identified, but this is a complicating factor.

114. For example, such cooperation among competitors can raise antitrust concerns. See generally STEPHEN F. ROSS, *PRINCIPLES OF ANTITRUST LAW* (1993).

115. In many industries there is a fair degree of competitiveness and animosity between business competitors.

116. See *supra* Part II.

117. The possibility that disclosure requirements may provide benefits in terms of increased consumer welfare is also problematic for an elegant market-based solution that

for information than for other products or services because it is relatively inexpensive to reproduce and distribute information broadly, and much of the value of information can only be determined after it has been provided to the potential purchaser.¹¹⁸ Finally, it is often difficult to monitor the use of information within another firm, which is how much proprietary information would be used.

2. *Significance of Concerns About Disclosing Proprietary Information*

If competitively disadvantaging information were not withheld, then the presence of a market failure in this context would be of little practical significance. But both empirical and theoretical research on public company disclosure practices suggest that concerns about the disclosure of proprietary information significantly reduce the amount of information that public companies choose to disclose.

(a) *Empirical Findings Relating to Competitive-Disadvantaging Concerns*

Two different lines of empirical analysis suggest that concerns about competitive disadvantaging are a significant factor in limiting disclosures by public companies. First are findings from studies of the information that sophisticated investors use to value companies. If public companies disclose most of the information that sophisticated investors use to value public companies, then the presence of a market failure resulting from interfirm externalities would be of little significance. Several studies were conducted throughout the 1980s and 1990s to determine what information sophisticated investors use

Romano suggests may help to overcome disclosure externalities. Romano points to the fact that many large investors hold shares in numerous companies, and so these investors will recognize both the costs to the disclosing firm and some of the benefits such disclosure would provide to other firms. Romano, *Empowering Investors*, *supra* note 12, at 2368. Romano explains:

The majority of investors hold portfolios, not single shares of stock, and therefore, unlike the issuer, they will internalize the externality if they make the disclosure decision. That is, they will desire a regime requiring the information's disclosure because, by definition of a positive externality, the expected gain on their shares in competitors will offset the loss on their shares in the issuer.

Id.; see also Romano, *Need for Competition*, *supra* note 12, at 439-46. But these institutional investors are unlikely to fully capture the consumer surplus gains that result from reducing a firm's monopoly power. *But see* William J. Carney, *Jurisdictional Choice in Securities Regulation*, 41 VA. J. INT'L L. 717, 736 (2001) (arguing that the SEC should be guided in its regulatory agenda by a shareholder primacy norm and not be concerned with enhancing welfare generally).

118. See generally Edmund W. Kitch, *The Law and Economics of Rights in Valuable Information*, 9 J. LEGAL STUD. 683 (1980).

to value a company's securities.¹¹⁹ These studies found that investors used business operating information to value a company's securities, and that much of this information was not being disclosed by public companies.¹²⁰

These studies considered why this type of information, although of interest to investors, was infrequently disclosed. Public companies explained that they withheld disclosure of this information because of concerns about the competitive disadvantaging that its publication might cause.¹²¹ For example, one of these studies concluded:

Disclosing competitively sensitive information is a major concern for companies; for many, it is the single largest concern about the Committee's recommendations [that more business operating information be disclosed]. Companies are concerned that competitors would gain new insight from business reporting under the Committee's model and use that insight to a company's competitive disadvantage.¹²²

It is, of course, possible that companies relied on this "competitive harm" rationale to explain their choice not to disclose this information when there were other, more significant, costs involved.

A second line of empirical analysis also suggests that concerns about competitive disadvantaging are a significant factor in limiting

119. Starting in the 1970s, critics of U.S. public company mandatory disclosure requirements argued that the information the SEC required companies to disclose did not provide sophisticated investors with information that was useful in valuing a company's securities. This issue was brought to the attention of the academic community primarily by the efforts of Homer Kripke. See Homer Kripke, *The SEC, the Accountants, Some Myths and Some Realities*, 45 N.Y.U. L. REV. 1151, 1174 (1970) [hereinafter Kripke, *Some Myths*] (concluding that the information companies were required to disclose at that time was "useless" and that "we should see what investors really need"); see also HOMER KRIPKE, *THE SEC AND CORPORATE DISCLOSURE: REGULATION IN SEARCH OF A PURPOSE* (1979) [hereinafter KRIPKE, *IN SEARCH OF A PURPOSE*] (summarizing his criticisms of the lack of relevant information required to be disclosed under mandatory disclosure requirements). In response to these concerns, several studies were undertaken to determine what information sophisticated investors actually used to value public company securities. See AM. INST. OF CERTIFIED PUB. ACCOUNTANTS, *IMPROVING BUSINESS REPORTING—A CONSUMER FOCUS* (1994) [hereinafter JENKINS REPORT]; ASS'N FOR INV. MGMT & RESEARCH, *FINANCIAL REPORTING IN THE 1990S AND BEYOND* (1993) [hereinafter AIMR REPORT]; FASB, *ELECTRONIC DISTRIBUTION OF BUSINESS REPORTING INFORMATION* (2001); FASB, *GAAP-SEC DISCLOSURE REQUIREMENTS* (2001); FASB, *IMPROVING BUSINESS REPORTING: INSIGHTS INTO ENHANCING VOLUNTARY DISCLOSURES* (2001) [hereinafter IMPROVING BUSINESS REPORTING]; WAYNE S. UPTON, JR., FASB, *SPECIAL REPORT: BUSINESS AND FINANCIAL REPORTING, CHALLENGES FROM THE NEW ECONOMY* (2001) [hereinafter UPTON REPORT]. The four FASB studies cited above will be cited as FASB STUDIES in subsequent footnotes. In the text, these studies will be referred to as "FASB Studies."

120. See also *infra* Part IV.A.2.

121. Along the same lines, a study completed in 1978 found that almost ninety percent of corporate executives wanted disclosure requirement exemptions to be broadly construed to avoid requiring the disclosure of any competitively disadvantaging information. R.K. MAUTZ & WILLIAM G. MAY, *FINANCIAL DISCLOSURE IN A COMPETITIVE ECONOMY* 97-98 (1978).

122. JENKINS REPORT, *supra* note 119, at 5.

disclosures by public companies. The information that companies provide to investors when disclosures are not made available to competing firms can be compared with the information disclosed by comparable public companies.¹²³ With the assistance of a corporate law firm involved in numerous private-financing transactions, disclosure practices in private transactions were reviewed.¹²⁴ In these “private” transactions much more information is shared with investors than is disclosed by comparable public companies.¹²⁵ This suggests that concerns about allowing competitors access to proprietary information—concerns that are less relevant in the context of private companies—do reduce public company disclosures.¹²⁶

123. For additional material that foreshadows the potential usefulness of such an analysis, see KRIPKE, IN SEARCH OF A PURPOSE, *supra* note 119, at 71 (“[The SEC] could, of course, have studied the information demanded and furnished in private placements when the information was controlled by the decision makers, not by the SEC.”), and Richard Leftwich, *Accounting Information in Private Markets: Evidence from Private Lending Agreements*, 58 ACCT. REV. 23 (1983), and STEVEN N. KAPLAN & PER STROMBERG, FINANCIAL CONTRACTING THEORY MEETS THE REAL WORLD: EVIDENCE FROM VENTURE CAPITAL CONTRACTS, REVIEW OF ECONOMIC STUDIES (Ctr. for Research in Sec. Prices, Working Paper No. 513, 2000), available at http://papers.ssrn.com/paper.taf?abstract_id=218175 (Mar. 2000).

124. The law firm of Latham & Watkins LLP provided this assistance. There are methodological challenges for such an analysis. Because these transactions are private, it is difficult to establish what are typical or customary practices. It is also true that written agreements do not necessarily reveal actual practices. This problem is exacerbated in private transactions, where investors have many ways to gather information. For example, large investors typically receive the right to visit the company’s offices and the right to request specific information, even if the information in question is not specifically set out in the disclosure provisions of the investor agreements. It is common in venture capital agreements for large investors to have the right to

visit and inspect any of the properties of the [c]ompany, including its books of account and other records (and make copies thereof and take extracts therefrom), and to discuss its affairs, finances and accounts with the [c]ompany’s officers and its independent public accountants, all at such reasonable times and as often as any such person may reasonable request.

ROBERT V. GUNDERSON, JR. & LEE F. BENTON, *Hi-Tech Corporation: Investors’ Rights Agreement*, in 1 VENTURE CAPITAL & PUBLIC OFFERING NEGOTIATION 9-29 (3d ed. Supp. 1999).

125. See *infra* Part IV.C.1 (supporting this conclusion by reviewing in detail the types of internal management information disclosed to investors in private transactions, as compared with the amount of such information disclosed to investors in comparable public transactions). *But see* Romano, *Need for Competition*, *supra* note 12, at 390 (“For example, in the private debt market, in which the SEC permits lower disclosure because it is restricted to sophisticated (institutional and wealthy individual) investors, such investors demand disclosure of approximately the same information as is required to be disclosed in the public debt market.”); Luis F. Moreno Trevino, *Access to U.S. Capital Markets for Foreign Issuers: Rule 144A Private Placements*, 16 HOUS. J. INT’L L. 159, 195 (1993) (“[S]tandardization used for recent private placements of investment grade debt securities has exceeded the expectations of market participants by containing wording almost identical to that utilized in prospectuses for public offerings.”).

126. Even in the private context, concerns about the competitive-disadvantaging costs of disclosure are a consideration when establishing disclosure practices. Most of the reviewed agreements specifically prohibit disclosure of information to an investor who could use the information to aid a competitor. For example, one published model agreement

There are, of course, alternative explanations for the higher level of disclosure in private transactions, as compared with what public companies disclose, including: (1) public companies' heightened concerns about liability and shareholder derivative suits; (2) the collective action costs faced by investors in public companies;¹²⁷ (3) differences between the types of companies that are public and those that are private; and (4) the fact that investors in private companies may be less able to sell their shares. But these alternative explanations for the higher level of disclosure in private transactions are not as viable as might appear. First, even if public companies do face a higher risk of being sued than do private firms, it is not obvious that less disclosure rather than more disclosure reduces the risk of such suits.¹²⁸ Moreover, if concerns about liability were a significant factor in shaping public company disclosure practices, then one would expect regulations or legislation reducing the possibility of liability for disclosures—such as the safe harbor provided to forward-looking statements starting in 1978¹²⁹ or the liability-reducing measures in the Private Securities Litigation Reform Act of 1995¹³⁰—to alter disclosure practices. But neither of these changes appears to have led to a significant increase in disclosures by public companies. Second, the collective action problems faced by public shareholders are receding with increased cooperation among institutional investors and efficiencies exploited from owning stakes in many companies.¹³¹ Third, there are increasingly fewer differences between the types of investors and companies that are public and those that are private.¹³² Finally, the reduced ability to sell shares in private transactions could also suggest that there are fewer benefits from disclosure, and so there should be less, not more, disclosure in these transactions.¹³³

stated: "The Company shall not be required to comply with [the covenants that set forth the disclosure requirements] in respect of any Holder whom the Company reasonably determines to be a competitor or an officer, employee, director or greater than ten percent (10%) stockholder of a competitor." GUNDERSON & BENTON, *supra* note 124, at 9-31.

127. See, e.g., Frank Easterbrook & Daniel Fischel, *Voting in Corporate Law*, 26 J.L. & ECON. 395 (1983) (arguing that collective action costs limit the usefulness of shareholder voting as a means to reduce agency costs in public companies). If the costs of collective action are higher for public company shareholders, then the benefits of disclosure would be lower, which could reduce the amount of information that it would be optimal for public companies to disclose.

128. See *supra* note 81 and accompanying text.

129. See *supra* note 81 and accompanying text.

130. The Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, § 102, 109 Stat. 737, 753-56.

131. See, e.g., Roberta Romano, *Less Is More: Making Institutional Investor Activism a Valuable Mechanism of Corporate Governance*, 18 YALE J. REG. 174 (2001). Moreover, the collective action problem is a form of market failure, and so disclosure practices reduced as a result of these costs may not be socially optimal.

132. See generally Seligman, *supra* note 18.

133. Moreover, differences between investors' options when holding public securities, as compared with private securities—such as the ability to sell shares instead of aggres-

The disclosure of substantially more information in private transactions than in comparable public transactions indicates the significance of concerns about the competitive-disadvantaging costs of disclosing proprietary information.

(b) *Theoretical Findings on Competitive-Disadvantaging Concerns*

Analytical models of public company disclosure practices also suggest that concerns about competitive disadvantaging are a significant factor in limiting the amount of information public companies disclose. Economists have constructed information disclosure models generally.¹³⁴ One of the central findings of this work is that under certain conditions all private information will be disclosed; that is, private information will unravel. The intuition behind this finding is that if a buyer can reasonably assume that a seller will reveal positive information, then a buyer will conclude that silence implies the worst possible news. Given this presumption, a seller will have an incentive to disclose all but the worst possible information. The cumulative effect will be that all relevant information will be disclosed without regulatory intervention.

