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Management Forecasts: Do They Have a Future in Corporate Takeovers

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MANAGEMENT FORECASTS: DO THEY HAVE A FUTURE IN CORPORATE TAKEOVERS?

by

John S. Poole*

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ORPORATE acquisitions have become a hot topic in the last few years. Economists laud takeovers as a necessary mechanism for ouster of inefficient managements. Others vilify corporate takeovers as wasteful and as deterrents to the pursuit of long-term goals. Whichever position is correct, the number of takeovers has increased dramatically over the last few decades. During the late 1960s, the United States witnessed a boom in mergers and acquisitions. After falling to its lowest

^{1.} See Berry & Scott, What to Do About Takeovers, MGMT. REV., Feb. 1986, at 61; Crock, The Right Question to Ask About Corporate Takeovers, BUS. WK., Mar. 11, 1985, at 88; Dobrzynski, A New Strain of Merger Mania, BUS. WK., Mar. 21, 1988, at 122; Egan, The New Rule of Raiding, U.S. NEWS & WORLD REP., Jan. 18, 1988, at 53; Jones, Do All These Deals Help or Hurt the U.S. Economy, BUS. WK., Nov. 24, 1986, at 86; Perham, It's a New Game in Mergers, DUN'S BUS. MONTH, Apr. 1986, at 28; Reilly, Merger Madness, FORTUNE, May 13, 1985, at 101; Sheeline, Deals of the Year, FORTUNE, Feb. 1, 1988, at 34; Taub, Who Cares About the Shareholders?, FIN. WORLD, May 15, 1988, at 15; Thackray, America's Shareholding Sheep, MGMT. TODAY, Oct. 1985, at 86; Weidenbaum, The Best Defense Against the Raiders, BUS. WK., Sept. 23, 1985, at 21; Williams, It's Time for a Takeover Moratorium, FORTUNE, July 22, 1985, at 133; Melloan, New Debate Over Corporate Governance, Wall St. J., Nov. 11, 1986, at 36, col. 3.

^{2.} Frank Easterbrook and Daniel Fischel are the leading advocates of the potential benefits of takeovers. See Easterbrook & Fischel, Corporate Control Transactions, 91 Yale L.J. 698 (1982); Easterbrook & Fischel, The Proper Role of a Target's Management in Responding to a Tender Offer, 94 Harv. L. Rev. 1161 (1981); see also Securities and Exchange Commission Report of Recommendations of Advisory Committee on Tender Offers, [Special Report No. 1028] Fed. Sec. L. Rep. (CCH) (July 15, 1983), Separate Statement of Frank H. Easterbrook and Gregg A. Jarrell, at 71 (July 8, 1983); Goldman, Takeovers Keep Management on Thier Toes, FE, May 1985, at 22; Magnet, Restructuring Really Works, FORTUNE, Mar. 2, . 1987, at 38.

^{3.} See, e.g., Alexander, Is the United States Substituting a Speculative Economy for a Productive One, 20 J. Economic Issues 365 (1986) (concentration on takeovers is replacing research and development); Chatinover, Takeovers Deliver Body-Blow to Long Term Growth, FE, May 1985, at 25; Saul, Hostile Takeovers: What Should Be Done?, HARV. Bus. Rev., Sept.-Oct. 1985, at 18 (criticizing contention that inefficient target managements spur takeovers); Sigler, Takeovers and the Economic Cost, Corp. Bd., Sept.-Oct. 1985, at 5 (arguing that hostile takeovers create no new wealth and replace equity with debt); see also Drucker, Corporate Takeovers—What Is To Be Done?, 82 Pub. Interest 3 (1986); Ehrbar, Have Takeovers Gone Too Far?, Fortune, May 27, 1985, at 20; Michel & Shaked, Takeover Madness: Corporate America Fights Back, Barrons, July 14, 1986, at 65.

^{4.} See, e.g., G. BENSTON, CONGLOMERATE MERGERS: CAUSES, CONSEQUENCES AND REMEDIES 6-7 (1980) (dollar volume of mergers increased from approximately \$2 billion in

point in 1974 and 1975,⁵ the number of mergers increased rapidly after 1980.⁶

More importantly, tender offers have become much more prevalent in the last twenty years.⁷ Although the absolute number of tender offers has varied over the years, the trend in the dollar volume involved in these transactions is upward.⁸ Especially in the last few years, tender offers have been used heavily in larger transactions.⁹ Nevertheless, a substantial portion of tender offers involve small- to medium-sized firms.¹⁰

1960 to \$15 billion in 1968); P. STEINER, MERGERS, MOTIVES, EFFECTS, POLICIES 9 (1975) (illustrating that the number of acquisitions tripled between 1960 and 1969); Bureau of Economics, Federal Trade Commission, Report No. 6-15-18, Statistical Report on Mergers and Acquisitions 58-59 (Oct. 1973) (indicating rise in number of large mergers exceeding \$10 million from 54 in 1963 to 173 in 1968). Between 1965 and 1970, the number of completed mergers and acquisitions exceeding \$1 million increased from 1,354 to 1,712. See A Twenty-Year Profile of Mergers and Acquisitions, MERGERS & ACQUISITIONS, Jan.-Feb. 1986, at 42 (statistics include only transactions of \$1 million or more). The Williams Act, 15 U.S.C. §§ 781(i), 78m(d)-(e), 78n(d)-(f) (1982), was enacted in 1968 primarily in response to the dramatic upsurge in takeovers that bypassed the merger regulations of the federal securities laws because they were carried out through tender offers. See Edgar v. Mite Corp., 457 U.S. 624, 632 (1982).

5. See Twenty-Year Profile, supra note 4, at 42 (showing 926 mergers and acquisitions during 1974 and 981 in 1975); Bureau of Economics, Federal Trade Commission, Statistical Report on Mergers and Acquisitions 26 (Dec. 1978) (indicating approximately 1,047 mergers of all types completed in 1975 compared to 2,359 in 1973).

6. The number of mergers and acquisitions rose from 1,565 in 1980 to 4,323 in 1986. See 1987 Profile, MERGERS & ACQUISITIONS, May-June 1988, at 45 [hereinafter 1987 Profile]. Mergers increased 48.6% in 1981, 32.3% in 1984, and 26.1% in 1986 over the previous years. Id. Correspondingly, the total monetary value of the acquisitions increased 104.1% in 1981 to \$67 billion, and 139.7% in 1984 to \$125 billion, over the previous years. Id.

7. See generally E. Aranow & H. Einhorn, Tender Offers for Corporate Control (1973); see also Hayes & Tausig, Tactics of Cash Take-Over Bids, in The Business of Acquisitions and Mergers 257, 259 (G. Scott Hutchinson ed. 1968) (number of firms acquired through a tender offer rose from 300 in 1956 to 1100 in 1965).

