

**COMPARISONS AMONG FIRMS:
(WHEN) DO THEY JUSTIFY MANDATORY DISCLOSURE?**

Sharon Hannes^{*}

Abstract

Comparisons among firms play a major role in securities analysis. This essay asks if this fact justifies the mandatory nature of securities regulation. Once a firm approaches the public securities markets, federal securities regulations compel it to disclose financial information to the public. A seminal theory argues that firms would not otherwise commit to maintain optimal disclosure levels, since a disclosing firm bears all disclosure costs but does not gain all disclosure benefits.

This paper examines the robustness of this argument in relation to disclosure benefits which arise from comparisons among firms. Financial data of peer firms allows shareholders to measure and monitor the relative performance of their own firm. The ability to make such comparisons is a benefit that each disclosing firm provides to its peers; it may have great social value but allegedly no private value to the disclosing party which bears the full cost of such disclosure. One might, therefore, call to address this market failure with a mandatory disclosure requirement.

Interestingly, while the above description might justify a mandatory disclosure requirement for private firms (a requirement which does not exist in practice), it does not automatically justify mandated disclosure by public firms. If comparison benefits accrue only after the public shareholders or securities analysts have had a chance to review the data of all the relevant firms (which is the case for all public firms), then each individual firm cannot enjoy comparison benefits without exposing its own statements. In other words, if one firm must make its financials public in order to incur comparative disclosure benefits -- which is normally the case with public firms since their public investors process financial data *outside the boundaries of the firm* -- then public firms would tend to disclose information regardless of the fact that such information benefits their peers. This voluntary mutual disclosure phenomenon, which helps firms capture comparative disclosure benefits, mitigates the fear that disclosure might be sub-optimally produced without the intervention of the regulator. Nevertheless, if a material piece of information confers significant comparative benefits when reviewed by corporate insiders and not by the public shareholders, then one cannot count on voluntary mutual disclosure to occur, and the mandatory federal intervention might be in order.

^{*} Tel Aviv University Faculty of Law. For their helpful comments and conversations, I wish to thank Robert Cooter, Jesse Fried, Omri Yadlin and [to come]. For their financial support my thanks to the Cegla Center for the Interdisciplinary Research of the Law at Tel Aviv University. Finally, I thank Northwestern University School of Law for their hospitality in the period in which I wrote this essay.

I. INTRODUCTION

The justifications for the mandatory nature of the federal securities disclosure regulation have been thoroughly examined in the literature, during a long lasting debate which has recently reignited.¹ Interestingly, the often-praised properties of the federal disclosure system cannot easily serve as a justification for its mandatory nature.² Simply put, if the regime governed by the Securities and Exchange Commission (“S.E.C.”) benefits the shareholders of a given firm, then such a firm would opt for this regime when going public, since it would maximize the value of its shares. To compel firms to adopt the disclosure regulation is unnecessary.

This notion is part of the now classical view that pre-IPO shareholders will either commit to optimal corporate governance terms at the stage of the public offering, or else the market will penalize them with a discount on the value of their shares.³ This hypothesized voluntary commitment to adopt the S.E.C. regulation, if it is indeed

¹ Romano proposes that the current mandatory system of federal securities law be replaced by a system of issuer choice, while Fox argues that the current mandatory framework must be retained. See Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 YALE L.J. 2359, 2361-62 (1998); Merritt B. Fox, *Retaining Mandatory Securities Disclosure: Why Issuer Choice is not Investor Empowerment*, 85 VA. L. REV. 1335 (1999); Roberta Romano, *The Need for Competition in International Securities regulation*, 2 THEORETICAL INQUIRIES IN LAW 387 (2001); Merritt B. Fox, *The Issuer Choice Debate*, 2 THEORETICAL INQUIRIES IN LAW 563 (2001).

² In the literature, the success of the U.S. capital markets is often attributed to extensive S.E.C. disclosure regulation. See, e.g., Michael H. Sutton, *Financial Reporting in U.S. Capital Markets: International Dimensions*, 11 ACCOUNTING HORIZONS 96-102 (1997); Arthur Levitt, *The Importance of High Quality Accounting Standards*, 12 ACCOUNTING HORIZONS 79-82 (1998). As expressed by one commentator: “The introduction of disclosure regulation can potentially provide a solution of the lemons problem. If the law requires companies that go public to provide a wide range of information, it will become easier for investors to distinguish high-quality companies from their less meritorious counterparts.” Brian R. Cheffins, DOES LAW MATTER? THE SEPARATION OF OWNERSHIP AND CONTROL IN THE UNITED KINGDOM, (ERSC Centre for Business Research, University of Cambridge, Working Paper No. 172, 2000) page 9, at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=245560.

³ Michael C. Jensen & William H. Meckling, *The Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structures*, 4 J. FIN. ECON. 305-360 (1976).

optimal, also allows us to disregard distorted managerial interests of mature firms that might lead firms to leave the S.E.C. system or refrain from adopting its ever-changing features. Even in the absence of mandated disclosure, the incorporation documents could simply state that once committed to the S.E.C. system in the IPO, managers and directors must adhere to the disclosure regulation system thereafter.

Against the backdrop of such an optimistic understanding, Frank H. Easterbrook and Daniel R. Fischel pointed out long ago a seemingly persuasive argument in favor of the mandatory nature of our disclosure system.⁴ As they laconically explained, securities disclosure entails externalities, i.e. a disclosing firm benefits its peer firms, and not only its own investors. Given the fact that the disclosing party endures all costs of disclosure but does not absorb all of its benefits, actual disclosure levels may fall below the socially optimal ones. While others have recently adopted this line of argument, no one clearly identified which aspects of disclosure benefit peer firms, causing the mischief in the first place.⁵ This gap calls for a response, particularly because evidence for such an enigmatic benefit was recently revealed by an empirical study. This study suggests that an expansion in the coverage of the S.E.C. disclosure requirements that occurred in 1999 benefited firms that were already filing with the S.E.C. prior to the rule change and were peer firms of the newly compliant ones.⁶

⁴ The paper elaborates on this view below. *Infra* Part II.

⁵ The financial literature points out that positive externalities could result from informational or liquidity spillovers due to increased disclosure by other firms. See, Ronald A. Dye, *Mandatory versus Voluntary Disclosure: The Cases of Financial and Real Externalities*, 65 ACCT. REV. 1-24 (1990); Anat R Admati & Paul Pfleiderer, *Forcing Firms to Talk: Financial Disclosure Regulation and Externalities*, 13 REV. FIN. STUD. 479-519 (2000). In this paper we emphasize informational spillovers.