A next step is to consider situations where unraveling does not occur. Unraveling will not occur when there is a rational justification for silence other than the desire to withhold bad news. In the context of information disclosure by public firms, concerns about releasing competitive-disadvantaging information are generally accepted as one of the best explanations for the lack of unraveling.¹³⁵ Professor Robert H. Gertner at the University of Chicago Graduate School of Business, in a review of the disclosure and unraveling literature, explains:

One then has to ask why complete unraveling would not occur without the law. The best answer is that the real cost of disclosure is the revelation of performance information which can benefit competitors and potential competitors. For example, a company that learns of another company performing well in a related line of business may choose to enter and compete. This possibility limits

sively monitoring manager performance—do not necessarily diminish the relevance of the private transaction benchmark. The socially optimal level of monitoring and disclosure is probably more accurately revealed by practices in private transactions, where selling shares and other forms of shirking are not as prevalent.

134. See, e.g., Sanford J. Grossman, *The Informational Role of Warranties and Private Disclosure of Product Quality*, 24 J.L. & ECON. 461 (1981); Paul R. Milgrom, *Good News and Bad News: Representation Theorems and Applications*, 12 BELL J. ECON. 380 (1982).

135. This is consistent with the consensus among legal scholars that disclosing proprietary information reduces public company disclosures. See, e.g., Franco, *supra* note 10, at 271 (“The effect of proprietary costs on issuers may exert an even more powerful influence in curbing such disclosure than liability costs.”).

the negative inference from a failure to disclose and leads to incomplete disclosure.¹³⁶

The conclusion that the desire to protect proprietary information explains the absence of complete unraveling in public company disclosures does not mean that companies will only withhold information that is competitively disadvantaging. Once it is no longer true that an investor can infer the worst possible conclusion when information is withheld, a new equilibrium level of disclosure is established. There will now be situations where managers have other bad news that they may withhold under cover of the desire to protect the firm from making competitively-disadvantaging disclosures.¹³⁷

B. *Estimating the Potential Social Cost of a Positive Externality*

There is a significant market failure in the disclosure practices of public companies that results from interfirm externalities. The next step is to estimate the potential cost of this market failure. As it turns out, the potential cost of an interfirm externalities market failure is much greater than previously realized. Previous scholarship estimates the potential cost of a market failure in disclosure practices caused by interfirm externalities by looking at the *difference* between the costs that would be borne by a company making a disclosure and the benefits that would be realized by other firms from receiving the disclosed information.¹³⁸ Romano states: “Finally, it is altogether possible that in the case of a positive externality, the harm to the disclosing firm would be greater than the benefit to rival firms from disclosing information. If this were the situation, then the social welfare maximizing policy would not be to mandate disclosure.”¹³⁹

136. Robert H. Gertner, *Disclosure and Unraveling*, in THE NEW PALGRAVE DICTIONARY OF LAW AND ECONOMICS 608 (1999); see also Verrecchia, *supra* note 35, at 166.

137. See Shavell, *supra* note 23; see also Suil Pae, *Discretionary Disclosure, Efficiency, and Signal Informativeness*, 33 J. ACCT. & ECON. 279 (2002).

138. It is unclear which specific calculation Fox relies on. Fox states: “Conversely, if Professor Romano is correct that a negative effect is in fact as likely as a positive one, a major element of my argument for retaining mandatory disclosure fails.” Fox, *Issuer Choice*, *supra* note 15, at 570 n.22. This suggests that Fox may consider the appropriate measure of potential harm from interfirm externalities the net of the costs of disclosure and benefits forgone.

139. Romano, *Need for Competition*, *supra* note 12, at 435. Romano reaches this conclusion in her effort to formalize Fox’s argument, an argument she goes on to reject for several reasons. In particular, she offers this calculation in the context of evaluating the relevance of a theoretical analysis of the efficacy of disclosure offered by Ronald Dye. *Id.*; see Ronald A. Dye, *Mandatory Versus Voluntary Disclosures: The Cases of Financial and Real Externalities*, 65 ACCT. REV. 1 (1990). One assumption in Dye’s model is that disclosures may generate either a positive or a negative externality. It may be that Romano’s discussion of the relevance of this net effect of disclosures is limited to determining whether Dye’s assumptions are realistic. To this author, however, Romano appears to be making the broader claim that determining whether disclosures may generate either a

But the correct calculation of the potential social cost of a positive externality, in fact, has two separate components. The calculation that Romano focuses on addresses only the first component. To determine the cost of an externality, we must consider both whether it is economic to unbundle the component of production directly causing the externality and what the social gains are from producing the good as compared with not producing the good, whether or not unbundling is economic.¹⁴⁰ A simple example in the more familiar context of a negative externality (as compared with the case of a positive externality) can help clarify this bifurcation. Suppose a factory creates ninety dollars of pollution that the factory owner does not have to pay for. The first question is whether pollution abatement can be purchased for less than ninety dollars. But there is a second question as well, regardless of whether or not pollution abatement (or “unbundling” in my formulation) is cost-effective. That question is whether the production of the good generating the pollution, whether or not it is cost-effective to abate the pollution, should continue. In this context, the solution to the problem is relatively simple: make the factory owner internalize the ninety-dollar pollution expense. Then the manufacturer can evaluate (1) if pollution abatement is economic, and (2) whether production is still profitable.

The insight is that an externality removes from the producer of a good information about one of the costs or benefits of production. The significance of not having access to this information can only be determined in an equilibria context. The correct estimate of the potential cost of such a market failure is therefore provided by looking to the *gross* amount of the potential gains or losses not recognized by a company establishing disclosure policies. To demonstrate this conclusion, this Article will provide a numerical example involving a positive externality.

1. Numerical Example with Apple Trees and Honeybees

The example of a positive externality typically used by economists is that of a beehive owner operating near an apple orchard.¹⁴¹ Beehives are said to produce more honey because of their proximity

positive or a negative externality in the way she proposes determines the social welfare effect of this externality.

140. Coase identified this second component. See R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 43 (1960) (“A better approach would seem to be to start our analysis with a situation approximating that which actually exists, to examine the effects of a proposed policy change and to attempt to decide whether the new situation would be, in total, better or worse than the original one.”).

141. See, e.g., ROBERT H. FRANK, MICROECONOMICS AND BEHAVIOR 577 (4th ed. 2000); WALTER J. WESSELS, ECONOMICS 494 (3d ed. 2000). The first article to use this example was J.E. Mead, *External Economies and Diseconomies in a Competitive Situation*, 52 ECON. J. 54 (1952).

to an apple orchard.¹⁴² However, the apple orchard owner is not paid for the increased value that her orchard provides to the beekeeper.¹⁴³ Therefore, not as many apple orchards will be planted as would be socially optimal. I now use this setting to show that the value of the benefits not recognized by the producer of a good, here the increased productivity apple orchards provide to beekeepers, provides the best estimate of the potential cost of a positive externality market failure.

Suppose that a farmer is deciding whether to plant an apple orchard. She carefully calculates her private costs and private benefits from planting the apple orchard. She knows of the beekeeper next door and knows that she will not be able to profit from the increased honey production that her trees would provide. The farmer determines that she will lose \$10 if she plants the apple orchard and decides not to proceed. If the farmer had planted the apple orchard, the beekeeper would have generated an additional \$25 in profit from increased honey production. In this example, the social cost of the positive externality would be \$15: the net of the \$10 foregone cost to the farmer, if she had planted the orchard, and the \$25 foregone gain to the beekeeper.

The first observation is that this calculation, correctly showing a social cost from the positive externality of \$15, is different than the calculation proposed by Romano. Romano, in her analysis, compares the gains that other firms might realize (from access to proprietary information) and the cost to the firm that results from producing these gains (the cost of disclosing this proprietary information). In the apple tree and honeybee illustration, this would be equivalent to comparing the benefit that the apple trees provide to the beekeeper (\$25) with the costs or benefits that result from the bees' presence among the apple trees. It is specifically by providing the bees use of the orchard that additional honey is produced, just as it is specifically by disclosing proprietary information that other firms benefit. The cost or benefit to the apple orchards from the presence of bees was not provided in the calculation of social costs above. It may be that

142. I was unable to find evidence supporting a benefit in terms of increased honey production from the proximity of beehives to apple trees. However, there is clear evidence of a benefit in the opposite direction; that is, the proximity of honeybees does substantially increase apple production. See Steven N.S. Cheung, *The Fable of the Bees: An Economic Investigation*, 16 J.L. & ECON. 11 (1972) (finding that it is primarily the orchard owners, not the beekeepers, who benefit from the presence of honeybees among fruit trees).

143. This is an odd example of a positive externality for several reasons. First, the quantifiable benefits appear to be provided to orchard owners, rather than to beehive owners. Second, because the parties are few and proximate, it would seem that transaction costs should be low, and so a significant market failure unlikely. And, in fact, payments from orchards are a major source of income for many beehive owners. Cheung, *supra* note 142. Third, by focusing on a relationship that is almost always symbiotic, the more complex situation, examined in this Article, where generating a positive externality imposes a cost on the producer is not explored.

bees improve the productivity of apple trees,¹⁴⁴ or it may be that our farmer is highly allergic to bees and has a strong distaste for the increased presence of bees. Let us assume that our farmer hates bees and had placed a negative value of \$30 on having bees buzzing about her orchard when she decided whether to plant the apple trees.¹⁴⁵ If we had only compared the cost that the bees impose on the farmer (\$30) with the benefits the apple trees provide to the beekeeper (\$25), we would have concluded that planting the orchard would impose a social cost of \$5. This is the calculation used by Romano, but this is the wrong conclusion. This calculation ignores the other benefits that are generated from planting the apple orchard. Because the net cost of planting the apple orchard is \$10 and the cost to the farmer from having the bees among the apple trees is \$30, the other benefits from planting the apple orchard must be \$20. We need to add this \$20 to the social cost of \$5 imputed from the Romano calculation to get the correct social gain from planting the orchard, \$15. In fact, a comparison of the costs that bees impose on the farmer with the benefits the proximity of the orchard provides to the beekeeper addresses a different issue than a measure of the social cost of an externality. This comparison is relevant to determine how much should be spent to prevent the bees from entering the apple orchard. In the example above, where the bees impose a cost on the farmer of \$30 and access to the orchard benefits the beekeeper by \$25, if the bees can be kept out of the trees for less than \$5, then this should be done.¹⁴⁶ But, if the bees cannot be kept out of the apple trees for less than \$5, then this should not be treated as a separable component of production. The analysis returns to determining social welfare with and without the apple trees, assuming the presence of bees among the apple trees. To generalize, a comparison of the costs and benefits of a factor of production is only relevant in determining whether or how much it would be worth spending to unbundle this factor of production.

So now we move to the second step: a comparison of the equilibria with and without production of the good, or, in our hypothetical, with and without the new apple orchard planted. Two pieces of information are needed to make this calculation: (1) the benefit the beekeeper receives from use of the apple orchard (the amount of the externality), and (2) the farmer's expected loss or gain from planting the orchard (the net costs or benefits excluding the externality). Both

144. See *id.* (confirming that such an economic benefit is, in fact, typically provided by honeybees).

145. Assuming there is a cost associated with providing the positive externality, then this example becomes more comparable to the disclosure of proprietary information, which will typically harm the firm making the disclosure.

146. This calculation assumes that the orchard owner, at this point, is able to realize the benefits from the increased honey production. If this were not the case, then the orchard owner would be willing to pay up to \$30 to keep the bees out of the orchard.

pieces of information may be difficult to determine. On one hand, the beekeeper might be hesitant to reveal just how valuable access to the apple orchard is, lest she be required to pay for this access. On the other hand, the farmer decided not to proceed with planting the apple orchard. To know how much she expected to lose from planting the apple orchard, we would need to know of her projected \$10 shortfall, but all that is revealed by her inaction is that she did not expect a positive return from the apple orchard.

Consider if we had access to only one of these two pieces of information, the profit the beekeeper would have gained had her bees had use of the apple orchard (\$25). With this information, it is simple to determine an upper limit on the social cost of the positive externality. That limit is \$25 and is determined without knowing why the farmer chose not to plant the apple orchard. This is not to say that the social cost of this positive externality will be \$25. It could well be that the farmer would have lost \$30 in planting the orchard, in which case there would be no harm from this market failure. Still, the *gross* amount of the third-party benefits not realized by the party making a production decision, not the *net* difference between the costs and benefits of the factor of production generating the externality, provides the upper limit on the social cost that could result from the externality.

2. *Estimating Social Costs from Interfirm Externalities in Disclosure Practices*

The apple trees and honeybees hypothetical provides one way to estimate the potential harm from a positive externality. Applying this analysis to public company disclosure practices shows that the potential harm from interfirm externalities may be quite substantial. If Romano had been correct, the measure of the potential harm from a positive externality in disclosure practices would be the *net* of the firm's cost from disclosing proprietary information and the benefit to other firms from access to this proprietary information. Based on this *net* calculation, it is unlikely that interfirm externalities would impose significant costs. Gains to competitors would be more or less offset by the losses to the disclosing firm, and it would be improbable that imposing an extensive set of disclosure regulations on all public companies could be justified on the basis of interfirm externalities.¹⁴⁷ However, the potential cost of a positive externality in public company disclosure practices is better estimated by looking solely at the gains other firms might receive from the disclosure of proprietary information.

147. This is the conclusion that Romano reaches based on her calculation. Romano, *Need for Competition*, *supra* note 12, at 435.