8. See Austin, Nigem & Bernard, Tender Offer Update: 1987, MERGERS & ACQUISITIONS, July-Aug. 1987, at 49 [hereinafter Tender Offer Update: 1987]. The dollar volume has risen from \$9 billion in 1979 to \$46.8 billion in 1985. Id. In addition, the number of tender offers has increased from a low of approximately 77 in 1983 to 183 in 1986. Id. The dollar volume and number of tender offers in 1986 represented an increase of 29% and 51%, respectively, over 1985 levels. Id.

9. Tender offers provided the mechanism for eight of the ten highest priced takeovers in 1985. Austin & Mandula, Tender Offer Update: 1986, MERGERS & ACQUISITIONS, July-Aug. 1986, at 55. Moreover, ten completed tender offers in 1986 were valued at more than \$1 billion. Tender Offer Update: 1987, supra note 8, at 49. Six of the ten largest takeovers in 1987 were executed through tender offers including the highest priced takeover of the year, a \$7.6 billion acquisition by British Petroleum Co. PLC of a minority interest in Standard Oil Co. Tender Offer Update: 1988, MERGERS & ACQUISITIONS, May-June 1988, at 23 [hereinafter Tender Offer Update: 1988].

10. See, A Lively Market in Small Deals, MERGERS & ACQUISITIONS, Mar.-Apr. 1986, at 18 (two-thirds of reported mergers and acquisitions for 1984-1985 were valued at less than \$25 million and one-third at less than \$5 million); see also Two-Tier Tender Offer Pricing and Non-Tender Offer Purchase Program, Exchange Act Release No. 21,079, [1984 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 83,637, at 86,931 (June 21, 1984). Between 1981 and 1983, 60% of tender offers consisted of any-or-all offers with two-tier and pure partial offers occurring at approximately the same rate (20%). Id. at 86,929. The incidence of any-or-all offers, however, occurred primarily with smaller target firms, while two-tier and partial offers predominated among large and medium size targets. Id. at 86,921. Two-tier offers occurred twice as often as the other types in very large takeovers. Id. at 86,931. See also infra notes 364-368 for statistics on the size of targets in tender offers and mergers. Many expect the recent adoption of a best

One may structure corporate control acquisitions through merger or tender offer¹¹ in a variety of ways. The acquisition for example, may involve an exchange of the target's stock for all cash, the bidder's stock, debt instruments issued by the bidder, or a combination of these three.¹² The acquisition, regardless of the method, forces target shareholders to confront the decision whether to sell their shares. Target shareholders, unfortunately, must make this decision without the benefit of very important information: management forecasts of future operations. Current statutory and regulatory law does not clearly require a target's management to disclose "soft information." Case law on this issue is confused. The SEC policy of permissive disclosure contains serious drawbacks, ¹⁴ and thus generally fails in

price rule by the SEC, which requires bidders to pay all target shareholders the same price even in a two-step transaction, to deter two-tier takeovers. See Amendments to Tender Offer Rules—All Holders and Best Price, Sec. Act Release No. 6,653, [Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 84,016, at 88,186 (July 11, 1986).

- 11. Generally, one can distinguish mergers from tender offers by the method of acquisition. Mergers involve shareholders of the target voting on a proposal presented by management at a shareholders' meeting. Tender offers consist of an offer to buy shares addressed directly to the target shareholders. Mergers require negotiation with and consent of the target management and therefore are usually restricted to friendly takeovers. The tender offer, on the other hand, provides a method of obtaining control where the target firm's management either opposes or refuses to actively support a merger. Tender offers also allow a bidder to acquire effective control without purchasing all of the outstanding target shares. See V. BRUDNEY & M. CHIRELSTEIN, CORPORATE FINANCE 709-16 (2d ed. 1979); see also Fleischer & Mundheim, Corporate Acquisition by Tender Offer, 115 U. PA. L. REV. 317 (1967) (explaining mechanics of tender offer as another technique for creating business combination). Many prefer the tender offer method because it can be accomplished more quickly than a merger. Id.
- 12. See SCHMULTS, FORMS OF TRANSACTIONS IN MERGERS & ACQUISITIONS 54, 55-61 (A. Kramer & J. McCord eds. 1969) (Practicing Law Institute); Note, The Federal Scheme of Tender Offer Regulation, 7 J. CORP. L. 525, 525 (1982). All cash tends to constitute the dominant medium with tender offers with solely cash payment involved in approximately 85-96% of the offers between 1981 and 1986. See Austin & Mandula, supra note 8, at 55; Tender Offers Update: 1987, supra note 8, at 49; see also Hayes & Tausig, supra note 7, at 260. All cash also represents the most common form of payment when all types of mergers and acquisitions are included, occurring nearly twice as frequently as the combination of cash and stock payments. See, e.g., 1987 Profile, supra note 6, at 51 (form of payment for 1987—54% cash, 10% all stock, 17% combination of cash, stock or debt instruments); 1986 Profile, Mergers & Acquisitions, May-June 1987, at 57, 61 (forms of payment for 1986—44% cash, 11% all stock, 17% combination of cash, stock or debt instruments).
- 13. The definition of "soft information" includes opinions, predictions, analyses, and other subjective evaluations as opposed to "hard information", which involves statements concerning objectively verifiable historical facts. See HOUSE COMM. ON INTERSTATE & FOREIGN COMMERCE, 95TH CONG., 1ST SESS., REPORT OF THE ADVISORY COMM. ON CORPORATE DISCLOSURE TO THE SECURITIES AND EXCHANGE COMMISSION 347 (Comm. Print 1977) [hereinafter REPORT ON DISCLOSURE], abstracted in [1977-1978 Transfer Binder] Fed. Sec. L. Rep. (CCH) § 81,357, at 88,663 (Nov. 3, 1977). Soft information may also include forecasts of earnings, revenues, and other financial data; future dividend policy; statements of any other forward-looking information such as plans; statements concerning past or present situations such as a company's market share where precise statistics are not available; and statements of motive, purpose, or intention. See Schneider, Nits, Grits, and Soft Information in SEC Filings, 121 U. PA. L. REV. 254, 255 (1972); see also Kohn v. American Metal Climax, 458 F.2d 255, 265 (3d Cir.), cert. denied, 409 U.S. 874 (1972) (soft information includes "future earnings, appraised asset valuations and other hypothetical data"). There is no clear delineation between hard and soft information does not exist. Schneider noted that "many apparently hard statements have soft cores and vice versa." Schneider, supra, at 256.
- 14. See Note, The SEC Safe Harbor for Forecasts—A Step in the Right Direction, 1980 DUKE L.J. 607 [hereinafter Safe Harbour].

its purpose. The Williams Act¹⁵ was intended to protect investors by requiring full and fair disclosure of information important in deciding how to respond to a tender offer.¹⁶ A policy of mandatory disclosure of target management's financial forecasts would significantly enhance the accomplishment of this goal. In addition to recognizing individual shareholders' interests in greater knowledge and information, this policy would promote society's interest in economic efficiency.