⁶ The study examines the economic consequences of S.E.C disclosure requirements using a recent regulatory change in the OTC Bulletin Board, an electronic quotation medium operated by the National Association of Securities Dealers. Starting in 1999, all firms trading on the OTC Bulletin Board have to comply with the "eligibility rule" requiring firms to provide S.E.C disclosure filings. Some of the OTC Bulletin Board firms had not filed with the S.E.C prior to this change in regulation while others already had

One possible benefit that disclosure provides peer firms is the revelation of sensitive business information. As Roberta Romano justifiably argues, however, such a benefit cannot serve as a proper justification for the nature of our regulation system, which is doing its best to minimize exposure of business secrets.⁷ Revelation of business secrets is considered a harmful byproduct of disclosure, rather than a desirable goal.

This paper therefore underscores a different aspect of disclosure which creates -- inter-firm spillovers (or externalities); the ability to compare other firms to the disclosing party. Comparisons of financial information among peer firms, also known as cross section analysis, lie at the core of all securities analyses, and are vital to the efficiency of our capital markets. The importance of such comparisons is stressed repeatedly throughout the literature of financial statements analysis. Clyde Stickney and Roman Weil, for example, in their famous intermediate level book on financial accounting, describe the importance of comparisons as follows:

Readers cannot easily answer questions about a firm's profitability and risk from the raw information in financial statements... Ratios aid financial statement analysis because they conveniently summarize data... [but] Ratios, by themselves out of context, provide little information. For example, does a rate of return on common shareholders' equity of 8.6 percent indicate satisfactory performance? After

(the prior threshold for disclosure was total assets exceeding \$10 million and more than 500 shareholders). Hence it was possible to isolate and measure the consequences of the disclosure on peer firms. *See* Brian J. Bushee & Christian Leuz, ECONOMIC CONSEQUENCES OF SEC DISCLOSURE REGULATION: EVIDENCE FROM THE OTC BULLETIN BOARD (2002), at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=307821.

⁷ Romano, *Empowering Investors: A Market Approach to Securities Regulation*, *supra* note 1, at 2368. Reg S-K contains provisions that exempt firms from disclosure that may expose business secrets.

calculating the ratios the analyst must compare them with some standard... [such as] *the corresponding ratio for a similar firm in the industry...*[or] *the average ratio for other firms in the same industry.*⁸

This comparative advantage of disclosure, however, was never emphasized by the legal scholarship that dealt with the mandatory disclosure system. The absence of an inquiry into the nature of these benefits is odd, since at a first glance the comparative benefits of disclosure, if they are indeed essential for the welfare of the capital markets, seem like a good justification for mandated disclosure.

Surprisingly, however, this feature of disclosure, and the reality that most financial data disclosed by one firm indeed benefits its peers, does not automatically necessitate the mandatory nature of the federal system. Nevertheless, this paper shows that the use of financial comparisons may support calls for mandatory securities regulation in certain circumstances.

The crux of the argument is to differentiate between comparison benefits reaped directly by the public shareholders of a given firm (or other “outsiders”), from those primarily enjoyed by corporate insiders (and only indirectly by the public shareholders). While both types of comparison benefits enhance the value of the firm, only the former is likely to instigate voluntary disclosure; the latter may require mandatory intervention of

⁸ Clyde P. Stickney & Roman L. Weil, FINANCIAL ACCOUNTING (10th ed., 2003) 249. *See also* Gerald L. White, Ashwinpaul C. Sondhi & Dov Fried, THE ANALYSIS AND USE OF FINANCIAL STATEMENTS (3rd ed. 2003), 111; Jerry J. Weygandt, Donald E. Kiesso & Paul D. Kimmel, PRINCIPLES OF FINANCIAL ACCOUNTING (6th ed. 2002).

the regulator.⁹ To illustrate this argument, one can take advantage of the roles that financial comparisons play in two fields of accounting: financial accounting and managerial accounting.

Financial accounting is the branch of accounting which presents financial data to recipients outside the firm. Such recipients might include, for example, a bank that is reviewing the financial condition of the company in order to assess the merits of a loan request, or public shareholders (usually through a securities analyst) who are reviewing the firm to determine its value. Since the recipients of the information are outsiders, it is only understandable that clear and binding auditing and reporting standards have crystallized over the years. This enables outsiders to process reliable information in a standard fashion. Within this framework, comparisons among firms are highly important. Analysts, for example, are trained to ascertain if a firm is competitive and adheres to industry standards by comparing the firm's financial ratios with those of its peers.¹⁰

The logic behind financial comparisons is twofold. First, financial data such as inventory levels must be compared with industry standards to ascertain that they are not sub-optimal. What might appear to be a reasonable inventory level, may be shown to be too small or too large when compared to rival firms. Hence, financial data has a

⁹ Comparison to another firm may support or hurt the share price of the firm ex post, but ex ante the ability to compare is a benefit since it reduces information asymmetries between the firm and its monitors, which in turn allows better monitoring, and therefore higher share value and liquidity.

¹⁰ A ratio expresses the mathematical relationship between one quantity and another taken out of the financial statements of the relevant firm. The relationship is expressed in terms of either a percentage, a rate, or a simple proportions. The comparison between the ratios of the examined firm and its peers assists analysts in assessing the firm's competence. Often used financial ratios measures liquidity levels (the Current Ratio, the Acid-test (Quick) Ratio, the Current Cash Debt Coverage Ratio, Receivables Turnover and Inventory Turnover), profitability levels (the Profit Margin, the Cash Return on Sales, the Asset Turnover, Return on Assets, Return on Equity, Earning Per Share, Price-Earning Ratio and the Payout Ratio) and susceptibility for insolvency (Debt to Total Assets Ratio, Times Interest Earned Ratio and the Cash Flow from Operations to Liabilities Ratio). See, Stickney & Weil, *supra* note 8, at 278; Weygandt Et. Al, *supra* note 8 at 803. For a recent study of the precision of different ratios (multiples) *see* Eric Lie & Heidi Lie, *Multiples Used to Estimate Corporate Value*, 58 FIN. ANAL. J. 44-54 (2002).

comparative aspect on top of its intrinsic value. (Even the cash article in the financial reports, which seems to have such an obvious intrinsic value, may point to a problem when compared to other firms).¹¹

Second, financial results, such as sales or profits, must be compared among firms in order to determine if the results are the product of managerial efforts rather than a trend in the economy. A hefty rise in sales disclosed by one company does not insure that the firm is operating effectively, if, for example, financial reports of its peers show that they did much better. Conversely, a fall in sales may still indicate competent management, if comparisons show that opponent firms did worse during the same period.