A simple numerical example set in the context of disclosures by a public company is helpful. Suppose that the cost to Firm A of disclosing a specific piece of information—the profitability of its various products—is \$100, and the benefit that this information, if disclosed, would provide to Firm A's competitors is also \$100. Suppose further that the disclosure of this profitability information would also benefit Firm A, perhaps by reducing agency costs by \$90, and these agency cost-reducing benefits cannot be realized without disclosing this product profitability information. If Firm A is unable to capture the benefits this disclosure would provide to its competitors, then Firm A will choose not to disclose this information. To disclose this information would cost Firm A \$10 (the \$100 cost less the \$90 gain). The social cost of this decision is \$90, since all of Firm A's costs of disclosure would have led to comparable gains at other firms. In this example, we see that even when the competitive-disadvantaging costs of disclosure are equal to the benefits provided to the firm's competitors, the distortion resulting from interfirm externalities can be quite costly.

Of course, the critical issue is the extent to which this numerical example is realistic. Are the potential gains from the disclosure of proprietary information that the firm making such a disclosure is unable to capture large, and why can't the other benefits from disclosure be unbundled from the benefits generated from the disclosure of proprietary information? Two approaches above were used to show that public companies limit their disclosures because of concerns about the competitive-disadvantaging costs of disclosures. The first approach was to look to studies that consider why public companies do not disclose much of the information investors find useful.¹⁴⁸ The second approach was to compare the disclosure practices of private companies with the disclosure practices of comparable public companies.¹⁴⁹ Both of these approaches can be used to estimate the scale of the positive externalities not recognized by firms making disclosures. First, assume that the competitive-disadvantaging costs avoided by the companies withholding disclosures are roughly comparable to the unrealized gains that those disclosures would have provided to other firms. On average, one company's losses will approximate other companies' gains.¹⁵⁰ With this assumption, we can look to evidence showing the extent to which public companies reduce disclosures to avoid competitive disadvantaging, as a way to approximate the foregone benefits these disclosures would provide.

148. See *supra* notes 119-22 and accompanying text.

149. See *supra* notes 123-33 and accompanying text.

150. One notable exception to this assumption, discussed *supra* Part II.A.3, occurs when disclosures reduce monopoly power and generate consumer welfare gains.

Before proceeding it is useful to note that this method of estimating the potential cost of a positive externality in public company disclosure practices may be inaccurate for two reasons. First, it is difficult to assign a monetary value to the decision to withhold the disclosure of proprietary information. Second, the third-party cost of a specific factor of production is useful in determining how much it would be worth spending to remove this component from the production process.¹⁵¹ In the hypothetical example of apple trees and honeybees, the preliminary question was whether the bees could be efficiently unbundled from the production of apples. In that context, answering the question required determining how much it would cost to keep the bees away from the apple trees. In the context of disclosure, whether it is possible to unbundle the adverse effects of disclosing competitively disadvantaging information without losing the other benefits such disclosures might provide is a more complex question. Certainly some of the benefits of disclosure could be easily unbundled from the disclosure of proprietary information. For example, the predominant effect of disclosing trade secrets would be to transfer proprietary information from the disclosing firm to other firms, with few other benefits provided to the firm making the disclosure.¹⁵² However, other types of disclosures, such as the profitability of the various products a firm sells, would appear to trigger many of the costs and benefits of disclosure simultaneously.

An article by Paul Mahoney at the University of Virginia Law School, arguing that the SEC requires the disclosure of too much information by public companies, considers the question of the extent to which the benefits from various types of disclosures can be unbundled.¹⁵³ Mahoney argues that the information that public companies disclose can be separated into two categories: agency cost information and accuracy enhancement information.¹⁵⁴ For Mahoney, agency cost information is information about transactions between the company and its agents, and accuracy enhancement information is information that could affect the stock price, such as information about the economic well-being of the firm.¹⁵⁵ Mahoney argues that agency cost information, but not accuracy enhancement information, is of use in reducing agency costs.¹⁵⁶ If Mahoney were correct, this would substantially reduce the potential cost of interfirm externalities in public company disclosure practices. Companies could disclose Mahoney's

151. See *supra* Part III.B.1.

152. The details of trade secrets would in most situations be only moderately useful to an investor because learning the trade secret details is unlikely to be the best or only way to determine their value or manager effectiveness.

153. See Mahoney, *supra* note 13.

154. *Id.* at 1054.

155. *Id.*

156. *Id.*

agency cost information, information that is unlikely to competitively disadvantage the firm, but withhold accuracy-enhancing information. The primary benefits of disclosures would remain without requiring disclosure of competitively disadvantaging information.

But Mahoney's argument for why accuracy-enhancing information does not provide agency cost-reducing benefits is not convincing, and a review of the evidence suggests that the facile separation Mahoney offers between different types of information and the different benefits their disclosure provides is not realistic. Mahoney supports his claim that the disclosure of accuracy enhancement information does not substantially reduce agency costs in two ways. First, Mahoney points to the fact that prior to the 1930s information about the economic condition of the firm was not subject to mandatory disclosure requirements.¹⁵⁷ But disclosure practices prior to the 1930s have little probative value, particularly given the dramatic evolution in business and accounting practices over the past seventy years. Second, Mahoney argues that it would be a mistake to "recast the accuracy enhancement model in agency cost terms by arguing that all information about a company's performance is relevant to the shareholders' attempts to monitor managers."¹⁵⁸ Mahoney explains:

Although other sorts of agency problems exist, they were not the source of mandatory disclosure rules, and I do not believe they can be effectively addressed through mandatory disclosure rules. If they could be so addressed, one could recast the accuracy enhancement model in agency cost terms by arguing that all information about a company's performance is relevant to the shareholders' attempts to monitor managers. For my purposes, however, "agency information" is a distinctive set of information about the agent's use of his delegated powers to sell his own property or services to the principal.¹⁵⁹

Thus, Mahoney's claim that accuracy enhancement disclosures cannot reduce agency costs relies on the assertion that "he does not believe the disclosure of information about a company's performance "can be effectively addressed through mandatory disclosure rules."¹⁶⁰ At best, Mahoney is assuming what he is trying to prove, that "[t]he normative prescriptions of the agency cost model tend to point in the opposite direction of those derived from the accuracy enhancement model."¹⁶¹ By assuming the two types of information provide two different kinds of benefits, he can argue for requiring disclosure of

157. *Id.* at 1060-65.

158. *Id.* at 1054.

159. *Id.*

160. *Id.*

161. *Id.* at 1050.

agency cost-reducing information, but not accuracy-enhancing information.¹⁶²

But the information that Mahoney labels as accuracy enhancement information would almost certainly be useful in reducing agency costs. Again, disclosure practices in private transactions are instructive.¹⁶³ In private transactions there would be less reason to share with investors information whose sole function was to improve the accuracy of share prices because in these transactions securities are not publicly traded. Yet in these transactions more, not less, information about the firm's economic condition is disclosed.¹⁶⁴ This suggests disclosing this information provides benefits other than accuracy enhancement, benefits that are most likely generated by reducing agency costs. Moreover, many of the mechanisms by which disclosures reduce agency costs are directly mediated by more accurate share prices, and more accurate share prices are the direct result of disclosing accuracy-enhancing information. For example, managers have fewer opportunities to profitably trade the firm's shares if share prices are more accurate.¹⁶⁵ Similarly, the operation of the market for corporate control is facilitated when share prices reflect the value of the company's assets while under current management.¹⁶⁶ Nor is it surprising that information about the firm's economic well-being is helpful in reducing agency costs. Managers can fail investors not just by directly expropriating funds from the firm, but also by inadequately exploiting the business opportunities available to the firm.

Much information that is useful to investors is withheld by public companies out of concern for the gains competitors would realize from these disclosures, and it is not a simple matter for companies to disclose information that would benefit the disclosing firm without also disclosing information that would competitively disadvantage the firm. Together, these two conclusions show that interfirm exter-

162. There is an alternative interpretation of Mahoney's argument. Perhaps Mahoney does not intend to deny the agency cost reduction benefits from the disclosure of information about the economic condition of the firm, but rather to focus on the fact that "it is difficult to specify ex ante what types of information [about the economic condition of the firm] are relevant without engaging in overkill." *Id.* at 1094. In other words, the distinction he is drawing is not between information that is useful for agency cost reduction purposes and that which is useful for accuracy enhancement purposes, but rather the distinction is between information that is more effectively made part of a mandatory disclosure scheme and information that is more amenable to a negotiated disclosure agreement between principals and investors. If this is his claim, the analysis in this Article suggests that, in fact, the opposite is the case: that it is information about the agent's use of the firm's resources that is more amenable to a negotiated disclosure agreement between managers and investors, because it is not subject to a significant market failure.

163. See *supra* notes 123-32 and accompanying text.

164. See *infra* notes 232-34 and accompanying text.

165. See *supra* notes 52-54 and accompanying text.

166. See *supra* notes 48-50 and accompanying text.

nalities cause a substantial market failure in public company disclosure practices. But this finding does not by itself justify regulatory intervention. Rather, this finding shows that what is at stake justifies proceeding with a consideration of the efficacy of imposing corrective disclosure requirements.

C. *Evaluating the Efficacy of Imposing Corrective Regulations*

We have shown that the costs of interfirm externalities may be quite substantial.¹⁶⁷ The next step is to determine the circumstances under which a regulatory intervention to correct this market failure would make sense.

1. *A Method to Compare the Costs and Benefits of Disclosure Regulation*

The evaluation of a regulatory intervention must weigh all of the costs and benefits of imposing a disclosure requirement on public companies. The costs and benefits of disclosures were identified above.¹⁶⁸ To evaluate a regulatory intervention, the costs resulting from the regulatory process itself must be added to this list. Regulation costs can be separated into administration costs, avoidance costs, and waste costs.¹⁶⁹ Administration costs are the costs of constructing, monitoring, and enforcing disclosure requirements. Avoidance costs refer to the distortionary effects that disclosure requirements can have on a company's business practices. For example, a company may produce less internal information if the company's management knows that internal information will be publicly disseminated. Finally, there are several costs that can be best characterized as regulatory waste. These are costs that result from the fact that the optimal regulatory scheme will not be a perfect scheme, and so some disclosure will be required that is unnecessary and other disclosure that should be required will not be. Other regulatory waste costs may be incurred when, and to the extent that, the regulator is "captured" by the regulated firms.¹⁷⁰

Weighing the costs and benefits of a regulatory intervention into public company disclosure practices requires a fairly complex calculation. Separating the analysis into three components makes the calcu-

167. See *supra* Part III.B.

168. See *supra* Part II.

169. These distinctions are similar to those provided by Beaver, *supra* note 16, at 629 ("[T]he costs of regulation [of public company disclosures] include the costs involved in the development, compliance, enforcement, and litigation of disclosure regulations."). Compliance costs are not included here because they are included in the firm's production costs of disclosures.

170. See, e.g., George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3 (1971).

lation more tractable. These three components are: (1) a comparison of the costs and benefits of a disclosure requirement, whether or not a company has public securities; (2) a comparison of the short-term costs and benefits of transferring proprietary information from one firm to many firms; and (3) a comparison of the remaining costs and benefits of requiring the disclosure of certain information by all public firms. The first component is a comparison between the incremental production costs from a disclosure requirement and the incremental benefits a firm would receive from these disclosures, whether or not the firm has publicly traded securities. The second component is a comparison between the competitive-disadvantaging costs of a disclosure, the effect such a disclosure requirement has on the firm's competitors, positive or negative, and any consumer surplus gains from the disclosure.¹⁷¹ The third component is a comparison between regulation costs and the disincentives to invest in innovation, on one hand, and the incremental benefits a firm would receive from the required disclosures as a result of having publicly traded securities and economy-wide gains, on the other hand. Table 2 shows these three comparisons:¹⁷²

171. This comparison of the competitive-disadvantaging costs incurred by a company making a disclosure with the benefits provided to other firms and consumer surplus gains from the disclosure is similar to the comparison that Fox and Romano focus on. *See supra* Part III.B.1. The differences are (1) here, the possibility of consumer surplus gains is included in the comparison, and (2) this is understood to be only one of three components necessary to evaluate the efficacy of a disclosure requirement.

172. This Table rearranges the items listed in Table 1 above, with the addition of the costs of regulation.

TABLE 1

Benefits from Disclosure	Costs of Disclosure
COMPONENT 1 (benefits): <ul style="list-style-type: none"> • Reduced agency costs: improved monitoring of managers. 	COMPONENT 1 (costs): <ul style="list-style-type: none"> • Direct costs of preparing and disseminating information about the firm.
COMPONENT 2 (benefits): <ul style="list-style-type: none"> • Competitor gains. • Consumer surplus gains. 	COMPONENT 2 (costs): <ul style="list-style-type: none"> • Competitive disadvantage. • Competitor losses.
COMPONENT 3 (benefits): <ul style="list-style-type: none"> • Reduced agency costs: facilitate corporate control market; fewer insider trading opportunities (with public securities). • More accurate share prices. • Lower cost of capital. • Improved liquidity. • Improved economy-wide asset allocation. 	COMPONENT 3 (costs): <ul style="list-style-type: none"> • Long-term disincentive to invest in innovation. • Regulation costs.

By analyzing each of these components in the context of a specific disclosure requirement, one can estimate whether a disclosure requirement would be welfare-enhancing.