This Article discusses the inadequacy of SEC policy and case law to deal effectively with forecasts. Moreover, it reviews the empirical studies concerning the information content and accuracy of management forecasts. Empirical evidence reveals that management forecasts provide new, useful information to investors. Market impact studies show that stock price movements relate to public disclosure of management forecasts. Research of the accuracy of forecasts indicates that management forecasts are superior to both analysts' forecasts and forecasts generated from statistical models. This empirical evidence militates in favor of the mandatory disclosure of management forecasts, especially in corporate control contests. This Article also discusses the potential additional costs associated with public disclosure. The Article concludes that mandatory disclosure of company forecasts results in cost-efficiency. This Article also touches upon the attitude toward and treatment of forecasts in takeover situations in England, where public disclosure is more prevalent than in the United States.

I. THE DEVELOPMENT OF CURRENT POLICY ON FINANCIAL FORECASTS

A. Evolution of SEC Policy

Initially, the SEC placed an absolute ban on soft information in commission filings.¹⁷ The SEC predicated this decision on the traditional view that SEC documents should include only "factual" or objectively verifiable information, ¹⁸ and that soft information could mislead unsophisticated inves-

^{15.} See Pub. L. No. 90-439, 82 Stat. 455 (1968) (codified at 15 U.S.C. §§ 78l(i), 78m(d)-(e), 78n(d)-(f) (1982)).

^{16.} S. REP. No. 550, 90th Cong., 1st Sess. 2, 3-4 (1967); H.R. REP. No. 1711, 90th Cong., 2d Sess. (1968), reprinted in 1968 U.S. CODE CONG. & ADMIN. NEWS 2811, 2813-14; 113 CONG. REC. 854, 855 (1967) (statement of Sen. Williams); see also Piper v. Chris-Craft Indus., 430 U.S. 1, 35 (1977) ("sole purpose of the Williams Act [is] protection of investors"); Berman v. Gerber Prods. Co., 454 F. Supp. 1310, 1319 (W.D. Mich. 1978) (Congress's primary purpose in adopting Williams Act was to ensure that public shareholders confronted with tender offer receive complete and truthful information).

^{17.} See South Coast Serv. Corp. v. Santa Ana Valley Irrigation Co., 669 F.2d 1265, 1271 (9th Cir. 1982); Gerstle v. Gamble-Skogmo, 478 F.2d 1281, 1294 (2d Cir. 1973); J. SELIGMAN, THE TRANSFORMATION OF WALL STREET: A HISTORY OF THE SECURITIES AND EXCHANGE COMMISSION AND MODERN FINANCE 557 (1982); Guidelines for Release of Information by Issuers Whose Securities are in Registration, Sec. Act Release No. 5180, [1970-1971 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 78,192, at 80,578 (Aug. 16, 1971) (companies should limit information in prospect/uses to "factual information and should not include such things as projections, predictions, forecasts or opinions with respect to value"); Schneider, supra note 13, at 257-58.

^{18.} See Sec. Act. Release No. 5180, supra note 17; Fiflis, Soft Information: The SEC's Former Exogenous Zone, 26 UCLA L. REV. 95, 97 (1978); Hewitt, Developing Concepts of

tors.¹⁹ Inevitably, this position drew increasing criticism.²⁰ Commentators considered unrealistic the belief that investors were unaware of the inherent uncertainties of projections, especially when accompanied with cautionary statements.²¹

As a result, in November and December 1972, the SEC conducted public hearings on the issue of disclosing estimates, forecasts, or projections of economic performance.²² The SEC soon thereafter announced "a significant departure from the Commission's historic policy of generally not permitting the disclosure of sales and earnings projections in SEC filings."²³ Although

Materiality and Disclosure, 32 BUs. L. 887, 955 (1977) (SEC prohibited forecasts in filings, unless they involved negative trends). Harry Heller, a long-time staff attorney with the SEC, gave the following often quoted explanation of the SEC's position:

The question will be raised, if the determination of future earnings is the prime task confronting the investor, why not require or permit a direct prediction of [future] earnings? The answer to this is that the Securities Act, like the hero of "Dragnet," is interested exclusively in facts. Conjectures and speculation as to the future are left by the Act to the investor on the theory that he is as competent as anyone to predict the future from the given facts. Since an expert can speak with authority only as to subjects upon which he has professional knowledge and since no engineering course or other professional training has ever been known to qualify anyone as a clairvoyant, attempts by companies to predict future earnings on their own or on the authority of experts have almost invariably been held by the Commission to be misleading because they suggest to the investor a competence and authority which in fact does not exist.

Heller, Disclosure Requirements Under Federal Securities Regulation, 16 BUS. L. 300, 307-08 (1961).

19. See SECURITIES AND EXCHANGE COMMISSION, DISCLOSURE TO INVESTORS—A REAPPRAISAL OF FEDERAL ADMINISTRATIVE POLICIES UNDER THE '33 AND '34 ACTS (1969) [hereinafter Wheat Report], summarized in [Special Studies 1963-1972 Transfer Binder] Fed. Sec. L. Rep. (CCH) 74,601, at 65,241 (1971).

It has been the Commission's long-standing policy not to permit projections and predictions in prospectuses and reports filed with the Commission. Such documents are designed to elicit material facts. Their factual character is widely recognized. Investors and their advisors are at liberty to make their own projections based on the disclosures resulting from the Commission's requirements. A real danger exists, in the Study's judgment, that projections appearing in prospectuses and other documents filed under the securities laws and reviewed by the Commission would be accorded a greater measure of validity by the unsophisticated than they would deserve.

Id. at 96; see also 17 C.F.Ř. § 240.14a-9, note (1976) (giving example of "predictions as to specific future market values, earnings or dividends" as potentially misleading). But see infra note 34 (discussing the deletion of the references to earnings and dividend projections in note to rule 14a-9). Of course, this position involves circular reasoning in that shareholders' expectation of "hard" data in SEC reports, which establishes the basis for excluding soft information, exists because of the SEC's policy of including only hard data in its documents.

20. A. BROMBERG & L. LOWENFELS, SECURITIES FRAUD AND COMMODITIES FRAUD § 6.5, at 136.123 (1985); see Kripke, The SEC, the Accountants, Some Myths and Some Realities, 45 N.Y.U. L. REV. 1151, 1198 (1970); Mann, Prospectuses: Unreadable or Just Unread?—A Proposal to Reexamine Policies Against Permitting Projections, 40 GEO. WASH. L. REV. 222 (1971); Schneider, supra note 13.

21. REPORT ON DISCLOSURE, supra note 13, at A-312. Some commentators noted that projections were commonly circulated informally so investors were not unaccustomed to dealing with this type of information. See Schneider, supra note 13, at 269.

22. See Public Proceedings in the Matter of Estimates, Forecasts or Projections of Economic Performance, Exchange Act Release No. 9,844, [1972-1973 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 79,075, at 82,322 (Nov. 1, 1972).