This paper demonstrates, however, that the leading role of comparisons in financial accounting -- a salient externality of securities disclosures -- does not generally justify the mandatory nature of securities disclosure for public firms. The essence of the argument is that mutual disclosure is necessary in order for one firm to absorb the benefits resulting from disclosure by other firms. In order for the public shareholders or the securities analyst to compare the data of all relevant firms, such relevant firms must first disclose their own reports, since financial data is processed outside the firm. To put it another way, although disclosure benefits other firms, each individual firm must disclose its own data in order to enjoy the benefits of the disclosure of other firms. Thus, the externalities that financial accounting involves should not necessarily impede voluntary commitment to socially optimal levels of disclosure (and if the S.E.C. regulations reflect such socially optimal levels, then firms would elect to follow them when going public).

¹¹ Jensen argues that firms which enjoy a hefty cash flow not committed to an efficient cause are prone to waste it to the detriment of the public shareholders. See, Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance and Takeovers*, 76 AM. ECON. REV. 1 (1986).

This is not the case with disclosure aspects that are relevant for managerial accounting. Managerial accounting is the accounting branch that provides financial information for corporate insiders. While there is usually no need to use external auditors for the work, since credibility is not the major problem within the firm, there is a great similarity to financial accounting in the need to gather and analyze the financial information of other firms. Similar questions trouble corporate insiders and outsiders – how well is the firm operating, and what is required to improve performance.

It is no surprise that managers (the primal insider consumer of information) rely heavily on comparisons to other firms, just as outsiders do in relation to financial accounting data. Again, comparisons are done primarily for two reasons. First, because industry standards and habits are important for the managerial team; managers must assess if the deviations of their firm from such standards are justified. Second, comparisons are made to verify if the results of operations are the consequence of market conditions or managerial performance. Comparisons, therefore, are used intensively as an integral part of any managerial accounting assessment.

Note however, that the benefits gained by a firm from a managerial accounting perspective can be achieved without exposing its own financial statements to the public. Unlike the efforts of securities analysts, which necessitate mutual disclosure, managers of a firm can enjoy benefits arising from the financial statements of other firms without disclosing their own reports. Considering this, and the potentially high costs of disclosure, it is plausible to assume that efficient disclosure levels would not be adopted voluntarily. In such a scenario, a mandatory securities regulation regime might improve the position of all firms, although each one of them would opt out of the disclosure

regime if it were allowed to do so. In other words, the threat of a free ride on the disclosure efforts of others might justify the mandatory nature of our securities system, or at least, certain parts of it.

Part II of this article briefly presents the debate in the literature, focusing on the argument raised by this paper. Part III considers the motivations for voluntary disclosure when data is processed outside the firm, providing relevant examples. Part IV discusses justifications for mandatory disclosure when financial data is processed within the firm. Part V explores how the analysis may explain another enigma related to securities disclosure – the mandatory requirement made by Blue Sky laws for firms to disclose financial information at the time of going public, but not thereafter. Section VI concludes by evaluating the robustness of the justification for a mandatory disclosure system and compares it with private solutions to the challenge.

II. THE DEBATE IN THE LITERATURE

The traditional rationale for the mandatory nature of the federal disclosure system is the assertion that information is a public good that permits a “free ride” for users who have not paid for it.¹² Due to this characteristic of information, and in the absence of mandatory disclosure, the argument goes, there would be suboptimal level of securities disclosure.¹³ The S.E.C. attempts to determine the requisite amount and nature of

¹² William H. Beaver, *The Nature of Mandated Disclosure*, in *ECONOMICS OF CORPORATION LAW AND SECURITIES REGULATION* 317, 320 (Richard A. Posner & Kenneth E. Scott eds., 1980); Frank H. Easterbook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 *VA. L. REV.* 669, 681 (1984); John C. Coffee Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 *VA. L. REV.* 717, 725 (1984).

¹³ On the one hand, too little disclosure may result from the fact that private information almost instantly dissipates in the market so that the collector of information cannot reap the full value of his investment in disclosure. On the other hand, excessive search for information may also occur, since market

corporate disclosure that would take place, absent the inefficiencies described above, and impose them on public firms.¹⁴

Another major traditional argument in favor of disclosure regulation suggests that in the absence of regulation, market forces would lead to an uneven possession of information among investors, which in turn would harm investors' confidence in the capital markets. It is only fair (and efficient) therefore, that the less informed be protected from the more informed.¹⁵ The S.E.C disclosure regulations solve the problem by reducing the benefit of private search of information. The S.E.C. preempts private search by mandating disclosure and by imposing legal liability on selective transmittal of information.¹⁶

Another common argument for disclosure regulation is that management has incentives to suppress unfavorable information, to withhold adverse information and to undertake preemptive buyouts of its own firm. As a result, investors will not have sufficient data concerning the market and will be unable to distinguish quality differences among traded firms.¹⁷ A mandatory disclosure system would reduce such agency costs of corporate governance.¹⁸

participants may gain from trades based on private information that has no social value (such as duplicated information), and therefore, any investment in its collection is a social waste.

¹⁴ Beaver, *supra* note 12.

¹⁵ From an efficiency point of view, the claim may be phrased as follows: Excessive search for information stems from private gains that market participants may capture if they trade shares with non-public information. Mandated disclosure, the argument goes, may alleviate this problem since disclosure minimizes opportunities for these private gains. Coffee, *supra* note 12, at 734.

¹⁶ Beaver, *supra* note 12, at 323; Coffee, *supra* note 12, at 726; Easterbrook & Fischel, *supra* note 12, at 692.

¹⁷ Beaver, *supra* note 12, at 325; Coffee, *supra* note 12, at 739.