2. *Evaluating a Hypothetical Disclosure Requirement*

To illustrate how this “component” analysis assists in evaluating a specific disclosure requirement, it is helpful first to analyze a hypothetical disclosure requirement. The hypothetical disclosure requirement considered is called the “low-basis asset sales disclosure requirement.” The low-basis asset sales disclosure requirement would require public companies to disclose all details with respect to the sale of an asset if: (1) such asset were created as a by-product of other production efforts; (2) such asset has little or no book value;¹⁷³ and (3) more than five percent of the company’s gross profit in any quarter comes from the sale of this asset. Admittedly, this is an oddly tailored disclosure requirement, but it is helpful to show how the component analysis of the efficacy of a disclosure requirement works.

173. The absence of book value makes it difficult for someone who only has access to financial statements to determine how much of such a product is being sold.

The hypothetical company to which the low-basis asset sales disclosure requirement will be applied is Doodles Corp. Doodles Corp. is a hypothetical public company that has produced and distributed animated feature films for the past sixty years. Doodles Corp.'s managers recently discovered an unexpectedly large and vibrant market for the animation cels produced as a by-product of the techniques used to create animated films. By selling more of these animation cels, Doodles Corp.'s managers now consistently report improving earnings. Doodles Corp. does not disclose the extent to which earnings from the sale of animation cels contribute to the company's reported earnings. Investors believe incorrectly that Doodles Corp.'s growing earnings are indicative of growth in Doodles Corp.'s ongoing animated feature film business and do not realize that they are instead the result of an increasing dependence on the continued viability of the market for cels from old animated films.¹⁷⁴ Nor do other companies who own animated cels realize just how large and profitable the market is for these animation cels.

Under current disclosure requirements, Doodles Corp. would not be required to disclose the share of its profits generated from the sales of animation cels.¹⁷⁵ Nor would Doodles Corp. managers elect to disclose this information, since its nondisclosure provides them many benefits.¹⁷⁶ Let us assume, under the low-basis asset sales disclosure

174. This hypothetical is similar to the facts in the SEC's main enforcement action applying the MD&A requirements. *See supra* note 27; Caterpillar, Inc., 50 S.E.C. 903 (1992), 1992 SEC LEXIS 786. Caterpillar had not disclosed its reliance on the contributions to profits that came from the earnings generated by Caterpillar's Brazilian subsidiary. But in the Caterpillar situation it was a dramatic devaluation of the Brazilian currency which the SEC argued triggered the disclosure obligation. There is no comparable dramatic change in circumstances in the hypothetical presented here.

175. This is assuming these cels are not sold through a separate segment of Doodles Corp.'s business. (At The Walt Disney Company, sales and profits from animated films and cels sales would be reported in two different segments, Studio Entertainment and Consumer Products, respectively.) At most, Doodles Corp. might be required to make a qualitative acknowledgement that the sales of animated cels contributed to its profits under the Management Discussion and Analysis (MD&A), *see supra* note 27. The five percent hurdle of the low-basis asset sales disclosure requirement would not be relevant under current disclosure requirements. In 1999 the SEC released Staff Accounting Bulletin (SAB) No. 99 to emphasize that even a relatively small quantitative effect (under five percent) would still be considered material under many circumstances. Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45, 150 (Aug. 19, 1999) (to be codified at 17 C.F.R. pt. 211); *see* Kenneth C. Fang & Brad Jacobs, *Clarifying and Protecting Materiality Standards in Financial Statements: A Review of SEC Staff Accounting Bulletin*, 99 BUS. LAW. 1039 (2000).

176. Nor, even if it were feasible, would the company's managers and investors necessarily have precommitted to require disclosure of this particular information because the cost to Doodles Corp. in terms of lost monopoly power is unlikely to be recouped, even if investors own shares in other animation companies as well. *See supra* note 117 (discussing the possibility of investors in several firms establishing disclosure policies); *supra* Part II.B.3 (showing how disclosure can lead to gains in consumer welfare rather than benefits to competing firms).

requirement, that Doodles Corp. would be required to disclose the details of these sales.

The efficacy of the low-basis asset sales disclosure requirement, as it would apply to Doodles Corp., can be evaluated by considering in turn the three components described above.¹⁷⁷ First, the costs of preparing and disseminating the information required to be disclosed under this provision are compared with the benefits these disclosures provide whether or not a company has publicly traded securities. Incremental production costs from the low-basis asset sales disclosure requirement should be minimal, since this information should be readily available within the firm and relatively inexpensive to include with disclosure materials already provided to investors. On the other hand, the dissemination of the low-basis asset sales information could have significant agency cost reducing benefits, even if Doodles Corp. did not have publicly traded securities. For example, if the scope of the animated cels market was not disclosed by Doodles Corp. and not readily apparent to potential competitors, then the Doodles Corp. managers could sell this information to other companies with animated cel libraries to the detriment of Doodles Corp.¹⁷⁸

The second component—addressing the trade-off between the short-term costs of giving up exclusive access to proprietary information, on one hand, and the benefits to other firms and consumers from gaining access to this information, on the other hand—also points to social welfare gains from the imposition of a low-basis asset sales disclosure requirement. As noted above, proprietary information may provide a firm monopoly power.¹⁷⁹ When such monopoly-creating information is disclosed, lost monopoly profits would be more than offset by the gains to other firms and consumers.¹⁸⁰ In the case of Doodles Corp., disclosure of the opportunity to sell animated cels could entice other firms to start selling cels from their libraries. The net effect of the three factors here—reduced profits to Doodles Corp., gains to Doodles Corp.'s competitors, and consumer gains from lower animated cel prices—should be positive.

The third component in the analysis is a comparison of long-term disincentives to invest and regulation costs as compared with those benefits that disclosure provides to companies with public securities. The low-basis asset sales disclosure requirement only applies to the sale of assets that are created as a by-product of other production efforts. This should minimize the disincentives created by this disclosure requirement. In the context of Doodles Corp., it seems unlikely that disclosing information about the sales of animated cels would

177. See *supra* Part III.C.1.

178. See *supra* notes 84-87 and accompanying text.

179. See *supra* Part II.A.4.

180. See *supra* note 71.

create a disincentive to invest in innovation. On the other hand, the disclosure of low-basis asset sales would provide many benefits to a public company, such as Doodles Corp. For example, disclosure of this information could improve a potential acquirer's analysis of Doodles Corp.'s underlying value. A potential acquirer could use the information about cel sales to evaluate the different components of Doodles Corp.'s operations properly. It may be that Doodles Corp. is inadequately exploiting the opportunity to sell cels, so that management will have a reserve to draw on to report earnings growth, or it may be that Doodles Corp. is overinvesting in its feature animation business, because of its access to internal capital from the sale of animation cels.

The low-basis asset sales disclosure requirement could also reduce opportunities for a firm's managers to benefit at shareholders' expense from their exclusive access to firm information. In the context of Doodles Corp., if the animated cels component of earnings were not disclosed, Doodles Corp.'s managers would have considerable control over the timing of Doodles Corp.'s reported financial performance. Doodles Corp.'s managers could use this control over the timing of earnings to increase the amount of their equity interest in the firm at the expense of other shareholders. For example, Doodles Corp.'s managers could generate poor earnings in anticipation of stock option grants. This would lower the strike price of their options, and thus increase their ownership stake in the company. There is evidence that public company managers engage in just this type of opportunistic behavior.¹⁸¹

There may also be benefits in terms of improved asset allocations throughout the economy from the disclosures required under the low-basis asset sales disclosure requirement. In the case of Doodles Corp., competitors and investors may interpret the public valuation of Doodles Corp. as indicative of opportunities in the animated film production business. These competitors would not realize the extent to which Doodles Corp.'s valuation is generated from the sale of animation cels. Competitors and investors could more accurately assess the profitability of the animated film business for a new entrant with information about the extent to which Doodles Corp.'s earnings are generated from the sales of cels.

181. David Aboody & Ron Kasznik, *CEO Stock Option Awards and Corporate Voluntary Disclosure*, 29 J. ACCT. & ECON. 73 (2000) (finding earnings estimates were less positive before stock option grants than after such grants); David Yermack, *Good Timing: CEO Stock Option Awards and Company News Announcements*, 52 J. FIN. 449 (1997) (finding that firms experienced significantly positive abnormal returns after CEO stock options were granted).

If the issue of regulation costs is not included,¹⁸² the component analysis shows that the low-basis asset sales disclosure requirement would be welfare-enhancing. The preparation and dissemination of this information should be relatively inexpensive. While the disclosure of this information may competitively harm the firm making the disclosures, these losses would be more than offset by gains by a company's competitors and consumers. The low-basis asset sales disclosure requirement is unlikely to reduce investments in innovation. At the same time, disclosing this information could substantially reduce agency costs. This hypothetical case illustrates how the component analysis can be used to evaluate a specific disclosure requirement.

IV. REQUIRING PUBLIC COMPANIES TO DISCLOSE ADDITIONAL MANAGEMENT INFORMATION

Part II developed a comprehensive microeconomic model of disclosure and disclosure regulation. Part III showed how this microeconomic model of disclosure could be used to evaluate a specific public company disclosure requirement. This Part evaluates a requirement that public companies disclose substantially more of the information used within the firm to manage operations than is currently required to be disclosed, applying the tools developed in Parts II and III.

The analysis proceeds as follows. First, a description of management information is provided. Its similarities to the information that sophisticated investors use to value a company's securities are highlighted. Next, three restrictions are developed on the types of management information that would be subject to a mandatory disclosure requirement. The subset of management information that falls within these three constraints is defined as Disclosable Management Information ("DMI").¹⁸³ Finally, the costs and benefits of requiring disclosure of DMI are considered.

There are several reasons to focus on a requirement that public companies disclose additional internal management information. First, investors and scholars have noted the growing gap between the information that managers use internally to understand and run their businesses and the information that the SEC requires public companies to disclose.¹⁸⁴ Second, mandatory disclosure of manage-

182. Regulation costs are hard to discern when considering a narrowly tailored hypothetical disclosure requirement.

183. This Article does not attempt to construct specific regulations that would efficiently lead to the disclosure of this information. Such an effort, though important to proving the plausibility of my arguments and necessary to implement the recommendations here, is beyond the scope of this Article.

184. See, e.g., MARGARET M. BLAIR & STEVEN M.H. WALLMAN, BROOKINGS INST., UNSEEN WEALTH: REPORT OF THE BROOKINGS TASK FORCE ON INTANGIBLES 7 (2001); ROBERT E. LITAN & PETER J. WALLISTON, AEI-BROOKINGS JOINT CTR. FOR REGULATORY STUDIES, THE GAAP GAP: CORPORATE DISCLOSURE IN THE INTERNET AGE 23-33 (2000). Re-

ment information can provide the foundation for a broad and comprehensive disclosure paradigm that could replace the flawed materiality standard.¹⁸⁵ Third, a market failure caused by interfirm externalities is likely to be particularly acute in the context of internal management information. Management information would seem to be of substantial value to both a firm's competitors and a firm's investors, particularly in the context of reducing agency costs. So it is with respect to the disclosure of management information that distortions resulting from interfirm externalities are likely to be most significant.

cent studies have found that public companies' financial statements provide less explanatory power as to a company's stock price than they had in the past. See Baruch Lev & Paul Zarowin, *The Boundaries of Financial Reporting and How to Extend Them*, 37 J. ACCT. RES. 353 (1999); Stephen Brown, Kin Lo & Thomas Lys, Use of R² in Accounting Research: Measuring Changes in Value Relevance over the Last Four Decades (July 8, 1999) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=141056 (last visited July 5, 2004); J. Chang, The Decline in the Value Relevance of Earnings and Book Values (University of Pennsylvania, Working Paper, 1998).

185. Both the Securities and Exchange Acts require that public companies disclose "such further material information . . . as may be necessary to make the required statements . . . not misleading." 17 C.F.R. § 230.408 (1999) (Securities Act Filings); 17 C.F.R. § 240.12b-20 (1999) (Exchange Act Filings). This requirement echoes President Roosevelt's call that "no essentially important element attending the [issuance of securities] shall be concealed from the buying public." SELIGMAN, *supra* note 6, at 53 (quoting 73 CONG. REC. 937, 954 (1933)). The Supreme Court has, in turn, defined information as material under these Acts "if there is a substantial likelihood that a reasonable shareholder would consider it important" in determining the value of a company's securities. *TSC Indus., Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976) (interpreting the materiality standard in the context of a proxy statement); see also *Basic Inc. v. Levinson*, 485 U.S. 224, 240 (1988) (applying the *TSC Industries* materiality standard in the context of a lawsuit brought under section 10b-5 of the Exchange Act, explaining that "materiality depends on the significance the reasonable investor would place on the withheld or misrepresented information"). Legal scholars have identified various difficulties in implementing this so-called materiality standard. See, e.g., Victor Brudney, *A Note on Materiality and Soft Information Under the Federal Securities Laws*, 75 VA. L. REV. 723 (1989) (proposing applying different materiality standards under different circumstances); Fang & Jacobs, *supra* note 175 (identifying complications from the SEC's decision not to provide a bright-line rule as to when information is material); John M. Fedders, *Qualitative Materiality: The Birth, Struggles, and Demise of an Unworkable Standard*, 48 CATH. U. L. REV. 41 (1998) (reviewing SEC efforts to require disclosure of unethical conduct); Carl W. Schneider, *Nits, Grits, and Soft Information in SEC Filings*, 121 U. PA. L. REV. 254 (1972) (differentiating between "hard" and "soft" information and arguing for increased required disclosure of soft information). But the problems with the materiality standard are even more fundamental than this scholarship indicates. As a practical matter, public companies simply do not disclose the information that sophisticated investors find useful in valuing a company's securities. See *supra* notes 119-22 and accompanying text. Nor is there an adequate theoretical justification for the materiality standard. Why should public companies be required to disclose all information an investor might find useful without any consideration of costs? Surely a sophisticated investor would not endorse such a cost-blind disclosure requirement. But if costs are included, the clarity of the materiality standard would be blurred by the questions of which and how costs should be weighed in making disclosure decisions.