23. Disclosure of Projections of Future Economic Performance, Sec. Act Release No. 5,362, [1972-1973 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 79,211, at 82,666 (Feb. 2,

declining to make corporate managements generate and release projections as an initial matter, the SEC took the position that once a corporation voluntarily disclosed a projection to any outsiders, then the corporation must disclose the information publicly.²⁴ The SEC release concluded:

The results of the hearings conducted by the staff have convinced the Commission that now is the appropriate time to take action in this area, to recognize the realities of the situation, and to take the lead in developing standards and guidelines that will enable all issuers to understand their responsibilities and all investors to have equal access to projection information.²⁵

After more than two years, the SEC released specific proposals to implement its new policy.²⁶ The proposed rules required corporations to file information on any projection,²⁷ including material assumptions, furnished to any outsider. Additionally, the SEC delineated the criteria for the application of a safe harbor rule to alleviate the potential for per se liability that attached to unrealized projections.²⁸ A company, once subjected to the SEC

1973). Fifty-three witnesses testified at the hearing and the SEC received over 200 letters from interested persons. *Id.* For a summary of the comments, see [1972] 180 Sec. Reg. & L. Rep. (BNA) A-5 to A-6; [1972] 179 Sec. Reg. & L. Rep. (BNA) A-7 to A-10; [1972] 178 Sec. Reg. & L. Rep. (BNA) A-6 to A-19. *See also* Edwards & Warren, *Management Forecasts: The SEC and Financial Executives*, MSU BUS. TOPICS, Winter 1974, at 51.

24. See Sec. Act Release No. 5,362, supra note 23. The major impetus for this policy change stemmed from the desire to correct the perceived unfairness in the prevailing practice of selective informal disclosure of this information, especially to securities analysts. The SEC also noted, however, the relevance of projections. "Information gathered at the hearings reinforced the Commission's own observation that management's assessment of a company's future performance is information of significant importance to the investor . . . and that such information should be available, if at all, on an equitable basis to all investors." Id. at 82,667.

25. Id. at 82,668. The Commission also recognized the need for establishing standards for liability consistent with the securities laws. See id. at 82,666, 82,668; see, also WHEAT REPORT, supra note 19, at 65,242 (insurmountable problems of liability would arise unless the SEC gave projections in prospectuses some measure of immunity).

26. See Proposed Rules on Earnings Projections, Sec. Act Release No. 5,581, [1974-1975 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 80,167, at 85,299 (Apr. 28, 1975); see also Gormley, Financial Forecasts: Problems and Considerations, 6 Sec. Reg. L.J. 32, 42 (1978).

27. The proposed rules defined "projection" as:
a statement made by an issuer regarding material future revenues, sales, net
income or earnings per share . . . expressed as a specific amount, range of
amounts . . . or percentage variation from a specific amount (\$2.20 plus or minus
10 percent or "an increase of 10 percent over last year"), or a confirmation by an
issuer of any such statement made by another person . . . [S]tatements that
another person's projection is "in the ballpark," "attainable" or "on target" are
examples of a confirmation.

Sec. Act Release No. 5,581, *supra* note 26, at 85,302. The proposed rule did not contain a definition of "material," but the release indicated that any statement relating to the issuer's total future sales, net income or earnings per share would be material, while a projection relating to a subsidiary or particular line of business might be material depending on the facts in the particular situation. *Id*.

28. Id. at 85,303. The SEC attempted to limit applications of the safe harbor protection to "situations where there is the greatest likelihood of a reasonable projection." Id. The criteria related to the manner of preparation, form, and manner of disclosure. The projection had to satisfy the following conditions: (1) prepared with reasonable care, (2) generated by qualified personnel, (3) carefully reviewed and approved by management at the appropriate levels, (4) have a reasonable factual basis, and (5) represent management's good faith judgment. Id. As to form, the projection had to include at least sales or revenues, net income, and fully diluted earnings per share. Id. The maximum horizon was one-and-a-half years ahead. Id. As for the

disclosure system, would be required to continue to provide projections in its annual Form 10-K or declare and explain why it had ceased the disclosures.²⁹ This approach attempted to establish an on-going system of public disclosure that came close to widespread mandatory disclosure.

The proposals generated rapid dissent.³⁰ Many companies complained about the costs and burdens of revising the projections.³¹ Many viewed the safe harbor provisions as too subjective and stringent.³² As a result, the SEC withdrew all the proposed rules.³³ The SEC, in a rather abbreviated release, did not fully explain this withdrawal, but instead adhered to its belief that investors find projections useful and issued very general guidelines for *voluntary* disclosure.³⁴

While the proposed guidelines awaited final approval, the Advisory Committee on Corporate Disclosure was appointed to review the entire SEC disclosure policy, including projections.³⁵ In its report, the Advisory

manner of disclosure, the SEC required material assumptions and cautionary statements on ultimate achievement of the projection. *Id.* Finally, if the issuer represented that someone had reviewed the projection, the issuer had to supply information concerning the relationship of the reviewer to the corporation and where investors could obtain a copy of the reviewer's report. *Id.* at 85,304. Moreover, the SEC deemed only companies with sufficient experience in budgeting and reporting to have a reasonable basis for making public projections. The safe harbor rule, therefore, applied only if a company had prepared budgets and had been subject to and complied with the Securities Exchange Act of 1934 reporting requirements for at least three years. *Id.* at 85,303.

29. Id. at 85,302. The SEC did not require companies to file with them if the company retained the projection internally or furnished the projection in connection with the following transactions: (a) a nonpublic securities offering, (b) a commercial loan, (c) negotiations with underwriters, (d) negotiations for a merger or sale of assets, (e) private disclosure to a government agency, or (f) disclosure to accountants or counsel. Id. at 85,306. Furthermore, the SEC would have compelled a company to revise any projection the SEC had reason to believe no longer had a reasonable basis. Id. at 85,305. The SEC failed to provide guidance on the meaning of a "reasonable basis," and some commentators criticized the vague language in many of the standards in the proposed rules. See, e.g., Gormley, supra note 26, at 42.

30. See Safe Harbor, supra note 14, at 619.

31. See [1975] 320 Sec. Reg. & L. Rep. (BNA) D-1 to D-4.

32. See Gormley, supra note 26, at 42; Safe Harbor, supra note 14, at 619.

33. See Adoption of Amendment to Rule 14a-9, Withdrawal of Proposed Rules, and Disclosure of Projections of Future Economic Performance, Sec. Act Release No. 5,699, [1975-1976 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 80,461, at 86,200 (Apr. 23, 1976). The SEC received 420 letters on the proposal, a rather large response. *Id.* at 86,201.

34. See id. The release replaced the extensive proposed rules with proposed Guides 62 and 4, which represented expressions of the practices the Division of Corporate Finance would follow in reviewing filings containing projections. Projections were allowed when the following three factors existed: (1) management had a reasonable basis for the projections; (2) management presented projections in an appropriate format; and (3) the accompanying disclosures facilitated investor understanding of the basis for and limitations of projections. Id. at 86,203. Pending final adoption of the proposed guides the SEC adopted another guide numbered 4, dealing with an unrelated matter, so that proposed Guide 4 became Guide 5. Also in this release, the SEC amended the note to rule 14a-9 (17 C.F.R. § 240.14a-9 (1988)), deleting the reference to "earnings" projections as an example of misleading information. Id.