¹⁸ It may also be argued that the investment in developing the optimal standard of disclosure requires a federal body. Since disclosure standards are complex and expensive to develop and update, and since the standard is a public good that anyone can duplicate once others develop it, there may be a need for a public entity such as the S.E.C. to govern it. While this may or may not justify the existence and function of the S.E.C. it *cannot justify compelling the standard*. If the standard is expensive to develop, private actors may arguably not form it, but once it is publicly available, firms should be free to opt out of the public

Easterbrook and Fischel are not persuaded by these arguments. First, Easterbrook and Fischel have criticized the arguments on the basis that the S.E.C. does not solve the problems raised. Some of the “disclosure” rules, for instance, prohibit the transmission of certain information, such as forward-looking statements, and therefore cannot be justified by the arguments above. In addition, there is no evidence that mandatory disclosure rules actually protect unsophisticated investors.¹⁹

Second, and more importantly, firms should be able to solve the above problems even when disclosure is voluntary.²⁰ The firm, Easterbrook and Fischel assert, is in privity with its investors, and as the Coase Theorem suggests, the firm and the investors can strike a mutually beneficial bargain. Once the firm starts making disclosures, it cannot stop short of any particular critical revelation, because investors always assume the worst. Moreover, the firm may commit to continuous disclosure at the stage it goes public. The legal system should then enforce such commitment instead of mandating it. A firm that wants the highest possible price when it issues stock must take all cost-justified steps to make the stock valuable in the aftermarket, including credible pledges to continue disclosing.²¹

Edward Rock highlights the importance of the credible commitment to disclose, arguing that the U.S. disclosure regime permits issuers to make such credible commitment for permanent disclosure.²² This ability to commit credibly facilitates

arrangement if they so desire. Put differently, an efficient standard would be voluntarily adopted by all firms that favor it.

¹⁹ Easterbrook & Fischel, *supra* note 12, at 693.

²⁰ *Ibid.*, at 682.

²¹ *Ibid.*, at 684.

²² Edward Rock, *Securities Regulation as Lobster Trap: A Credible Theory of Mandatory Disclosure*, 23 CADOZO L. REV. 675 (2002).

contractual relations between the issuers and investors, thereby reducing the cost of capital.²³ The U.S. disclosure system demands a high level of disclosure, with severe sanctions for inaccurate disclosure. Combined with the difficulty of opting out of the system, this serves as the requisite commitment to provide high quality disclosure into the indefinite future.²⁴ Rock admits, however, that this does not justify forcing firms into the system, and argues that firms would voluntarily opt into the system if it were not mandated.

John C. Coffee, Jr. has criticized this point of view, contending that voluntary disclosure overlooks the significance of corporate control transactions and much too facilely assumes that manager and shareholder interests can be perfectly aligned.²⁵ This view is highly debatable, since it may justify almost any intervention in the operation of our capital markets while the stated principal that guides the regulation is that anyone willing to disclose may sell securities at whatever price the market will sustain..

Interestingly, Easterbrook and Fischel themselves raise the strongest pro mandatory argument, and finally leave the issue of the optimal disclosure regime open. They conclude that rules of disclosure may be beneficial in ways that require further understanding, but one cannot be confident that the current disclosure regime is the optimal one, or that it is better than a voluntary disclosure alternative.²⁶

²³ Rock justifiably argues that standards of disclosure should be coordinated among firms to achieve their full value. Rock, *supra* note 22, at 686. While this coordination argument is fully acceptable, it can hardly justify the mandatory nature of securities regulation today. Since this paper does not propose to abolish the federal system, and since all firms currently use the same securities disclosure system, the fear is that standardization would lead firms to opt for the federal system even if it is sub-optimal. The opposite fear, that coordination would be disrupted by the lack of a single disclosure system, does not hold, following the coordination achieved through decades of mandated adherence to the federal regulation.

²⁴ Rock, *supra* note 22, at 687.

²⁵ Coffee, *supra* note 12, at 738. Coffee also argued that the beneficiaries of increased efficiency include virtually all members of society, and not just investors. *Ibid*, at 736.

²⁶ Easterbrook & Fischel, *supra* note 12, at 685.

Easterbrook and Fischel's argument for the mandatory nature of the disclosure system is based on *inter-firm* benefits (or externalities), rather than the traditional argument, which highlights the benefits of disclosure to the investors of the disclosing entity. They argue that an imposition of a standard format of disclosure facilitates an efficient disclosure language and that firms would enjoy reciprocal benefits from such disclosure.²⁷ In their own words:

The information produced by one firm for its investors may be valuable to investors of other firms. Firm A's statements may reveal something about the industry in which firm A operates – if only the size of firm A's anticipated production – that other participants in the industry can use in planning their operations. There may be other collateral benefits to investors in rival firms. Yet firm A cannot charge the investors in these other firms for the benefits, although they would be willing to pay for them. Because they cannot be charged, the information will be underproduced.²⁸

By the mid 1980s, the debate largely died out, and mandatory disclosure was retained. The debate was reignited after Romano proposed to implement state competition in securities regulation, in which firms would select their securities regulator from among the fifty states, the S.E.C. or other nations, all of whom would stand on equal regulatory footing.²⁹ Romano emphasizes that a theoretical need for government

²⁷ Easterbrook & Fischel, *ibid.*, at 700.

²⁸ Frank H. Easterbrook & Daniel R. Fischel, *THE ECONOMIC STRUCTURE OF CORPORATE LAW* (1991) 250.

²⁹ Romano, *Empowering Investors: A Market Approach to Securities Regulation*, *supra* note 1. Choi & Guzman have proposed essentially the same reform, although their emphasis was on the issuer's choice of the best suitable regime, rather than on the investors' benefits. See Stephen J. Choi & Andrew T. Guzman,

regulation to prevent a market failure is not equivalent to a need for a monopolist regulator. Competitive federalism, as she claims, harnesses the high-powered incentives of markets to produce regulatory arrangements compatible with investors' preferences.³⁰

Further on, Romano refutes the inter-firm externality or benefit argument.³¹ The majority of investors, she states, hold portfolios composed of many firms, and therefore, unlike the single issuer, they desire a regime requiring optimal information disclosure; their position in multiple firms allows them to gain a great deal of the inter-firm benefit of disclosure.

In a critical article, Merritt B. Fox tries to negate this claim, and argues that an investor can enjoy most of the benefits of diversification by holding only a few stocks.³² Contrary to a monopolist government entity, such investors would not have an opportunity to balance the competitive disadvantage of the disclosure with the benefit of disclosure to other firms. In response to this article, Romano stresses that Fox's concern is mitigated by the fact that a majority of shareholders are large institutions which hold portfolios of many firms and would therefore be able to internalize much of the costs and benefits of disclosures.³³

Naturally, Romano stresses the benefits of her proposed regime, noting that in a competitive regulatory system, undesirable mandatory policies cannot be maintained over time. Firms would migrate to a regulatory regime, which did not impose such inefficient

Portable Reciprocity: Rethinking the International Reach of Securities Regulation, 71 S. CAL. L. REV. 903 (1998).