A. *The Content and Relevance of Management Information*

A firm's consolidated financial results provide only a limited indication of the health and worth of the company. There is a wealth of additional information that both managers and investors turn to when valuing a public company and determining how well it is managed.

1. *The Information Managers Use to Understand Their Own Businesses*

The information a firm's managers use to understand a company's operations varies from manager to manager and from company to company. However, common elements and practices have evolved.¹⁸⁶ The information used to manage the firm's operations, in addition to summary financial reports, can be separated into four categories: (1) operation-specific financial reports; (2) product profitability analyses; (3) other performance measurements; and (4) future investment analyses.¹⁸⁷ The first category—operation-specific financial reports—encompasses the financial results generated by operating units within a firm, such as the financial results from a particular retail outlet or a certain line of business. The second category—product (or service) profitability analyses—encompasses analyses of the profitability of the goods or services that the firm sells, typically on a per-unit or per-service basis. One challenge in carrying out a product profitability analysis is the difficulty in determining how fixed costs should be allocated among the various products the firm produces, a problem that has been a central focus of managerial accounting.¹⁸⁸ The third category—other performance measurements—refers to the information that is used to evaluate a firm's operations and is typically quantitative, but not exclusively financial. For example, a firm might monitor the average “life” of its customers or the quality ratings of its products. It is increasingly common for firms to identify a small number of such measures, often called “value drivers,” to moni-

186. One particularly useful source of information about the tools that managers use within the firm is managerial accounting, a field of study devoted to measuring, evaluating, and managing business performance within the firm. See generally Christopher D. Ittner & David F. Larcker, *Assessing Empirical Research in Managerial Accounting: A Value-Based Management Perspective*, 32 J. ACCT. & ECON. 349, 350-55 (2001) (reviewing the evolution of managerial accounting over the past forty years). Managerial accounting primarily focuses on the question of how a manager's evaluation tools can and should be structured to optimize the firm's performance. So the findings from this field of study need to be used with some caution when applied to the question of what information might be subject to disclosure regulation.

187. This taxonomy is consistent with that presented in RAY H. GARRISON & ERIC W. NORREEN, *MANAGERIAL ACCOUNTING* (10th ed. 2003).

188. Much of what is now known as managerial accounting was formerly known as cost accounting for this reason.

tor and manage the performance of the firm. A survey of the information companies use to manage their operations found:

[C]ompanies increasingly are integrating these various practices using a comprehensive “value-based” management (hereafter VBM) framework. . . .

. . . .

The value-based management approach represents an extension of more than four decades of managerial accounting research and practice. . . .

. . . .

. . . The VBM framework extends these ideas to highlight the identification of the firm’s financial and non-financial value drivers, and the feedback loop from performance to the subsequent reassessment of objectives, strategies, and organizational design and control.¹⁸⁹

The fourth category—future investment analyses—refers to the financial modeling managers undertake to evaluate new business opportunities. Investment analyses derive projected cash flows and other financial results for a potential business opportunity from a detailed set of operating and financial assumptions. Such assumptions might include, for example, estimates of future prices, productivity levels, and consumer behavior.

Each of these four types of management information is useful: (1) in determining the value of the company’s securities; (2) in measuring the competence of the firm’s management; and (3) in exposing opportunities for the firm’s competitors. The difficult question is whether it is feasible or beneficial to require disclosure of some or all of this management information. First, it is helpful to consider if the information that investors use to value securities is comparable with the information that manager’s use to run their businesses. If there is management information that is not used by investors, it is unlikely that requiring its public disclosure would be welfare-enhancing.

2. *The Information Sophisticated Investors Use to Value Companies*

Studies carried out by accounting and investor trade groups during the 1980s and 1990s to determine how sophisticated investors value companies are instructive.¹⁹⁰ The goal of these investor studies

189. Ittner & Larcker, *supra* note 186, at 350-55.

190. See *supra* note 119 (describing the circumstances leading up to these studies). The focus here on information used to value a company’s securities does not mean that this in-

was to identify what information, beyond that already disclosed by public companies, would be helpful to sophisticated investors.¹⁹¹

The first of these studies, published in 1993, was carried out by the Association for Investment Management and Research (AIMR) and titled *Financial Reporting in the 1990's and Beyond* ("the AIMR Study").¹⁹² AIMR is an organization whose membership consists of over 50,000 investment professionals from over 100 countries and is "the largest and most important organized group of financial statement users in [the U.S.] economy and the world."¹⁹³ The AIMR Study found that its membership wanted companies to disclose more internal management information.¹⁹⁴

In 1994, the American Institute of Certified Public Accountants (AICPA) published *Improving Business Reporting—A Customer Focus* ("the Jenkins Report").¹⁹⁵ AICPA is the U.S. accounting industry's trade association. The connection between management information and the information sophisticated investors use is evident in a question posed in the introduction to the Jenkins Report: "Can effective business reporting exclude new performance measures on which management is focusing to manage the business?"¹⁹⁶ As part of its work on the Jenkins Report, AICPA conducted a survey of 1200 sophisticated investors to "identify the types of information users believe are the most useful in valuing securities."¹⁹⁷ The Jenkins Report concluded:

To meet users' changing needs, business reporting must:

- (a) Provide more information with a forward-looking perspective, including management's plans, opportunities, risks, and measurement uncertainties.
- (b) Focus more on the factors that create longer term value, including non-financial measures indicating how key business processes are performing.
- (c) Better align information reported externally with the information reported to senior man-

formation is not also valuable for reducing agency costs. See *supra* notes 151-66 and accompanying text.

191. These studies did not consider the possibility of making disclosure of this additional information mandatory, which is the issue considered here.

192. See AIMR REPORT, *supra* note 119.

193. *Id.* at 10.

194. *Id.* at 85-86.

195. JENKINS REPORT, *supra* note 119.

196. *Id.* ch. 1, at 16.

197. *Id.* ch. 2, at 716.

agement to manage the business.¹⁹⁸

Thus, the Jenkins Report also concluded that the information that investors consider most useful in valuing a company's securities is essentially the same as the information that managers use within the firm.

In 1998, the Financial Accounting Standards Board (FASB), the organization formerly responsible for establishing generally accepted accounting principals (GAAP), started a research project that followed up on the findings of the Jenkins Report and the AIMR Study. Upon the completion of research in 2001, FASB released four reports ("FASB Studies"),¹⁹⁹ one of which focused on improving the business and financial reporting by public companies ("the Upton Report").²⁰⁰ That report concluded "[u]sers value disclosure of nonfinancial information. Presentation of nonfinancial performance information in metrics that can be tracked from period to period would enhance the usefulness of that information."²⁰¹ Again, sophisticated investors want access to the business operating information generated and used within the firm.

3. *Evidence that Management Information Is Not Already Disclosed*

Before considering if regulatory intervention could efficiently increase the disclosure of certain management information, an additional issue needs to be addressed. Given the amount of information that public companies already disclose, the information available to investors through other channels, and the fact that sophisticated investors already use management information to value and monitor public companies, it is necessary to consider whether requiring additional disclosures of management information by public companies would be useful to investors.

Markets are notoriously efficient. Professional investors do not consistently outperform the stock market,²⁰² and stock market prices reflect not only the information held by any one investor but also aggregate all information available to the market.²⁰³ There is also a sizeable industrial espionage industry.²⁰⁴ Still, several lines of evidence suggest a substantial gap remains between current disclosure practices and the level of disclosure that publishing management in-

198. *Id.* ch. 1, at 16.

199. FASB STUDIES, *supra* note 119.

200. UPTON REPORT, *supra* note 119.

201. *Id.* at 106.

202. *See, e.g.*, STEPHEN A. ROSS ET AL., CORPORATE FINANCE 354-55 (6th ed. 2002).

203. Gilson and Kraakman, *supra* note 11.

204. *See supra* note 84.

formation would entail.

First, the AIMR Report, the Jenkins Report and the FASB Studies were each undertaken because of concerns about the growing gap between the information that public companies were disclosing and the information executives were using internally to manage operations.²⁰⁵ While these studies focused on determining what information sophisticated investors were using to value companies, the studies also reviewed the types of information that public companies were already disclosing. One of the FASB Studies, for example, reviewed disclosure practices in eight industries to determine the extent to which detailed management operating information was being disclosed by public companies.²⁰⁶ For each of these eight industries, nonfinancial disclosures were reviewed in six categories: (1) business data; (2) management's analysis of business data; (3) forward-looking information; (4) information about management and shareholders; (5) background about the company; and (6) information about intangible assets. The study concluded that "businesses currently provide considerable non-financial information, although perhaps less in the form of explicit metrics that can be tracked from period to period."²⁰⁷ Even this optimistic reading of the data²⁰⁸ makes clear that nothing close to complete management information is being disclosed. Both legal and finance scholars have noted a similar paucity of useful business information in public company disclosures.²⁰⁹

Even if public companies do not publish a substantial amount of management information, this does not mean that their management information cannot otherwise be obtained by investors and competitors. For example, it should not matter that General Motors does not include in its public filings information about how much it charges for each of its car models when an investor need only go to the Internet or the local car dealership to access this information. There is, however, evidence that suggests that stock market prices do not incorporate undisclosed management information. Financial economists have generally rejected the strong form of the efficient capital market hypothesis (ECMH), which holds that all private information about a company is reflected in a company's share price.²¹⁰ In fact,

205. See *supra* note 184 and accompanying text.

206. IMPROVING BUSINESS REPORTING, *supra* note 119.

207. UPTON REPORT, *supra* note 119, at 57.

208. The actual survey results were published along with the findings.

209. See, e.g., Romano, *Need for Competition*, *supra* note 12, at 448-64 (reviewing the actual disclosures of several public companies); Kitch, *supra* note 34, at 838 ("If an investor concludes that an issuer's securities disclosures really have provided 'an opportunity to look at the company through the eyes of management' then the investor may be well advised to short the stock, because the perspective of management is complacent and self-satisfied and ignores the hostile and unpredictable world.").

210. Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. FIN. 383 (1970) (surveying the theoretical implications of efficient markets and

one of the main reasons financial economists have rejected the strong form of the ECMH is the apparent value of internal management information.²¹¹ Financial economists have consistently found that corporate insiders outperform the market when trading in their own company's stock, showing that managers have access to information that is not immediately reflected in the company's stock price.²¹²

Another point suggesting that management information has incremental value is that sophisticated investors invest resources in gathering this type of information.²¹³ Also, in transactions where the information that companies share with investors is not made publicly available, investors receive a substantially greater amount of management information than do investors in public companies.²¹⁴ This suggests that there would be an incremental benefit to investors from receiving additional management information.²¹⁵ Finally, valuation textbooks focus on management information as a central component in determining a company's value.²¹⁶

B. Constructing a Requirement to Disclose Additional Management Information

To require the disclosure of all management information would certainly be ill-advised. Does an investor in a public company have any reason to know how much is spent on every pencil the company buys? What benefit could come from forcing a company to disclose the features of a product that the company has made a substantial investment in, but has not yet released? Would a company ever prepare projections in a way that is not significantly biased by the fact that this information is going to be publicly disclosed?

reviewing the relevant empirical evidence); Eugene F. Fama, *Efficient Capital Markets II*, 46 J. FIN. 1575 (1991) (providing an updated review of the empirical evidence on the efficient markets hypothesis); Daniel R. Fischel, *Efficient Capital Markets, the Crash, and the Fraud in the Market Theory*, 74 CORNELL L. REV. 907, 911-12 n.11 (1989) ("The empirical evidence to date (with some exceptions) appears to establish the validity of the weak and semi-strong but not the strong form of the efficient capital markets hypothesis.").

211. See ROSS ET AL., *supra* note 202, at 359.

212. See *supra* note 52.

213. A related concern might be that if sophisticated investors are already using this type of information to value stocks, its publication by companies should not impact share prices. There are two answers to this concern. First, as noted in the text, this information does not appear to already be incorporated into share prices. See *supra* notes 52, 184. The second answer is that this is not an absolute issue of whether information is incorporated into share prices, but an incremental one of the extent to which information is incorporated into share prices. See generally Sanford J. Grossman & Joseph E. Stiglitz, *On the Impossibility of Informationally Efficient Markets*, 70 AM. ECON. REV. 393 (1980).

214. See *supra* notes 123-32 and accompanying text.

215. It is possible, but unlikely, that this benefit from additional management information is no longer relevant once a firm's shares are publicly traded.

216. See, e.g., ERICH HELFERT, *TECHNIQUES OF FINANCIAL ANALYSIS: A GUIDE TO VALUE CREATION* 461-67 (11th ed. 2003); TOM COPELAND ET AL., *VALUATION: MEASURING AND MANAGING THE VALUE OF COMPANIES*, 70-71 (3d ed. 2000).