In this release, the SEC's position on reporting projections seemed ambivalent. At one

In this release, the SEC's position on reporting projections seemed ambivalent. At one point, for instance, the SEC commented that "the Commission is neither encouraging or discouraging the making and filing of projections because of the diversity of views" Id. at 86,202. At another point, the SEC stated, "The Commission . . . [is] of the view that the flexibility of a general disclosure guide will encourage a certain degree of experimentation in the disclosure of projections" Id. at 86,203.

35. See Solicitation of Public Comments by Advisory Committee on Corporate Disclo-

Committee endorsed the SEC's movement toward greater disclosure of soft information and recommended "that the Commission actively and generally encourage the publication of forward-looking and analytical information in company reports to shareholders and in Commission filings." Nevertheless, the Advisory Committee eschewed endorsing mandatory disclosure in favor of an experimental, voluntary policy facilitated through creation of a safe harbor rule.

The SEC shortly thereafter adopted final guidelines very similar to the earlier proposed guidelines and the Advisory Committee's recommendations.³⁹ The SEC adopted extremely flexible guidelines that impose few specific limitations on companies. For instance, the SEC did not create absolute requirements concerning prior operating or reporting history, disclosure of assumptions, minimum items to be disclosed, third-party review, or time horizons for or updating of projections.⁴⁰ The SEC instead merely indicated that these issues may be relevant in determining whether a projection is misleading.⁴¹ Despite its earlier skepticism of the need for a simplistic safe harbor provision,⁴² the SEC released proposals for two versions of a safe harbor

sure, Sec. Act Release No. 5,707, [1975-1976 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 80,531, at 86,374 (May 18, 1976) (giving notice of the appointment of the Advisory Committee on February 2, 1976, and its purpose). See generally Kripke, Where Are We on Securities Disclosure After the Advisory Committee Report, 6 Sec. Reg. L.J. 99 (1978); Sommer, Survey: Report of the Advisory Committee on Corporate Disclosure to the Securities and Exchange Commission—Foreword, 26 UCLA L. Rev. 48 (1978).

- 36. REPORT ON DISCLOSURE, supra note 13, at D-14. More specifically, the Advisory Committee advocated encourgaging "public companies to disclose statements of management projections of future company economic performance in their filings with the Commission" Id. at 345.
- 37. Id. at 354. The Advisory Committee recommended creation of an experimental program and monitoring to determine the usefulness of the information disclosed to investors, the corresponding costs to the issuers, and the responsiveness of the issuers to investor needs. Id. at 344.
- 38. The safe harbor rule proposed by the Advisory Committee would have precluded liability against issuers unless a plaintiff could prove that the issuer made a disclosure without a reasonable basis or absent good faith. *Id.* at 344-45, 364. In withdrawing its more complex proposed safe harbor provisions, the SEC stated its belief that disclosure of reasonably based and adequately presented projections would not subject issuers to liability under the securities laws even without a safe harbor rule. *See* Sec. Act Release No. 5,699, *supra* note 33, at 86,202.
- 39. See Guides for Disclosure of Projections of Future Economic Performance, Sec. Act Release No. 5,992, [1978 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 81,756, at 81,034 (Nov. 7, 1978); cf. REPORT ON DISCLOSURE, supra note 13, at 345-46 (explaining the Advisory Committee's Report on Corporate Disclosure).
 - 40. See Sec. Act Release No. 5, 992, supra note 39, at 81,038-040.
- 41. The SEC noted that a history of operation or experience in reporting "may" be among the factors providing a reasonable basis for a projection. *Id.* at 81,038. The Commission stated its belief that disclosure of assumptions generally would aid investors, assist in establishing a reasonable basis and "under certain circumstances... may be material to an understanding of projected results." *Id.* (emphasis added). Although disclosure of sales or revenues, net income, and earnings per share "usually are key elements in an appropriate presentation of a projection," management should have flexibility on which items to disclose. *Id.* Management may exercise discretion on whether to have an independent review, but management must reveal any relationship between the company and reviewer. *Id.* at 81,039. Finally, given variances among industries, management should maintain "the responsibility for selecting the most appropriate time period [for the projection] depending on all the facts and circumstances." *Id.*
 - 42. See supra note 38.

rule.43

The safe harbor rule finally adopted, rule 175,⁴⁴ combined elements from each of the proposed versions.⁴⁵ The major provision of rule 175 provided that the SEC would not deem a "forward-looking statement" as fraudulent or misleading "unless it is shown that such statement was made or reaffirmed without a reasonable basis or was disclosed other than in good faith."⁴⁶ Several commentators have criticized the imprecision in terms such as "reasonable basis" and "good faith."⁴⁷ Furthermore, this rule did

The Advisory Committee believed that the unsettled state of existing case law necessitated a safe harbor rule in order to encourage voluntary disclosure. *Id.* at 81,042. In contrast to its statements in Sec. Act Release No. 5,699, the SEC specifically stated its desire to encourage disclosure of projections:

[I]n light of the significance attached to projection information and the prevalence of projections in the corporate and investment community, the Commission has determined to follow the recommendations of the Advisory Committee and wishes to encourage companies to disclose management projections both in their filings with the Commission and in general.

Sec. Act Release No. 5,992, supra note 39, at 81,037.

44. 44 Fed. Reg. 38,810 (1979) (codified at 17 C.F.R. §§ 230.175 and 240.3b-6 (1988)).

- 45. See Safe Harbor Rule for Projections, Sec. Act Release No. 6,084, [1979 Transfer Binder] Fed. Sec. L. Rep. (CCH) § 82,117, at 81,938 (June 25, 1979). Rule 175, for example, includes from the Advisory Committee proposal: (1) application of the rule to capital expenditures, financing, dividends, capital structure, and management's plans and objectives of future operations; (2) placement of burden of proof on plaintiff to show the absence of good faith or a reasonable basis for the projection; and (3) protection for disclosure of assumptions with the projection. Similar to Version A, rule 175 applies primarily to prior reporting companies, but the rule also covers projections included within registration statements of initial public offerings. Id. at 81,943. The rule's protection, more importantly, covers only statements included in documents filed with the SEC or included in annual reports to shareholders. Id. As a result, Rule 175 does not protect projections made in press releases or statements to analysts, unless they also appear in SEC documents. The SEC intended rule 175 to provide an incentive for wider dissemination of this information. The rule defines a forward-looking statement as:
 - (1) A statement containing a projection of revenues, income (loss), earnings (loss) per share, capital expenditures, dividends, capital structure or other financial items; (2) A statement of management's plans and objectives for future operations; (3) A statement of future economic performance contained in management's discussion and analysis of financial condition and results of operations included pursuant to Item 303 of Regulation S-K or Item 9 of Form 20-F; or (4) Disclosed statements of the assumptions underlying or relating to any of the statements described in paragraphs (c)(1), (2) or (3) above.