³⁰ Romano, *Empowering Investors: A Market Approach to Securities Regulation*, *supra* note 1, at 2365.

³¹ Romano, *ibid.*, at 2369

³² Fox, *Retaining Mandatory Securities Disclosure: Why Issuer Choice is not Investor Empowerment*, *supra* note 1.

³³ Romano, *The Need for Competition in International Securities Regulation*, *supra* note 1.

mandates.³⁴ Many regulatory mistakes that are being caused by misunderstanding investors' needs would become far less likely. In addition, the state competition regime permits experimentation in legal rules, since states would implement different solutions to specific problems, which in turn would lead to a more rapid updating of less-than-optimal regulation.³⁵

Fox argues that despite the apparent attractions of Romano's approach, the issuer choice proposal should be rejected.³⁶ Giving the issuers the right to choose their disclosure regime would likely decrease, not increase, U.S. economic welfare; such a regime would lead issuers to elect disclosure levels significantly below the social optimum. Like Easterbrook and Fischel, Fox focuses on the inter-firm costs of disclosure, which arise because the information provided can put the issuer at a disadvantage relative to the issuer's competitors. He asserts that at all levels of disclosure, an issuer's private marginal costs will exceed the issuer's social marginal cost by an amount equal to these inter-firm costs.³⁷ This divergence of private from social costs means that the issuer's choice will lead to a market failure. Instead of the states competition regime, Fox proposes to ameliorate the existing system by accommodating the different needs of different types of issuers.³⁸

In response, Romano claims that in practice, the S.E.C.'s mandated disclosure does not and cannot require firms to disclose private proprietary information in order for the released information to significantly assist competitors and support the inter-firm

³⁴ Romano, *Empowering Investors: A Market Approach to Securities Regulation* *supra* note 1, at 2373.

³⁵ *Ibid.*, at 2392.

³⁶ Fox, *ibid.*, *supra* note 1, at 1337.

³⁷ Fox, *ibid.*, at 1345.

³⁸ Fox, *ibid.*, at 1408.

rationale. , Any real benefits to competitors from the mandated disclosure, Romano continues, are either accidental or trivial.

Against the backdrop of this debate, this paper asks whether inter-firm benefits or externalities can justify prohibition of opting out of the S.E.C. disclosure regime at the IPO stage. The paper concentrates on a single and salient type of such externalities -- the benefit of comparisons -- which has not received sufficient attention in the literature.

Romano's argument that investors with diversified portfolios would mitigate problems of inter-firms externalities does not work well for comparison benefits. Diversified portfolios do not normally contain stock of many competitors in the same market segment (whose market risk is naturally highly correlated), while inter-firm benefits of comparisons are most salient between firms in the same line of business. Nevertheless, as the analysis will illustrate, the mere existence of significant comparison benefits does not automatically necessitate a mandatory disclosure regime.

III. MOTIVATIONS FOR VOLUNTARY DISCLOSURE WHEN DATA IS PROCESSED OUTSIDE THE FIRM

Even in the absence of a mandatory disclosure requirement, public firms would commit to a certain level of disclosure, as they did prior to the legislation of the federal securities laws.³⁹ Without releasing information to the public domain, public firms would not be able to attract public investors, nor could they sustain a market price for their securities. However, as described above, comparison benefits that the disclosing firm provides its peers may cause disclosure levels to fall short of the socially optimal level, since the firm that bears the costs of disclosure does not absorb all disclosure benefits. This externality that financial disclosure entails may justify a mandatory disclosure regime, only if the costs of disclosure are higher than the benefits of disclosure for the disclosing firm, but fall short of the total disclosure benefits (for the disclosing firm and its peers). This twofold condition warrants mandatory intervention, so the argument goes, since, on the one hand, it means that firms may not voluntarily opt for disclosure, while on the other hand, it insures that disclosure is beneficial for society.

Surprisingly, the reciprocal nature of the disclosure externality may bring about voluntary disclosure, even when the twofold condition is met.⁴⁰ Before the paper continues to illustrate the interaction among firms that contributes to voluntary disclosure, it is useful to consider two real life examples of comparative (or cross section) analysis. The first is an example of an analysis of the current ratio, which is a frequently used measure of liquidity. The current ratio (or the working capital ratio) is computed by

³⁹ Economic theory suggests that an increased commitment to disclosure reduces information asymmetry and increases market liquidity. Each firm, however, would balance these benefits with the costs of disclosure, which include revelation of sensitive information, the risk of being sued and high administrative costs. See, Robert E. Verrecchia, *Essays on Disclosure*, 32 J. ACCT. ECON. 91-180 (2001).

⁴⁰ This means that the twofold condition for mandatory intervention is a necessary but not a sufficient condition for mandatory treatment.

dividing current assets by current liabilities. The higher the current ratio the less chance there is that the corporation shall suffer from liquidity problems. To understand how this ratio is used let us look at the ratios of a small department store's corporation by the name of Quality Department Store.⁴¹ The 1999 current ratio of this firm was 2.91, which means that for every dollar of current liabilities, Quality had \$2.96 dollars of current assets. The ratio for 1998 was higher and stood on 3.1. Quality's current ratio has decreased during the year, but this does not mean necessarily that Quality is nearing liquidity problems. A comparative review is in order. For instance, the current ratio for 1999 of Sears, Roebuck, and Co., a significant industry player, was 2.09,⁴² and the industry average was 1.25. Altogether, it seems that liquidity should not be a top concern of a reviewer of Quality.

The second example is the one of the inventory turnover ratio. The inventory turnover measures the number of times on average the inventory is sold during the period. Its purpose is to measure the liquidity of the inventory and it may also be indicative of problems of obsolete inventory, which the corporation insists not to write off. Using Quality Department Store's financial information one may compute that Quality's inventory turnover was 2.4 in 1998 and 2.3 in 1999. Generally, the faster (i.e., the higher) the inventory turnover, the less cash that is tied up in the inventory and the less chance of inventory obsolescence. But, Quality's inventory turnover by itself does not reveal if it is fast enough and the analyst must use comparative information to make an exacting

⁴¹ To illustrate that comparative analysis is an integral part of financial statements' analysis, the example is taken from a commonly used textbook for introductory courses in accounting. See, Weygant Et. al., *Supra* note 8, at 782-90.