Before evaluating the efficacy of requiring the disclosure of management information, three restrictions are offered for the type and amount of management information that might be subject to a disclosure requirement. The goal of these constraints is to develop a subset of management information for which a disclosure requirement might be welfare-enhancing. The management information that meets these various criteria is defined as Disclosable Management Information, or DMI. Each restriction addresses a different concern. First, the disclosures need to be of interest to and comprehensible by an investor. Second, a disclosure requirement will create disincentives to invest in information-gathering activities. Therefore, a disclosure requirement is likely to be more efficient if it focuses on information that is produced incidentally to other productive activities and is already gathered within the firm, rather than on information that is produced to provide a competitive advantage from its proprietary use.²¹⁷ Third, regulation costs will be a critical component for determining the efficacy of a disclosure requirement. Other things being equal, information that would be subject to a disclosure requirement should neither be easily manipulated nor be administratively difficult to make subject to a disclosure requirement.

1. *Restricting Disclosure Requirements to Information Useful to Investors*

Management information subject to a disclosure requirement should exclude extraneous or trivial information.²¹⁸ Management information is generated at every level of an organization. To determine the appropriate level of detail to which a disclosure requirement should apply, we can look at the way a company uses information within the firm. The sophisticated investor and the company's Chief Executive Officer (CEO) would be interested in information at a similar level of detail. The CEO is reviewing and building the company from the firm-wide perspective, just as the investor is con-

217. It is just this distinction between the incidental production of information and the investment in information-gathering activities to gain competitive advantage that Kronman uses to explain why the common law has disclosure requirements in only certain contractual settings. Kronman, *supra* note 23, at 2. In the alternative, if a "gather and disclose" rule is implemented (rather than a "disclose if gathered" rule), this rule will be less costly if applied to information that is already gathered by most firms. See *infra* note 250.

218. A related point is that people outside the firm must be able to understand the disclosure. When constructing a requirement to disclose management information, it would be necessary to outline what types of supporting information should be provided to make the disclosed information comprehensible and useful to a third party. One benefit of preparing financial statements according to GAAP is that investors have at least some guidance as to what each number represents and how each number was calculated. The importance of presenting management information in a way that is consistent over time and comprehensible to investors was one of the findings of the AIMR Report, the Jenkins Report, and the FASB Studies.

cerned with the overall value and management of the firm. Therefore, the level of detail of information subject to a disclosure requirement should be on par with the level of detail of information typically utilized by a company's CEO.²¹⁹ At this level of detail, the amount of information subject to a disclosure requirement might be substantial, but just as this information is useful to a CEO in managing the firm, this information would also be useful to a sophisticated investor in evaluating the firm and its management.

2. *Restricting Disclosure Requirements to Limit Disincentive Effects*

A disclosure requirement should focus on information that would continue to be produced despite its disclosure. Such a focus would reduce the disincentives caused by a disclosure requirement.²²⁰ This concern suggests two different types of restrictions on the management information that would be subject to a disclosure requirement: (1) certain proprietary information should be shielded from a disclosure requirement, and (2) disclosures should only be required to be made on an annual basis.

For the purposes of constructing DMI, information that identifies specific product attributes should be excluded. Management information includes much information—such as product life expectations, user opinions, quality measures, and projected profitability—that would be useful, even if specific product features were not revealed. This is not to deny that even information “sanitized” in this way could prove valuable to a company's competitors, but “sanitizing” would reduce the disincentives caused by a DMI disclosure requirement.²²¹

219. Direct reliance on the actual practices within the firm would be too easily avoided. If actual practices within the firm were the standard, very little information would be provided to the CEO; rather, all detailed information would be provided to those executives one level below the CEO.

220. The alternative to a “disclose if gathered” rule, a “gather and disclose” rule, does not create these disincentives but may be socially costly in other ways. *See infra* note 250.

221. The SEC currently recognizes a company's interest in protecting proprietary information from disclosure. Item 101, 17 C.F.R. § 229.101(c)(1)(ii) (1999) (providing that an issuer is not required to disclose narrative information concerning new business lines and products “the disclosure of which would affect adversely the registrant's competitive position”). Moreover, this concern is now given overriding priority. The result is that very little internal management information is disclosed. More preferable would be a provision comparable to the right to seek confidential treatment from the Commission under Rule 406 of the Securities Act, 17 C.F.R. § 230.406 (1999). Rule 406 does not set out the ground on which the Commission might grant confidential treatment, but does require the applicant for confidential treatment to provide “a detailed explanation of why, based on the facts and circumstances of the particular case, disclosure of the information is unnecessary for the protection of investors.” 17 C.F.R. § 230.406(b)(2)(iii) (1999). This exemption is generally applied to information that is not material but the disclosure of which is required, such as certain contracts. On this provision, see generally Comizio, *supra* note 29.

One example of how such a disclosure regulation might be structured in this way comes from the disclosure requirements imposed on companies with oil and gas exploration operations.²²² Starting in 1978, the SEC required companies with oil and gas exploration operations to disclose information about the estimated value of their proven oil and gas reserves. The SEC imposed this requirement because traditional financial reporting methods, based on cost accounting, did not provide sufficient guidance as to the economic value of these assets.²²³ Oil and gas companies, however, are not required to specify which particular fields account for the value of the reserves reported.

The periodicity of the requirement to disclose management information will also affect the extent of the disincentive created by a disclosure requirement. Increasing the frequency of required disclosures reduces the expected period during which a company can capture the private benefits undisclosed information may provide. Disclosure requirements for public U.S. companies have varying periodicities (mostly quarterly and annual with interim period disclosure required in certain circumstances), depending on the type of information and the relative significance of the underlying event.²²⁴ The proposal here would be that companies be required to disclose DMI annually, which would give an average of at least six months of protection to the information subject to this disclosure requirement.

3. *Restricting Disclosure Requirements to Reduce Regulation Costs*

Disclosure requirements can only effectively be applied to information that is in some way independently verifiable. One principle underlying GAAP is that gains and losses are only recognized based on actual transactions or, in certain circumstances, when there is a reliable way to independently verify the entry.²²⁵ Obviously, this standard of verifiability needs to be modified in the context of the disclosure of management information. Much management information will not be generated in transactions with third parties. On the other hand, a looser standard (for example, was this information used within the company to manage the business?) could be too easily manipulated.

Management information subject to a disclosure requirement must have at least some element of independent verifiability. First,

222. See *supra* note 28.

223. See KRIPKE, IN SEARCH OF A PURPOSE, *supra* note 119, at 200-01 (discussing why oil and gas reserve disclosure requirements were implemented).

224. See, e.g., Oesterle, *supra* note 29 (reviewing the periodicity of U.S. disclosure requirements).

225. Such a provision applies, for example, to holdings of readily marketable securities.

this implies that neither projections nor forecasts should be subject to a disclosure requirement.²²⁶ The management information subject to a mandatory disclosure requirement could, instead, consist of operation-specific financial reports, product profitability analyses, and other performance measurements.²²⁷ Each of these kinds of information is based on data generated from actual operations within the firm. This is not to say that there will be no distortions caused by requiring disclosure of this information, but only that defining DMI in this way should reduce some of the avoidance costs associated with a management information disclosure requirement.

In summary, DMI consists of management information: (1) at a level of detail commensurate with that customarily provided to a company's CEO; (2) with specific product details removed and published on an annual basis; and (3) generated from independently verifiable operating information. This formulation leaves some questions open. What would regulations implementing a requirement to disclose DMI look like? Would such regulations be standards-based or rules-based?²²⁸ Building on the three constraints provided here, the SEC would need to construct more detailed regulations specifying what management information would be subject to a disclosure requirement. However, for the purposes of carrying out the preliminary estimate of the efficacy of imposing a DMI disclosure requirement, these restrictions suffice.

C. *Estimating the Costs and Benefits of Requiring Disclosure of DMI*

An analysis of the costs and benefits of requiring public companies to disclose DMI proceeds in three steps, following the component approach to evaluating a disclosure requirement developed above.²²⁹ The first step is a comparison of the incremental production costs of disclosing DMI with the gains from DMI disclosure realized whether or not a firm has publicly traded securities. The second step is a comparison of DMI's short-term competitive-disadvantaging costs with

226. This conclusion is consistent with efforts over the past thirty years to encourage, but not require, the disclosure of these forecasts. The focus on the disclosure of forecasts started with Kripke. KRIPKE, IN SEARCH OF A PURPOSE, *supra* note 119, at 25, 317-18. Kripke used this issue to show that the SEC's hostility to nonfinancial statement disclosures was inefficient. *Id.* Kripke was correct that the SEC's hostility toward increased disclosure was based on an ill-founded theory of how disclosure policies protect investors. However, Kripke's focus on the disclosure of forecasts was mistaken because it underestimated the ease with which this information could be manipulated by managers. This may help explain the confused policy the SEC has followed with respect to the disclosure of projections. See Kitch, *supra* note 34, at 777-88 (describing the varying policies of the SEC with respect to forward-looking statements).

227. See *supra* Part IV.A.1.

228. See generally Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557 (1992).

229. See *supra* Part III.C.

competitor and consumer gains (or losses) resulting from the disclosure of DMI. The third step is a comparison of the disincentives to invest in innovation and regulation costs associated with requiring DMI disclosure with the incremental gains from the disclosure of DMI realized when companies' securities are publicly traded. The conclusion is that requiring disclosure of DMI is likely to be quite beneficial.

1. *Private Costs and Benefits with the Disclosure of DMI*

The benefits from the disclosure of DMI, whether or not a firm has publicly traded securities, would probably exceed incremental DMI production costs. In terms of benefits, disclosing DMI would provide insight into management performance in ways that current disclosures do not. In terms of costs, because DMI is distilled from information and analysis already produced for use within the firm, its production costs should be minimal.

A more precise way to explore the relationship between DMI production costs and gains from DMI disclosure, realized whether or not a firm has publicly traded securities, is to review disclosure practices when the information that a company shares with its investors is not made available to the public at large.²³⁰ In these "private" transactions, the level of information that a company chooses to disclose is primarily the outcome of the trade-off between marginal information production costs and private disclosure benefits. A preliminary review of the disclosure practices in private transactions shows that the equivalent of DMI is consistently disclosed.

With the assistance of a corporate law firm involved in numerous private-financing transactions, disclosure practices in several private transactions were reviewed.²³¹ This review found that companies are typically required to disclose significant amounts of internal management information in private transactions. Below are selected sections of the disclosure requirements from a representative investor agreement:

- .11.2 Historical and projected gross profit and contribution by product line for the last three fiscal years, the current fiscal year and the next fiscal year;
-
- .11.4 Minutes of recent meetings with senior management to review operations on a division-by-division basis, with specific focus on operating projections, if available.

230. See *supra* notes 123-32 and accompanying text.

231. See *supra* note 124 and accompanying text.

-
- .11.7 Comparison of initial budget to actual results, combined and for each division, including detail of expenses, for the last two fiscal years. . . .
-
- .2.1 Provide copies of any staff, management or consultant analyses of sales, markets or products of the Company, including market studies, marketing plans and customer surveys. . . .
-
- .1.1 Equipment utilization charts by month and week²³²

The information typically required to be disclosed in these private transactions, in fact, goes beyond what would be required under a DMI disclosure requirement.

There are, however, some difficulties with applying disclosure practices in private transactions to address this first comparison. First, there are limitations on the use of disclosure practices in these private transactions as a baseline for optimal disclosure practices generally.²³³ Second, even though DMI production costs are of the same character for private and public firms, production costs will be higher for a public firm because of the larger number of shareholders and the increased scrutiny applied to information that is publicly disseminated.²³⁴ Information that may be cost-effective for a private firm to disclose might not be worth disclosing if the same company is public, regardless of the other costs or benefits of disclosure. The conclusion that benefits from the disclosure of DMI, available to public or private firms, outweighs the direct costs of producing and publishing DMI must be preliminary at this time.

2. Public Costs and Benefits with the Disclosure of DMI

The second step in analyzing the efficacy of requiring the disclosure of DMI by public companies is to compare the competitive disadvantage incurred by the disclosing firm with competitor and consumer gains (or losses) from the disclosure of DMI. There are several reasons to expect that competitor and consumer gains from the disclosure of DMI will approximate or exceed the competitive disadvantage suffered by the disclosing company. First, if retaining DMI provides monopoly power to the disclosing firm, the disclosure of this in-

232. Excerpted from an agreement provided by Latham & Watkins LLP (on file with author).
 233. See *supra* notes 123, 128-33 and accompanying text.
 234. See *supra* Part II.B.1.

formation should produce a short-term gain in social welfare.²³⁵ Second, if a firm could disclose certain components of DMI that would incrementally benefit the disclosing firm, this information would be disclosed voluntarily. Therefore, the incremental DMI disclosed as a result of a DMI disclosure requirement is more likely than not beneficial to competitors and consumers. The net effect of transferring DMI from one firm to many firms in the short-term will be minimal or positive.

3. *Disincentives to Invest and Regulation Costs Compared with Other Gains from the Disclosure of DMI*

Four components remain to determine whether DMI should be required to be disclosed: (1) those gains from the disclosure of DMI only available to companies with public securities; (2) the improved allocation of assets throughout the economy that may result from the disclosure of DMI; (3) the long-term disincentives to invest in innovation from the disclosure of DMI; and (4) the regulation costs of implementing a DMI disclosure requirement. These elements are now considered in turn.