17 C.F.R. § 230.175(c) (1988). Also in this release, the SEC withdrew from note (a) to Rule 14a-9 (17 C.F.R. § 240.14a-9 (1988)) the reference to predictions of dividends as an example of a possibly misleading statement. See Act Release No. 6,084, *supra* at 81,938.

46. 17 C.F.R. § 230.175(a) (1988) (emphasis added).

47. See Brown, Corporate Communications and the Federal Securities Laws, 53 GEO. WASH. L. REV. 741, 796 (1985); Fiflis, supra note 18, at 109; Safe Harbor, supra note 14, at

^{43.} Proposed Safe Harbor Rule for Projections, Sec. Act Release No. 5,993, [1978 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 81,757, at 81,041 (Nov. 7, 1978). Version A contained provisions presented by the SEC, and Version B provided the rule recommended by the Advisory Committee on Disclosure. The two versions differed in several respects. Version A included only projections of specific financial items such as revenues, income, and earnings per share. Version B, however, included management's general plans and objectives, planned capital expenditures and financing, and dividend and capital structure policies. *Id.* at 81,043. Also, Version A applied only to companies required to file reports with the SEC under Sections 12(g) and 15(d) of the 1934 Securities Exchange Act, 15 U.S.C. §§ 78/(g) and 78o(d) (1982), whereas Version B would have protected any company. *Id.* Version A would have also placed the burden of proving good faith and reasonable basis on the defendant, while Version B placed the burden of proof on the plaintiff. *Id.* at 81,044.

little more than mirror the broad requirements already adopted by the courts.⁴⁸ While the safe harbor rule may have provided some minimal protection for issuers from strict liability, the rule added little in areas requiring higher standards of proof, such as negligence or scienter.⁴⁹

Despite indication that the SEC would monitor the effectiveness of its policy and publish additional guidelines,⁵⁰ the SEC's current policy remains relatively unchanged.⁵¹ Companies are encouraged to voluntarily disclose projections in SEC filings "that have a reasonable basis and are presented in an appropriate format."⁵² A history of operations or experience in projection, as well as an outside review, *may* provide a reasonable basis, but neither is required.⁵³ Disclosure of at least sales or revenues, net income, and earnings per share are recommended but not required, unless selective disclosure

^{639.} Compare the ambiguity of the terms in rule 175 with the more specific requirements in rule 144 (17 C.F.R. § 230.144 (1988)) (dealing with sale of restricted stock), and rules 505 and 506 (17 C.F.R. §§ 230.505 and 230.506 (1988)) (dealing with limited stock offerings).

^{48.} See Sundstrand Corp. v. Sun Chem. Corp., 553 F.2d 1033, 1040 (7th Cir.), cert. denied, 434 U.S. 875 (1977); Marx v. Computer Sciences Corp., 507 F.2d 485, 490 (9th Cir. 1974); G & M, Inc. v. Newbern, 488 F.2d 742, 745-46 (9th Cir. 1973); Eichen v. E.F. Hutton & Co., 402 F. Supp. 823, 829 (S.D. Cal. 1975); Schuller v. Slick Corp., [1974-1975 Transfer Binder] Fed. Sec. L. Rep. (CCH) 95,065 (S.D.N.Y. 1975); Beecher v. Able, 374 F. Supp. 341, 348 (S.D.N.Y. 1974); Green v. Jonhop, 358 F. Supp. 413, 420 (D. Or. 1973); Dolgow v. Anderson, 53 F.R.D. 664, 676 (E.D.N.Y. 1971), aff'd per curiam, 464 F.2d 437 (2d Cir. 1972).

^{49.} Both the Securities Act of 1933 and the Securities Exchange Act of 1934 contain several provisions on which one might base liability for faulty projections. Only § 11 of the Securities Act of 1933, 15 U.S.C. § 77k (1982) (involving registration statements), imposes strict liability. Other sections such as §§ 12 and 17 of the Securities Act of 1933, 15 U.S.C. §§ 77l, 77q (1982), involve negligence standards. One must prove scienter under §§ 10(b) and 13(e) of the Securities Exchange Act of 1934, 15 U.S.C. §§ 78j(b), 78m(e) (1982), and rule 10b-5 (17 C.F.R. § 240.10b-5 (1987)). The standard of liability for § 14(e) of the Securities Exchange Act of 1934, 15 U.S.C. § 78n(e) (1982), remains unclear, but several courts hold that scienter applies. See, e.g., MacFadden Holdings, Inc. v. J.B. Acquisition Corp., 641 F. Supp. 454, 461 (S.D.N.Y), rev'd on other grounds, 802 F.2d 62 (2d Cir. 1986); Pryor v. U.S. Steel Corp., 591 F. Supp. 942, 955 (S.D.N.Y 1984), rev'd in part on other grounds, 794 F.2d 52 (2d Cir. 1986); Caleb & Co. v. E.I. Dupont de Nemours & Co., 599 F. Supp. 1468, 1474 (S.D.N.Y. 1984). See generally Comment, The SEC Policy for Projections: New Problems in Disclosure, 21 UCLA L. Rev. 242 (1973).

^{50.} See Sec. Act Release No. 6,084, supra note 45, at 81,944 ("The Commission anticipates that as the staff gains further experience with disclosure of forward-looking information, it will recommend the publication of such guidelines or interpretive releases on specific aspects of such disclosure in order to provide guidance to issuers.").

^{51.} The substance of Guides 62 and 5 on projections has been incorporated in regulation S-K (17 C.F.R. § 229.10 (1988)). In 1982, the SEC embarked on a reform program for filings denominated integrated disclosure. This reform program, among other things, eliminated the prior system of issuing guides that explained division practices but did not have the binding legal effect of formalized SEC rules. See Recission of Guides and Redesignation of Industry Guides, Sec. Act Release No. 6,384, 1 Fed. Sec. L. Rep. (CCH) ¶ 3760, at 3303 (Mar. 3, 1982); Adoption of Integrated Disclosure System, Sec. Act Release No. 6,383, Accounting Series Release No. 306, [Accounting Series Releases 1937-1982 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 72,328, at 62,990 (Mar. 3, 1982).

^{52. 17} C.F.R. § 229.10(b) (1988).

^{53.} Id. § 229.10(b)(1). The rule fails to indicate whether an outside reviewer's report must be filed. It indicates only that if management states an outside review was conducted, the company must also disclose the qualifications of the reviewer, the extent of the review, the relationship between the reviewer and the company, and other material factors about obtaining the review. Id.

would be misleading, such as partial disclosure of contradictory trends.⁵⁴ Although not formally defined, a projection is an opinion of the most probable specific amount or the most reasonable range for each financial item projected based on the accepted assumptions. The SEC policy recommends the disclosure of significant assumptions or key factors affecting the potential results of a projection along with a cautionary statement about uncertainty.⁵⁵ Additionally, the SEC indicated that management should consider disclosing the variances with actual results of previous projections.⁵⁶ While intended to provide flexibility, this policy is so amorphous as to be of little usefulness. As a result, development of guidelines in this area has been substantially left to common law.