⁴² Note that the ratio technique allows to draw comparative conclusions even though Sear's net 1999 sales were 19,585 times greater than the net sales of the relatively tiny Quality Department Store, and Sears; net income was more than 5,500 times larger than Quality's.

assessment. It turns out that the industry average in 1999 was 6.2 and Sears, Roebuck and Co. had a inventory turnover of 5.14. Only after conducting such cross section analysis may the analyst expose that Quality does not seem particularly efficient in this category.

Aside from emphasizing the importance of comparisons for securities analysis, the two examples also illustrated a simple fact. The analyst could not reach any comparative conclusion unless she had possession of the financial information of all relevant firms. As mentioned above, the consumers of information in the financial accounting paradigm are corporate outsiders, and primarily public shareholders. If a firm wants to please its investors with the benefits of disclosure of peer firms, it cannot hope to enjoy these disclosures without exposing its own reports to the public. For the public shareholder (or the securities analyst) to compare the financial data of different firms, she must hold all relevant financial reports in her hands.

To appreciate the financial accounting disclosure argument, consider the following scenario. Let us assume that at the level mandated by the S.E.C. regulations, the costs of disclosure, are 5, and the intrinsic benefits of disclosure (i.e. the benefits that accrue to the disclosing party without comparisons to other firms) are 4.⁴³ Each disclosing party, however, confers a benefit of 3 on its peer, since the peer benefits from the ability to compare its own financial information with the disclosed information. This

⁴³ While the costs of disclosure stem from many sources, including revelation of business secrets and other sensitive information, consumption of managerial time, the threat of frivolous suits and administrative costs, there is very little empirical evidence regarding the costs and benefits of the securities regulation. One study mentions that this type of empirical study is “virtually non-existent”. See, Paul M. Healy and Krishna Palepu, *Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature*, 31 J. ACCT. ECON. 405-440 (2001). One famous exception is the Benston study on the benefits of the Securities Exchange Act 1934, which concludes that the disclosure statutes were of no apparent value to investors. See, George J. Benston, *Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934*, 63 AM. ECON. REV. , 132-155 (1973).

scenario is presented in the following 2 X 2 matrix, delineating the logic of reciprocal comparison benefits when financial data is processed outside the firm:

		Firm A	
		Disclose	Non-Disclose
Firm	B	Disclose	2, 2
		Non-Disclose	0,-1
			-1,0
			0,0

The southwest and northeast corners of the matrix represent instances in which one party opts for disclosure while the other refrains from disclosure. The non-disclosing party bears no costs and accrues no benefits, while the disclosing party bears the cost of 5, while enjoying a benefit of only 4, since its disclosed information cannot be compared (leading to a total loss of 1). Note that the non-disclosing party cannot enjoy the benefits of comparison to the disclosing party, since comparison analysis must be done outside of the firm. If, however, both firms commit to the disclosure regime, they will each enjoy disclosure benefits of 7, including benefits resulting from the disclosure by the rival firm, while they bear a cost of only 5 (resulting in a total gain of 2).

Two equilibriums (pure strategies “Nash Equilibria”) emerge from the game.⁴⁴ Either both parties disclose (and gain 2 each) or both parties reject the disclosure levels proposed by the S.E.C. (and gain nothing).⁴⁵ Put differently, there is no reason to disclose if the other party does not disclose, and there is much sense in disclosure if the other party discloses. Note that out of the two possible outcomes, there is reason to

⁴⁴ The concept “equilibrium” in game theory means that each player is using a strategy that is the best response to the strategies of other players. See, *e.g.*, Avinash Dixit & Susan Skeath, *GAMES OF STRATEGY* (1999) 30.

⁴⁵ As explained above, public firms would always commit to some level of disclosure. Assuming that the S.E.C. proposed levels are the socially optimal ones, such levels may not be adopted voluntarily by the firms.

believe that the superior outcome (mutual voluntary disclosure) would prevail. If the scenario depicted above resembles reality, i.e., if the S.E.C. -mandated regime is highly beneficial when most firms commit to it, then it is likely that most firms would opt for the regime even if it becomes voluntary. The long lasting adherence to the S.E.C. regulations mandated in the last seven decades, creates a focal point, and if such an equilibrium is indeed superior to the equilibrium in which all firms decide not to disclose, then it is highly unlikely that all firms would opt out of the disclosure system even if they were allowed to do so.⁴⁶

The conclusion of our discussion so far is that the mere fact that externalities exist -- particularly when externalities flow from the ability to compare financial accounting information among firms -- does not warrant mandatory securities regulation. One may also imagine a scenario, however, in which heterogeneous firms with different levels of disclosure costs and benefits, may alter our previous conclusions. Consider the following example; assume that firm A does not benefit from comparisons to its rival, but firm B gains a great deal from comparisons to its rival as shown in the following matrix:

⁴⁶ Another reason that most firms, which currently disclose will not opt out of the system is that disclosure has significant initiation costs. Once a firm already abides by the disclosure regime it is easier to persuade it to keep on doing so voluntarily. This issue is discussed in section 5 of the paper.

In any case, this paper concentrates on the decision of firms to commit to the S.E.C. regime at the time they go public. Mature firms, especially those with dispersed ownership, suffer from a severe agency problem that may impede a commitment to adopt the disclosure regulation, even if such a decision enhances the welfare of the shareholders. Therefore, even if the conclusion is reached that there is no reason to have a mandatory securities regulation, it does not follow that public firms should have the right to opt out of the disclosure regime they are now under. And if mature firms remain under the disclosure regime, it makes all the more sense for firms that go public to adopt the same commitment, if indeed the equilibrium in which all firms disclose is optimal.

		A	
		Disclose	Non-Disclose
B	Disclose	2, -1	-1,0
	Non-Disclose	0,-1	0,0

In this matrix, firm A has a dominant strategy of non-disclosure. Since it does not enjoy any benefits from financial comparisons, and its costs of disclosure are evidently higher than the intrinsic benefits it will gain from disclosure, firm A will refrain from disclosure regardless of the decision of firm B. Contrarily, firm B benefits significantly from financial comparisons (although its intrinsic disclosure benefits are lower than its disclosure costs).⁴⁷ Consequently, firm B will opt for the disclosure strategy if firm A discloses (Northwest corner) but not if firm A chooses not to disclose (Southeast corner). Since firm A will definitely not disclose, the sole equilibrium is the one in which no one discloses.