The disclosure of DMI would trigger many of the benefits public companies receive from making disclosures.²³⁶ First, the disclosure of DMI could reduce agency costs in several ways. It would provide a much more direct and transparent way to monitor manager performance than does the financial information currently disclosed by public companies. One persistent complaint from investors is the opacity of reported financial information.²³⁷ Managers are using an increasingly sophisticated arsenal of analytic tools within the firm to understand and evaluate their businesses and, in the process, are generating a wealth of information about company operations. This internal management information is precisely the type of information that investors use to value a company's securities.²³⁸ In fact, the gap is growing between the usefulness of the information managers rely on for internal decisionmaking and the opacity of the information that public companies disclose.²³⁹ Disclosure of DMI would help close this gap.

Disclosure of DMI would also provide potential acquirers substantially more information about target companies. This would improve the efficacy of the market for corporate control. Publishing DMI provides a potential acquirer access to the precise information necessary to determine whether there is an opportunity to create value through

235. See *supra* Part II.A.4.

236. See *supra* Part II.A.

237. See *supra* note 184 and accompanying text.

238. See *supra* Part IV.A.2.

239. See *supra* note 184.

an acquisition. One example of the usefulness of disclosure of this type of information is the relationship between the SEC requirement that oil and gas firms disclose the value of their proven reserves, starting in 1978, and increased takeover activity in the oil and gas exploration industries during the 1980s.²⁴⁰

The disclosure of DMI should also reduce the extent of informational asymmetries between those with access to inside information and other investors. Thus disclosure of DMI will reduce insider expropriation opportunities,²⁴¹ lower the firm's cost of capital, and limit the other adverse consequences such informational asymmetries may have on insiders' behavior.²⁴² The disclosure of DMI could also improve the allocation of assets throughout the economy. In the past five years it was striking how much real investments were driven by public company valuations.²⁴³ While it would be naïve to claim that increased disclosure would eliminate developments such as the dot-com speculative bubble, it would also be suspect to claim that substantially increased disclosure of DMI would have no impact on the allocation of assets throughout the economy.²⁴⁴

With respect to long-term publication costs, DMI was constructed to minimize the long-term disincentives to invest in information gathering that its publication might entail. DMI is culled from information that managers are already producing to enhance value creation within their companies. It seems unlikely that the returns within the firm on such information would be substantially reduced by its disclosure, since optimizing operations within the firm will remain an important goal even if the business environment becomes more competitive. DMI also specifically excludes product feature information, and DMI would only be disclosed on an annual basis.

There are three components of regulation costs: administrative costs, avoidance costs, and regulatory waste.²⁴⁵ An estimation of the regulation costs of implementing a DMI disclosure requirement is necessarily preliminary. This is true with respect to estimating the administration costs of requiring disclosure of DMI for several reasons. First, a detailed implementation scheme for a requirement to disclose DMI is not offered here. Second, the construction of effective regulation is an iterative process as more efficient requirements are developed and unanticipated costs are uncovered.²⁴⁶ Requiring disclosure of DMI will certainly be both difficult and expensive. Appropri-

240. See *supra* note 50 and accompanying text.

241. See *supra* notes 54-56 and accompanying text.

242. See *supra* note 56 and accompanying text.

243. See *supra* note 63 and accompanying text.

244. See *supra* note 63 and accompanying text.

245. See *supra* notes 169-70 and accompanying text.

246. See, e.g., Mark S. Croft, *MD&A: The Tightrope of Disclosure*, 45 S.C. L. REV. 477 (1994) (describing the evolution of the MD&A disclosure requirement).

ate disclosure requirements may need to be determined on an industry-by-industry basis. That said, it is possible to estimate the probable upper limit of the administrative costs of implementing a DMI disclosure requirement, based on the SEC's budget. The overall budget of the SEC in 2002 was approximately \$500 million.²⁴⁷ Given this overall budget, it seems unlikely that the incremental administrative costs of requiring disclosure of DMI would exceed \$50 million per year.²⁴⁸

Avoidance costs incurred as a result of requiring disclosure of DMI can take two forms. First, companies could choose to understand their businesses less precisely to avoid the disclosure of information that might be of use to a competitor. But this is not an inevitable outcome of such a disclosure requirement. In fact, requiring disclosure of DMI may force firms to find new ways to construct competitive advantages, which might even increase the production of DMI. Moreover, if the standard for DMI disclosure is not tied to whether information is already produced within the firm, as is the case with the requirement to disclose the value of oil and gas exploration properties,²⁴⁹ then there would not be an incentive to produce less information within any one firm.²⁵⁰

Second, avoidance costs may be incurred as fewer companies choose to become public in the United States or in other ways avoid disclosing DMI. Romano, for one, argues that it would be virtually impossible in practice to require a public company to disclose competitively disadvantaging information.²⁵¹ Romano cites an article by Kitch, which reviews the history of federal public company disclosure requirements, to support this conclusion. Romano states: "Kitch further contends that it is virtually impossible in practice to implement a disclosure regime that includes proprietary information—either firms will not meaningfully disclose information that can benefit their competitors, or they will delist to avoid such disclosure."²⁵² The statement that Romano refers to is made by Kitch, after he reviews a dispute in the late 1930s about what information public companies would be required to disclose by the SEC. Kitch states:

247. SEC, ANNUAL REPORT 179 (2002).

248. Based on the assumption that these new disclosure requirements and enforcement efforts would be unlikely to require more than a ten percent increase of the SEC's total budget for 2002.

249. See *supra* note 28.

250. This is the benefit of a "gather and disclose" rule, as compared with a "disclose if gathered" rule. See DOUGLAS G. BAIRD ET AL., *GAME THEORY AND THE LAW* 100–09 (1994) (modeling the economic trade-offs between a "gather and disclose" rule and a "disclose if gathered" rule).

251. Romano, *Empowering Investors*, *supra* note 12, at 2381; Romano, *Need for Competition*, *supra* note 12, at 446.

252. Romano, *Empowering Investors*, *supra* note 12, at 2381 (citing Kitch, *supra* note 34, at 874).

So ended the challenge to securities disclosure based on the need for secrecy. By [the end of the 1930s] most issuers had learned that the disclosure requirements of the Exchange Act did not affect their business, or if they did, had modified their businesses so disclosure would not be threatening, or had delisted from an exchange, finding immunity from disclosure regulation in the over-the-counter market.²⁵³

But Kitch's conclusion is contradicted by his other findings. Kitch reviews how numerous substantive disclosure requirements were successfully implemented over the course of the next sixty years, all without a flight from U.S. public capital markets.²⁵⁴

In fact, there are many reasons to be skeptical of the conclusion that it would be impossible to require disclosure of competitively disadvantaging information. First, there is a long history of objections to mandatory disclosure requirements, based on concerns that imposing a particular disclosure requirement would be catastrophic. Such concerns have consistently proven to be overblown.²⁵⁵ Second, a company's managers already make disclosures contrary to their short-term interests. This is because disclosure requirements already entail, at least in part, a commitment by managers to disclose information in circumstances when it is against their immediate interest to do so.²⁵⁶ A requirement to disclose competitively disadvantaging information does not, therefore, require managers—who are responsible for complying with disclosure requirements—to behave in a fundamentally different way with respect to disclosure policies than they already do. Third, financial economists have found that many public company disclosures are value-relevant.²⁵⁷ One would expect at least some of this value-relevant information to also be useful to a company's competitors.²⁵⁸ Fourth, the argument that a requirement

253. Kitch, *supra* note 34, at 874.

254. *See, e.g., id.* at 788-815 (describing the segment reporting requirements and management discussion and analysis requirements implemented by the SEC). *But see* Romano, *Empowering Investors*, *supra* note 12, at 2380-81 (arguing that segment reporting did not lead to the disclosure of competitively disadvantaging information).

255. For example, in the summer following the enactment of the Securities Act, the business community undertook an effort to repeal the Act arguing that it would "render financing exceedingly difficult, if not actually impossible, in the case of corporations with extensive interests," and the result would be to force "American corporations to go abroad for capital." SELIGMAN, *supra* note 6, at 77 (citing Arthur Dean, *The Federal Securities Act: I*, FORTUNE, Aug. 1933, at 104-06). The Securities Act was not repealed, and concerns about the collapse of publicly traded securities markets in the United States proved unjustified.

256. *See supra* notes 13-14 and accompanying text.

257. *See, e.g.,* Holthausen & Watts, *supra* note 35.

258. Romano, *Need for Competition*, *supra* note 12, at 454 (suggesting that if competitors had "spent time pouring over competitors' SEC filings" that might indicate that disclosure provided competitively useful information, but doubting that this occurs). The author's work experience, as an investment banker, venture capitalist, and public company executive, involved just this type of careful review of mandatory public company disclosures.

to disclose competitively disadvantaging information would lead to the flight of capital from U.S. public equity markets overstates the ease with which companies can choose to exit these markets. For one thing, it may be difficult for a U.S. public company with a large number of shareholders to delist.²⁵⁹ As importantly, the SEC has substantial control over if and when a company domiciled or doing business in the United States can elect to be exempt from the disclosure requirements of the Securities and Exchange Acts.²⁶⁰ The ability to remain private is to a large extent created by the SEC.²⁶¹ Fifth, the record with respect to the imposition of requirements to disclose competitively disadvantaging information is mixed. On one hand, efforts to impose a requirement on companies to disclose quantitative information about the profitability of various segments of their operations were fraught with difficulty.²⁶² On the other hand, within certain industries the SEC has effectively implemented regulations that led to the disclosure of competitively disadvantaging information. For example, starting in 1978 the SEC required companies with oil and gas exploration operations to disclose the economic value of their proven reserves, and these companies have generally complied with these regulations.²⁶³ Sixth, the ability of companies to disclose information without also disclosing proprietary information is implicitly based on the assumption that proprietary information can be inexpensively unbundled from information of value to the firm's various constituencies, which may not always be the case.²⁶⁴ Finally, there is no scholarly work that directly considers the costs and benefits of companies exiting the U.S. public capital markets.

A sweeping rejection of any requirement that public companies disclose competitively disadvantaging information, because it would be impossible to implement such a requirement, is not consistent with the evidence. This is not to imply that costs from disclosing competitively disadvantaging information are illusory or to reject the

259. See Rock, *supra* note 13, at 682-84.

260. Currently firms with fewer than 500 shareholders whose shares are not traded on a national stock exchange and have not engaged in a public offering are not required to provide periodic disclosure statements. See 15 U.S.C. § 781(a), (g) (2000).

261. This touches on the separate, albeit related, question of where the demarcation line should be between public and private companies. If the argument of this Article is correct that mandatory disclosure requirements ameliorate interfirm externalities, then this demarcation line should be reconsidered.

262. Item 101, 17 C.F.R. § 229.101(b) (1999) (requiring public companies to disclose their financial performance based on the various segments in which they operate); see Romano, *Need for Competition*, *supra* note 12, at 76-77 (pointing to the difficulties in implementing segment-reporting requirements and the limited apparent-value relevance of this information when disclosed). *But see* Fox, *Issuer Choice*, *supra* note 15, at 595-98 (arguing that segment-reporting requirements did lead to the disclosure of competitively disadvantaging information).

263. *But see supra* note 28.

264. See *supra* notes 151-66 and accompanying text.

claim that some companies will choose to remain private or otherwise alter their business practices because of the costs associated with mandatory disclosure requirements. Rather, the relevant question is the extent to which a particular requirement to disclose competitively disadvantaging information is enforceable and, if so, at what cost. In the case of DMI, the costs of regulation may even vary from industry to industry.

As for the costs of regulatory waste, without specific regulations to consider it is not feasible to evaluate such costs in the context of a DMI disclosure requirement.

4. *Political Feasibility of Implementing a DMI Disclosure Requirement*

Related to the question of the regulation costs of DMI disclosure is the question of whether it is politically viable to implement a DMI disclosure requirement.²⁶⁵ A preliminary consideration of the political feasibility of enacting substantially increased disclosure requirements of this type is inconclusive. On one hand, the enactment of the Securities and Exchange Acts, albeit under different circumstances and in a different era, was a much more dramatic undertaking. A DMI disclosure requirement would not require new legislation, since a DMI disclosure requirement falls well within the scope of the materiality definition, as well as the grant of regulatory authority to the SEC.²⁶⁶ On the other hand, the SEC has chosen thus far not to require disclosure of most of this management information, despite the nominal reliance of the SEC on the materiality standard and the findings of numerous studies that this is precisely the type of information that sophisticated investors find useful.²⁶⁷ It may be that the SEC has not yet realized the immense costs of an interfirm externalities market failure on public company disclosure practices,²⁶⁸ or it may be that requiring disclosure of this information is simply not politically feasible.

One way to understand the behavior of the SEC, or any administrative agency for that matter, is as an organization that serves the interests of the group or groups it regulates.²⁶⁹ There is certainly evidence of powerful interest groups attempting to influence the SEC.

265. See, e.g., Mahoney, *supra* note 13, at 1103 (“It is hard to imagine, however, that it would be politically feasible to force companies to disclose competitively sensitive information.”).

266. See, e.g., *supra* Part IV.A.2 (showing that DMI is information used by investors); Mahoney, *supra* note 13, at 1086 (describing the broad grant of authority provided to the SEC under the Securities and Exchange Acts).

267. See *supra* Part IV.A.2.

268. This is not an improbable conclusion, since the academic community has thus far failed to correctly estimate these costs as well. See *supra* Part III.B.