B. The Courts Struggle with Projections

1. Focus on Reliability

No general rule requires corporations to disclose all material information in their possession as an initial matter.⁵⁷ An obligation to disclose particular information arises only when a duty to disclose exists. This duty can be created by specific federal statutes, specific SEC rules, and the general antifraud statutes and rules.⁵⁸ Since no specific statutory or regulatory obligation requires corporations in control contests to disclose forecasts,⁵⁹ courts have looked to the antifraud statutes.

The general implicit antifraud statutes and regulations basically forbid the misrepresentation or omission of material facts. They also embody the half-truth principle, which is the obligation to disclose all material facts needed to make other statements previously made not misleading.⁶⁰ Several of the

^{54.} Id. § 229.10(b)(2). For instance, sales may be increasing while earnings are decreasing due to a rise in expenses or costs of operations. Disclosure of the sales figures alone would imply the company's worth was increasing when just the opposite was true.

^{55.} Id. § 229.10(b)(3)(i).

^{56.} Id. § 229.10(b)(3)(ii). The SEC believes users may also benefit from an analysis of reasons for the variances, especially when the analysis would highlight particular risk factors of the business. Id.

^{57.} See, e.g., Roeder v. Alpha Indus., 814 F.2d 22, 26-27 (1st Cir. 1987); Starkman v. Marathon Oil Co., 772 F.2d 231, 238 (6th Cir. 1985), cert. denied, 475 U.S. 1015 (1986); Staffin v. Greenberg, 672 F.2d 1196, 1202 (3d Cir. 1982); Schlanger v. Four-Phase Sys. Inc., 582 F. Supp. 128, 133 (S.D.N.Y. 1984); see also Bauman, Rule 10b-5 and the Corporation's Affirmative Duty to Disclose, 67 GEO. L.J. 935 (1979); Brown, supra note 47, at 750. But see Seligman, The Reformulation of Federal Securities Law, 73 GEO. L.J. 1083 (1985) (arguing in favor of an SEC rule creating general affirmative duty to disclose material information).

^{58.} See Fiflis, supra note 18, at 114. See generally REPORT ON DISCLOSURE, supra note 13, at VI, XLIII-XLV (discussing mandatory disclosure system based on statutes and agency rules).

^{59.} See Starkman v. Marathon Oil Co., 772 F.2d 231, 239 (6th Cir. 1985) (no requirement to disclose projections in tender offer materials), cert. denied, 475 U.S. 1015 (1986); Howing Co. v. Nationwide Corp., 625 F. Supp. 146, 156 (S.D. Ohio 1985) (no disclosure of projections required in freeze-out merger under rule 13e-3); Mendell v. Greenberg, 612 F. Supp. 1543, 1550 (S.D.N.Y. 1985) (financial projections not required by SEC in proxy materials); Resource Exploration v. Yankee Oil & Gas, Inc., 566 F. Supp. 54, 64 (N.D. Ohio 1983) (soft information not required to be disclosed by Williams Act).

^{60.} See, e.g., Rudolph v. Arthur Anderson & Co., 800 F.2d 1040, 1043 (11th Cir. 1986), cert. denied, 107 S. Ct. 1604 (1987); Lockspeiser v. Western Md. Co., 768 F.2d 558, 561 (4th

provisions impose on certain individuals a duty to speak in particular situations such as proxy solicitations⁶¹ and tender offers.⁶² The most commonly litigated antifraud provisions, however, are section 10(b)⁶³ and rule 10b-5,⁶⁴ which apply to all purchases and sales of securities. Since rule 10b-5 does not specify who has an initial duty to speak, the courts have developed a limitation requiring that a confidential relationship exist between the parties to create a duty to disclose, in addition to the existence of a material fact.⁶⁵

Cir. 1985 (cause of action raised by claim of omission of facts material to merger)); State Teachers Retirement Bd. v. Fluor Corp., 654 F.2d 843, 853 (2d Cir. 1981) (company that volunteers information must make full disclosure of material facts); First Va. Bankshares v. Benson, 559 F.2d 1307, 1314 (5th Cir.) (issuer who undertakes to say anything has duty to speak the full truth), cert. denied, 435 U.S. 952 (1977); SEC v. Texas Gulf Sulphur Co., 401 F.2d 833, 862 (2d Cir. 1968) (statement reasonably intended to influence investors must not be so imcomplete as to mislead), cert. denied, 394 U.S. 976 (1969).

- 61. See § 14(a), 15 U.S.C. § 78n(a) (1982), rule 14a-3 (17 C.F.R. § 240.14a-3 (1988)), and schedule 14A (17 C.F.R. § 240.14a-101 (1988)), involving disclosure items for proxy disclosure.
- 62. See § 14(d), 15 U.S.C. § 78(d) (1982), rule 14d-9 (17 C.F.R. § 240.14d-9 (1988)), § 14(c), 15 U.S.C. § 78n(c) (1982), rule 14e-2 (17 C.F.R. § 240.14e-2 (1988)), and schedule 14D-9 (17 C.F.R. § 240.14d-101 (1988)), concerning management and third-party statements in tender offers. See generally Flynn v. Bass Bros. Enters., Inc., 744 F.2d 978, 984 (3d Cir. 1984) (involving tender offer by majority shareholder). See also § 13(e), 15 U.S.C. § 78m(e) (1982); rule 13e-4 (17 C.F.R. § 240.13e-4 (1988)), and schedule 13E-4 (17 C.F.R. § 240.13e-101 (1988)) (issuer tender offers); rule 13e-3 (17 C.F.R. § 240.13e-3 (1988)), and schedule 13E-3 (17 C.F.R. § 240.13e-100 (1988)) (going-private takeonvers by issuers and their affiliates). See generally Crane Co. v. Harsco Corp., 511 F. Supp. 294 (D. Del. 1981) (involving issuer tender offers); Chris Craft Indus., Inc. v. Piper Aircraft Corp., 480 F.2d 341, 346 (2d Cir.), cert. denied, 414 U.S. 910 (1973) (involving target management statements during third-party tender offer).
 - 63. Section 10(b) states:

It shall be unlawful for any person directly or indirectly, by use of any means or instrumentality of interstate commerce or of the mails, or of any facility of any national securities exchange

(b) to use or employ, in connection with the purchase or sale of any security not so registered, any manipulative or deceptive device or contrivance in contravention of such rules and regulations as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors.

15 U.S.C. § 78j(b) (1982).

64. Rule 10b-5 provides:

It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails, or of any facility of any national securities exchange,

- (1) to employ any device, scheme, or artifice to defraud,
- (2) to make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or
- (3) to engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.