Under the circumstances of the example above, it is clear that a mandated disclosure system (leading to the Northwest solution) would improve social welfare. The net disclosure benefits of firm B (2) compensates for the loss of firm A (-1). If one believes, therefore, that the depiction above resembles the real world, mandatory disclosure may enhance social welfare.⁴⁸ The truth probably lies somewhere in the middle. This means that the reciprocal nature of comparative benefits mitigate the market failure associated with disclosure spillovers but do not solve it entirely.

⁴⁷ This scenario resembles another externality that financial disclosure entails, i.e., the revelation of trade secrets. If financial reports expose trade secrets, and if peer firms benefit from this externality more than it harms the revealing party, then the two situations are similar.

⁴⁸ The richness of the above depiction will be fully revealed once any given feature of the disclosure regulation is analyzed separately. In this paper, however, we are interested in the characteristics of the entire system.

Note, that mandating disclosure on these grounds, if it is at all warranted, is a somewhat problematic solution, since it sacrifices the welfare of type “A” firms for the benefits of type “B” firms without proper compensations. Aside from relevant distributive justice considerations, the mandatory disclosure requirement may depress investment in type A firms and distort market mechanisms. As we shall see momentarily, the fact that comparison benefits also accrue when financial data is processed within the firm (the managerial accounting rationale), provides much stronger grounds for the mandatory nature of the federal disclosure system.

IV. JUSTIFICATIONS FOR MANDATORY DISCLOSURE WHEN FINANCIAL DATA IS PROCESSED WITHIN THE FIRM

To understand why financial comparisons may still call for a mandatory securities regulation regime, we should move away from the domain of publicly held firms. In a closely held firm, data is mainly processed by corporate insiders: the entrepreneurs, managers and the small community of shareholders. Generally speaking, a closely held firm has no reason to make its financials public. In the absence of public shareholders, private communication channels among the different stakeholders of the company may suffice. Firms may find these channels more accommodating, since they do not expose business plans and secrets.⁴⁹

Nevertheless, even in closely held firms, the managerial team (together with the shareholders) benefits from observing financial data of peer firms for at least two reasons; first, such comparisons help verify industry standards and assess whether deviation from

⁴⁹ And unlike the S.E.C. mandated disclosure, they are not strictly defined and may easily be customized to the special features of each firm.

industry standards are justified; and second, the team can ascertain the extent to which the results of operations were affected by market climates, as reflected in the results of operations of other firms.

In contrast, however, to the situation considered in the previous section, in which data is processed within the firm, there is no element that renders disclosure externalities reciprocal. To illustrate this point, let us assume, as before, that the costs of disclosure (at the optimal level for society and as mandated by the S.E.C. regulations for public firms) are 5, and the intrinsic benefits of disclosure are 4. Assume further that each disclosing party confers a benefit of 3 on its peer, since the peer benefits from the ability to compare its own financial information with the disclosed information. Most importantly, in a privately held firm, the analysis of financial data (including comparisons to other firms, if such comparisons are possible), is conducted within the firm by corporate insiders. It is now possible to draw a matrix with these properties:

		A	
		Disclose	Non-Disclose
B	Disclose	2, 2	-1,3
	Non-Disclose	3,-1	0,0

The salient difference between this scenario and the one considered previously is that comparison benefits accrue even to firms that elect not to disclose. Each firm would therefore opt for the non-disclosure strategy regardless of the choice of its peer. In this way, the observing party might gain comparison benefits without bearing the costs of making its own data public. In other words, the non-disclosure strategy would be the

dominant strategy since it provides high benefits (3) if the other firm discloses, and incurs no costs (0) if the other firm refrains from disclosure. Consequently, the southeast corner is the sole equilibrium of the game. This inferior position is clearly socially and privately sub-optimal, since each firm could do much better by selecting the disclosure strategy. Apparent opportunism, however, would lead each of the firms to adopt the non-disclosure strategy, which ultimately would harm them both.

In the scenario delineated above, a mandatory disclosure requirement is warranted. The net social benefits (4) and net private benefits for each of the affected firms (2) clearly outweigh those resulting from the firms' voluntary decisions not to disclose (0). The mandatory feature is a coordination mechanism to address a need the market fails to address by itself. Without it, as we see in practice, private firms might reject any commitment to disclose information, which would harm them all.

Once we recognize that private firms lack the proper incentives to reach the socially optimal disclosure levels, we should also recognize that a similar problem confronts public firms. As discussed above, while a great deal of financial data of public firms is processed outside the firm, data analyses and comparisons to other firms are also conducted by corporate insiders. Managerial accounting, the branch of accounting which managers draw on to assess the conduct of their firms, often uses comparisons to the information revealed by other firms. The lack of proper incentives to reach the optimal disclosure levels that was shown to be pervasive in privately held firms also exists in public firms. Since part of the data is processed within the firm, there is no reason to expose this internal data to gain the full benefits of the internal data. Consequently, it is

impossible to rely on public firms to voluntarily reach the disclosure levels that are optimal for society, and the mandatory feature of securities regulation may be justified.

This is especially true for the aspects of disclosure, which are highly important for the internal managerial team but are not as important for public shareholders. To illustrate this point, let us assume that comparisons of the cash flow statement of a firm with the cash flow statements of its peers are essential for the internal management of the firm. Assume further that the public shareholders do not put much emphasis on this particular statement. Consequently, it is quite possible that without the mandatory requirement to include the cash-flow statement in the public financials, firms would not make their own cash flow statements public. Exposure of financial data is costly for the firm, and while all firms would wish to review the statements of their peers, they would have no reason to expose their own cash flow statement. Eventually, all firms might reject disclosure of the relevant financial statement, and no comparison benefits would accrue. In such a case, a compelling obligation to disclose might bring relief to all of them. Although no firm would elect to disclose its cash flow statement voluntarily, all firms would prefer the regime that makes disclosure obligatory.

V. THE ENIGMA OF THE BLUE SKY LAWS

The federal securities regulations have two separate disclosure requirements: one, disclosure to prospective shareholders prior to the sale of securities by the company to the public; and two, periodical continuous disclosure by public firms. Prior to 1934, there were no federal securities disclosure requirements, but state laws, often termed Blue Sky

laws, did mandate minimal disclosure.⁵⁰ Contrary to the federal regime, the Blue Sky Laws never had a continuous disclosure component and mainly required disclosure of financial information prior to the IPO.