269. See, e.g., Stigler, *supra* note 170, at 3.

For example, Arthur Levitt, SEC Commission Chairman from 1992 to 2000, noted in his book, *Take on the Street*, the extent to which interest groups attempt to shape disclosure policy:

During my seven and a half years in Washington, I was constantly amazed by what I saw. And nothing astonished me more than witnessing powerful special interest groups in full swing when they thought a proposed rule or piece of legislation might hurt them, giving nary a thought to how the proposal might help the investing public. With laserlike precision, groups representing Wall Street firms, mutual fund companies, accounting firms, or corporate managers would quickly set about to defeat even minor threats.²⁷⁰

Many academic critics conclude that meeting the demands of powerful interest groups provides the best explanation for how the SEC constructs disclosure requirements.²⁷¹ It is also possible, as suggested by Professor Stephen J. Choi of Boalt Hall Law School and Professor A.C. Pritchard of Michigan Law School, that the SEC suffers from a number of cognitive biases in its rulemaking process.²⁷² If the “regulatory capture” or “behavioral economics” paradigm is a complete description of the SEC’s actions, then the analysis here is unlikely to lead to regulatory action.

On the other hand, it may be that the SEC is at least in part interested in increasing social welfare generally. For example, Levitt systematically tried in his tenure as SEC Commission Chairman to give weight to the interests of individual investors²⁷³ even though Levitt was aware these investors had limited political influence: “In the Washington lobbying hierarchy, the corporation is by far the most muscular power center, followed by workers (in large part because of the efforts of organized labor) and consumers. Shareholders, and especially individual investors, come last.”²⁷⁴ The mandatory disclosure of value-based information by companies with oil and gas exploration operations also provides evidence that the SEC can act in the way called for in this Article.²⁷⁵

270. LEVITT, *supra* note 43, at 236.

271. *See, e.g.*, Carney, *supra* note 117, at 725 (concluding that “an interest group story has more explanatory power” than a public interest explanation of how the SEC constructs mandatory disclosure requirements); Franco, *supra* note 10, at 346 n.253 (reaching a similar conclusion). *But see* Easterbrook & Fischel, *supra* note 5, at 672 (“We are less confident, however, that interest-group support is the *sole* explanation for securities regulation.”).

272. *See* Choi & Pritchard, *supra* note 3.

273. One notable example of this was the enactment of Regulation FD against the wishes of both securities firms and public companies. *See* Merritt B. Fox, *Regulation FD and Foreign Issuers: Globalization’s Strains and Opportunities*, 41 VA. J. INT’L L. 653, 654 (2001) (interpreting Regulation FD as an effort to promote the public good).

274. LEVITT, *supra* note 43, at 236-37.

275. *See* KRIPKE, IN SEARCH OF A PURPOSE, *supra* note 119, at 200-01 (interpreting the implementation of this disclosure requirement in this way).

D. Summary of Findings with Respect to a Requirement to Disclose DMI

Estimating the efficacy of requiring the disclosure of DMI turns out to depend primarily on the trade-off between the regulatory costs of implementing this disclosure requirement and the many benefits generated by these disclosures. This third component of the analysis of the efficacy of requiring DMI's disclosure proves to be pivotal, because: (1) the direct cost of preparing and disseminating DMI appears to be easily offset by the agency cost-reducing benefits DMI disclosure provides, whether or not a firm has publicly traded securities; (2) the costs of transferring proprietary information from one firm to many firms should be minimal; and (3) DMI is already produced as a by-product of efforts to improve firm performance. What then of the regulation costs of implementing a DMI disclosure requirement as compared with gains available to public firms and the economy as a whole from the disclosure of this information? Imposing a DMI disclosure requirement would be a challenging and expensive task, but not a task that should be avoided for these reasons alone. DMI disclosure could have a broad efficiency-enhancing impact throughout the U.S. economy. The arguments for requiring disclosure of DMI are compelling, even if this conclusion is necessarily preliminary.

V. IMPLICATIONS OF FINDINGS

This Article addresses *de novo* the question of what, if any, information public companies should be required to disclose. Answering this question anew shows that the SEC should require the disclosure of substantially more management information by U.S. public companies than it currently requires be disclosed.²⁷⁶ Without the disclosure of DMI, investors have an unnecessarily opaque view of the economic condition of the firm. Mandatory disclosure of DMI would provide investors a more effective way to monitor manager performance and encourage managers to focus on enhancing the value of the firm, rather than on the more limited measures of performance that investors currently have access to.

If this is too brazen a conclusion for some, the SEC should at least devote resources to understanding the advantages and disadvantages of requiring disclosure of DMI. The presence of a market failure resulting from interfirm externalities explains how unnecessarily opaque disclosure practices can persist, and previous scholarship has dramatically underestimated the potential costs of this

²⁷⁶. See *supra* Part IV.

market failure.²⁷⁷ Any individual firm choosing to disclose DMI would be competitively disadvantaged, and even investors with interests in many public firms would not be able to capture all of the benefits from disclosure of DMI. However, from an economy-wide perspective, the benefits to be gained by increasing the transparency with which firms operate are substantial.

There are three additional ramifications of this finding. First is a recommendation for the SEC to change the way in which it develops public company disclosure requirements generally. Second, the findings here advance the stalled scholarly debate about whether the federal regulation of public company disclosure practices is welfare-enhancing. Third, given the findings here, arguments that issuers should be able to choose the regime under which their securities would be regulated need to be reconsidered.

A. Guidance to the SEC on How to Construct Disclosure Requirements Generally

The implications for the SEC of the findings in this Article go beyond recommending requiring the disclosure of DMI. There are three additional steps the SEC should take immediately. First, the SEC currently gives substantial weight to companies' concerns about the costs of disclosing competitively disadvantaging information.²⁷⁸ In fact, a competitive-harm justification for withholding disclosures should be most suspect. This Article shows that concerns about the costs of disclosing competitively disadvantaging information can lead to the adoption of suboptimal disclosure practices. Moreover, the competitive-disadvantaging costs of disclosure are unlikely to be an important factor in determining which disclosure requirements enhance welfare.²⁷⁹ Competitive harms are likely to be offset by gains by other firms, or by consumers generally. The correct analysis of the efficacy of disclosure requirements focuses primarily on the trade-off between regulation costs and the other benefits provided to firms and the economy from requiring disclosures.

Second, the SEC is avoiding an honest dialogue about what criteria should be used to construct public company disclosure requirements by nominally relying on the materiality standard. The SEC does not, in practice, use the materiality standard to determine what public companies should be required to disclose.²⁸⁰ If the SEC formalized and publicized how mandatory disclosure requirements are developed, describing the costs and benefits of a proposed disclosure re-

277. See *supra* Part III.B.

278. See *supra* note 29.

279. See *supra* Part IV.C.

280. See *supra* note 185.

quirement, the appropriate dialogue could begin. As it stands, the SEC establishes disclosure practices in a way that is not helpful in advancing our understanding of the appropriate scope and content of public company disclosure requirements.

Finally, disclosure practices in private transactions can be used to provide guidance to the SEC as to what kinds of information public companies should be required to disclose. Disclosure practices in private transactions were useful in evaluating the efficacy of a mandatory DMI disclosure requirement.²⁸¹ This result can be generalized. Disclosure practices in private transactions provide guidance as to efficient public company disclosure requirements, when a disclosure requirement does not create a significant disincentive to invest in information-gathering activities and regulation costs are not substantial. Using private transaction disclosure practices as a benchmark would provide the SEC a more solid foundation for the edifice of public company disclosure requirements already in place.

B. Advancing the Debate on the Efficacy of Federal Disclosure Regulation

The scholarly debate on the efficacy of federal disclosure regulation is now essentially stalled for lack of evidence. Scholars argue about what to do in the absence of compelling evidence for or against imposing federal disclosure requirements on public companies. Almost twenty years ago Easterbrook and Fischel concluded:

[I]f all we can say is that we cannot identify either benefit or detriment from a given set of rules, the injunction to leave well enough alone has great force. At the same time, the study of regulation is sufficiently advanced to support a contrary injunction: Most regulatory regimes reduce aggregate welfare, although they also profit special interest groups.²⁸²

Little has changed, except for the arguments as to what to do in the absence of compelling evidence.²⁸³

This Article offers a new methodological approach to determine when disclosure requirements are welfare-enhancing, building on two insights. First, developing a comprehensive microeconomic model of disclosures by public companies reinforces the need to proceed by analyzing disclosure requirements individually.²⁸⁴ When evaluating a

281. See *supra* Part IV.C.1.

282. Easterbrook & Fischel, *supra* note 5, at 715.

283. See, e.g., Fox, *Issuer Choice*, *supra* note 15, at 569 (“I argue . . . that absent affirmative empirical evidence demonstrating social losses from mandatory disclosure, it should be retained.”); Romano, *Empowering Investors*, *supra* note 12, at 2372 (“The difficulty of discerning an affirmative impact on investors from the federal regime . . . supports abandoning its exclusivity.”).

284. See *supra* Part II.

specific disclosure requirement, it becomes possible to include information about costs and benefits that is not available when considering the impact of disclosure requirements in aggregate. Second, a model is developed to compare the various costs and benefits of imposing a disclosure requirement on public companies.²⁸⁵ Even if the reader is uncomfortable with the conclusion that DMI should be required to be disclosed, a coherent way to determine the efficacy of other federal disclosure requirements is now available.

C. Reconsidering the Debate on Allowing Issuers to Choose Their Securities Regulation Regime

Some legal scholars argue that issuers should be able to choose the regime under which their securities are regulated, just as corporations currently choose their state of incorporation.²⁸⁶ These proposals suggest that an issuer choice scheme would be superior to mandatory federal securities regulation, because issuer choice would mitigate many of the inefficiencies inherent in a noncompetitive regulatory regime. But issuer choice proposals assume that there are no market failures with respect to the disclosure practices of public companies for which imposing disclosure requirements would be an efficient solution.²⁸⁷

The proponents of issuer choice in securities regulation are correct in observing that current scholarship does not provide a convincing rationale for imposing federal disclosure requirements on all public companies. But this Article challenges the conclusion that there are no adequate justifications for imposing mandatory disclosure requirements. First, the argument provided in this Article shows that mandatory disclosure of DMI would be efficient.²⁸⁸ Second, even if the details of the argument for disclosing DMI do not impress these critics, a method by which welfare-enhancing regulatory interventions can be constructed is developed.²⁸⁹ The challenge now for the proponents of issuer choice in securities regulation is to offer a mechanism by which certain mandatory provisions would be included in any regulatory regime, so that some of the benefits of an issuer choice regime could be maintained. A hybrid regulatory scheme, including some mandatory provisions and some provisions applicable only in certain regimes, could provide an attractive degree of flexibility. This may be a promising approach for issuer choice advocates, and would be parsimonious with the ongoing internationalization of securities regulation.

285. See *supra* Part III.C.

286. See *supra* note 14.

287. See, e.g., Romano, *Empowering Investors*, *supra* note 12, at 2372.

288. See *supra* Part IV.

289. See *supra* Part III.

VI. CONCLUSION

Answering anew the question of what, if any, information public companies should be required to disclose yields several significant results. First, developing a comprehensive microeconomic analysis of disclosures by a public firm shows that it is only possible to evaluate disclosure regulation by assessing specific disclosure requirements. Second, constructing a method to evaluate specific disclosure requirements reveals that previous scholars have dramatically underestimated the potential cost of a market failure in public company disclosure practices. Third, weighing the costs and benefits of requiring disclosure of certain internal management information indicates that public companies should be required to disclose substantially more of the information used within the firm to manage operations than is currently required to be disclosed.

The original proponents of federal securities legislation sensed that something was amiss with unregulated public company disclosure practices. That intuition is supported here. Unfortunately, these proponents did not correctly identify what caused public companies to adopt unnecessarily opaque disclosure practices. Brandeis' call for increased disclosure by public companies was premised on his incorrect belief that the primary benefit of requiring public company disclosures was fraud deterrence.²⁹⁰ As a result, objections were not raised when exemptions from disclosure requirements were granted for proprietary information at the time the Securities and Exchange Acts were enacted.²⁹¹ In the years since, the SEC has consistently deferred to the interests of firms in keeping proprietary information confidential.²⁹² This Article shows it is just such concerns that may cause a significant market failure in public company disclosure practices. Exemptions granted from disclosure requirements based on "competitive harm" should be highly suspect.

And even if the original proponents of federal securities regulation did not correctly specify the market failure at play, the findings here are consonant with the larger agenda of the Progressive movement. Progressives did not consider regulatory intervention an alternative to market mechanisms, but rather as a way to promote the workings of markets by correcting market failures. The Securities and Exchange Acts, with their emphasis on disclosure, do offer a powerful tool to improve the effectiveness with which public markets monitor and discipline the managers of public firms.

Despite the dramatic evolution of information technologies and

290. See *supra* note 7 and accompanying text.

291. See, e.g., Landis, *supra* note 8, at 47 (noting, in passing, the decision to grant the SEC the power to "give confidential treatment to certain type of material contracts"); see also *supra* note 86 and accompanying text.

292. See, e.g., *supra* note 29.

management practices over the past seventy years, regulators and legislators have been unable and unwilling to fundamentally recalibrate the scope of public company disclosure requirements. This Article provides both the tools and rationale to undertake a needed expansion of public company mandatory disclosure requirements. With the findings here, a coherent foundation is now available to determine which disclosure requirements should be imposed on public companies.