The requirement to provide information prior to going public but not thereafter is puzzling. Financial information is important throughout the life of the company. Making the investment decision is only the starting point in the relationship between a company and its investors, and continuous disclosure allows monitoring and accurate pricing of the stock on the market. If one cannot depend on investors to demand disclosure at the IPO, how can one rely on investors to demand continuous disclosure? One can imagine that most rational investors would request and receive information when they consider making an investment. Some unsophisticated investors, however, may fail to demand efficient periodical disclosure, since the benefits of such disclosure are more complex and difficult to understand. It might, therefore, seem strange that the Blue Sky Laws demanded disclosure only prior to a public offering.

The importance of financial comparisons, highlighted by this paper, may explain this enigma. We have discussed above comparisons among firms in the same industry. Aside from these important “horizontal” comparisons, analysts often also rely on “vertical” comparisons, i.e., comparisons of the financial reports of a single firm in different periods. Once we appreciate the importance of these inter-periodical comparisons, or the so-called *time-series analysis*,⁵¹ we recognize how disclosure benefits are fortified when market players have previous financial statements with which they can compare current financial reports.

⁵⁰ For a case book description of the state regulation of securities (the Blue Sky Laws) see Larry D. Soderquist & Theresa A. Gabaldon, *SECURITIES REGULATION* (4th Ed. 1999) 660-70.

⁵¹ On the importance of time series analysis see Stickney & Weil, *supra* note 8, at 250.

Some firms may decide not to disclose at all after considering the total disclosure costs and benefits. If, however, they have already been compelled to report once, which consumes a great deal of fixed costs, they may voluntarily decide to continue to disclose in the future. The disclosure in the subsequent period would not only provide the firm with intrinsic disclosure benefits, but also those of inter-period financial comparisons. To illustrate this point, let us assume that a firm may elect to disclose in either of two periods. The costs of disclosure for every period are 8,⁵² and the benefits of disclosure are 6 in the first period, and 9 in the second period. The enhanced disclosure value in the second period is due to inter-periodical financial comparisons. Consequently, without disclosure in the first period, the benefits of disclosure in the second period are merely 6. We can see that on a voluntarily basis the company would reject disclosure in both periods, since the costs of disclosure in any period and the combination of both periods are higher than the respective disclosure benefits. If, however, Blue Sky Laws required disclosure in the first period, then the company would voluntarily disclose its financials in the second period, at which time enhanced disclosure benefits outweigh disclosure costs. In actuality, many companies indeed published periodical financial reports prior to 1933, when Blue Sky laws required merely to publish statements prior to going public.⁵³

⁵² In order to isolate the argument we assume no fixed disclosure costs.

⁵³ See Ross L. Watts & Jerold L. Zimmerman, *Agency Problems, Auditing, and the Theory of the Firm: Some Evidence*, 26 J. L. & ECON. 613 (1983); George Benston, *Required Disclosure and the Stock Market: An Evaluation of the Securities Exchange Act of 1934*, 63 AM. ECON. REV. 132 (1973).

VI. CONCLUSIONS AND DISCUSSION

Some commentators have proposed that securities exchanges or state legislators replace the mandatory system of federal securities law.⁵⁴ In such a system, firms could elect to be traded on the exchange (or alternatively incorporate in the state), which propose the most advantageous disclosure system. A recent study casts doubt on the efficacy of these suggestions. On January 4, 1999, the duty to file with the S.E.C. was imposed on all firms traded on the OTC Bulletin Board, an electronic quotation medium operated by the National Association of Securities Dealers since 1990. Many of the OTC Bulletin Board firms which had not previously filed with the S.E.C., chose not to comply with the new requirement and left the OTC Bulletin Board.⁵⁵ The firms removed from the OTC Bulletin Board were forced onto the Pink Sheets of the National Quotation Bureau, which is a sub-market that suffers from low liquidity.

By itself, this finding cannot support the mandatory nature of securities regulation. The firms that did not comply with the new disclosure standards found them too costly to adopt. This may suggest that the new disclosure requirements were excessive, at least to these firms. The study, however, also uncovered some hidden benefits of the mandated disclosure. Interestingly, the researchers tracked OTC Bulletin Board firms which had already been filing with the S.E.C. prior to the new filing instruction -- almost half of the firms traded prior to the new regulation. Those firms which *did not change their disclosure practices* have benefited from the new disclosure regulation, which has *changed the disclosure practices of their peers*; they have experienced a sustained increase in all liquidity measures together with a statistically

⁵⁴ See Romano, *supra* note 1; Paul G. Mahoney, *The Exchanges as Regulator*, 83 VA. L. REV., 1453 (1997).

⁵⁵ *Supra* note 6, at 2.

significant increase in their share price.⁵⁶ Presumably, the newly compliant firms (those which did not elect to leave the OTC Bulletin board) provided positive externalities to the already disclosing firms.

This evidence for significant externalities suggests that the mandatory nature of securities disclosure may be justified. The firms which opted out of the OTC Bulletin Board could probably provide further benefits to their peer firms if they would be forced to disclose information -- whether or not they elect to trade on the Bulletin Board.⁵⁷ If the analysis presented in this paper is accurate, the fact that firms elected not to comply with the new standards does not indicate that they would not do better if they were forced to comply. As we have shown, it is quite possible that the decision not to disclose is the result of enjoying a free ride on the disclosure of others, without bearing the costs of disclosure. Once firms are forced to disclose, free riding is not possible, and all firms share the benefits of disclosure while also bearing disclosure costs.

The paper also differentiated between two types of comparison benefits that flow from disclosure, and showed that the free ride should be more of a concern for comparison benefits used by corporate insiders.⁵⁸ If it is possible to differentiate between disclosure components that interest corporate insiders and those that interest public shareholders, mandatory disclosure would best fit the former.

⁵⁶ *Supra* note 6, at 3-4.

⁵⁷ This argument should not be read though as promoting mandatory disclosure in these circumstances. To reach a conclusion on this matter one would have to weigh the costs for the firms that evidently preferred not to disclose against the benefits of disclosure.

⁵⁸ Note that the justification for mandatory disclosure when comparison benefits accrue within the boundaries of the firm fits many other types of inter-firm benefits associated with disclosure such as business data externalities, which can be enjoyed without reciprocal disclosure. While this paper emphasizes on comparison spillovers, the social planner should consider all relevant externalities associated with disclosure.