17 C.F.R. § 240.10b-5 (1988).

65. See Chiarella v. United States, 445 U.S. 222, 226-30 (1980). The confidential relationship generating the duty to speak often originates in fiduciary duties created by state law. See, e.g., id. at 228; Pepper v. Litton, 308 U.S. 295, 306 (1939) (recognizing the fiduciary duty of management to shareholders). The duty to speak can also be derived from other related SEC rules. See, e.g., Pittsburg Terminal Corp. v. Baltimore & O.R.R., 680 F.2d 933, 941-42 (3d Cir. 1982) (finding duty to speak in both state law and SEC rule). The fiduciary status alone does not create an obligation to disclose information, but it must be coupled with a triggering event such as a stock transaction or the making of some affirmative statements.

Individuals having a confidential relationship with shareholders, such as corporate officers, directors, and controlling shareholders, are termed "insiders." ⁶⁶ Given the duty to speak placed on corporate officers as insiders, or explicitly in certain situations, combined with the duty to make complete disclosure once a statement is made, the question of the existence of an initial duty to disclose is rarely in controversy. Instead, cases involving forecast disclosure have focused on whether the particular soft information was "material."

In the early years, some courts reacted to the antidisclosure policy of the SEC by stating that projections could not be published in SEC filings because they were per se misleading.⁶⁷ Most courts, however, deferred to the SEC policy by scrutinizing the factual situations carefully and requiring a high level of reliability before allowing disclosure.⁶⁸ The courts tend to analyze disclosure of projections under the rubric of materiality,⁶⁹ but the defi-

^{66.} See Dirks v. SEC, 463 U.S. 646, 653 (1983); Chiarella, 445 U.S. at 227; Feldman v. Simkins Indus., Inc., 679 F.2d 1299, 1304 (9th Cir. 1982); SEC v. Fox, 654 F. Supp. 781, 790 (N.D. Tex. 1986); Berman v. Gerber Prods., Inc., 454 F. Supp. 1310, 1319 (W.D. Mich. 1978).

⁽N.D. Tex. 1986); Berman v. Gerber Prods., Inc., 454 F. Supp. 1310, 1319 (W.D. Mich. 1978). 67. See Union Pac. R.R. v. Chicago & N.W. Ry., 226 F. Supp. 400, 409 (N.D. Ill. 1964) (forecast of future earnings "mislead by conveying a certitude which inherently they cannot possess."); cf. Sunray DX Oil Co. v. Helmerich & Payne, Inc., 398 F.2d 447 (10th Cir. 1968) (asset appraisals inherently misleading); see also Kripke, The SEC, the Accountants, Some Myths and Some Realities, 45 N.Y.U. L. Rev. 1151, 1198 (1970) (former SEC official views projections as prophecies and not proper for registration).

^{68.} See Arber v. Essex Wire Corp., 490 F.2d 414, 421 (6th Cir.) (law does not require insider to volunteer any economic forecast), cert. denied, 419 U.S. 830 (1974); Kohn v. American Metal Climax, Inc., 458 F.2d 255, 265 (3d Cir.) (SEC and courts discourage presentations of asset appraisals, future earnings or hypothetical data in proxy materials), cert. denied, 409 U.S. 874 (1972); Denison Mines Ltd. v. Fibreboard Corp., 388 F. Supp. 812, 819 (D. Del. 1974) (SEC discourages asset valuations in filings); Thomas v. Duralite Co., 386 F. Supp. 698, 717 (D.N.J. 1974) (law does not require private dreams, aspirations, or other hopes of buyer to be disclosed), aff'd in part, vacated in part on other grounds, 524 F.2d 577 (3d Cir. 1975).

^{69.} See, e.g., First Va. Bankshares v. Benson, 559 F.2d 1307, 1314 (5th Cir. 1977) (opinion or prediction actionable under rule 10b-5); G & M, Inc. v. Newbern, 488 F.2d 742, 745 (9th Cir. 1973) (forecast actionable under § 10(b) as "material fact"); James v. Gerber Prods., Inc., 587 F.2d 324, 327 (6th Cir. 1978) (tentative forecasts and projections are not material); see also Jacobs, What is a Misleading Statement or Omission Under Rule 10b-5?, 42 FORDHAM L. REV. 243, 279-87 (1973) (company need only disclose underlying material facts); cf. Greenfield v. Heublein, Inc., 742 F.2d 751, 757 (3d Cir. 1984) (preliminary merger negotiations not material as matter of law), cert. denied, 469 U.S. 1215 (1985); Reiss v. Pan Am. World Airways, Inc., 711 F.2d 11, 14 (2d Cir. 1983) (same proposition). In one frequently cited case, however, the court analyzed the misleading nature of the defendant's intention to sell a target company's assets following a merger distinct from the issue of materiality. See Gerstle v. Gamble-Skogmo, Inc., 478 F.2d 1281 (2d Cir. 1973). While finding defendant's asset appraisals not required to be disclosed, the court held that defendant's proxy statements on continuing the target's operations contradicted its intentions to liquidate the target, so they were misleading. Id. at 1296. The court went on to find that this information was material to the shareholders' decision on the merger proposal. Id. at 1302-03. This opinion is not a dramatic departure from the traditional approach of finding projections inherently misleading. First, the appellate court accepted the lower court's finding as to defendant's intentions to liquidate, thereby making this information definite and similar to "hard" information. Second, this finding rested primarily on the blatant contradictions between the statements already appearing in the proxy statement and the accepted "present" intentions of the defendants, which happened to concern future actions. Rather than indicating that soft information may be required to be disclosed as independently material, this opinion merely illustrates that very reliable relevant information with a future-oriented component may be material where it directly conflicts with statements voluntarily made by the defendant. Cf. Levinson v. Basic, Inc., 786 F.2d 741, 746-

nition of materiality espoused by the Supreme Court in TSC Industries, Inc. v. Northway, Inc. 70 is ill-suited to the task. In that case, the Court indicated that an omitted fact is material if there is a "substantial likelihood that a reasonable shareholder would consider it important" in making an investment decision or if disclosure of the omitted fact "significantly alter[s] the 'total mix' of information made available." This standard deals with the relevance of the information, whereas most courts focus on the reliability of projections. Moreover, courts have utilized various standards for reliability.

2. Various Standards for Creating Obligation to Disclose

a. Traditional Absolute Standard

Appellate courts have applied at least four categories of standards for determining a disclosure duty related to company projections. First, the traditional view holds that no duty exists to disclose soft information. For example, in *Gerstle v. Gamble-Skogmo, Inc.*⁷³ the court refused to require

47 (6th Cir. 1986) (distinguishing between independent duty to disclose merger negotiations and duty to disclose that arises after other statements denying existence of merger negotiations have been made), vacated, 108 S. Ct. 978, 99 L. Ed. 2d 194 (1988) (act of publishing misleading statements denying existence of ongoing merger negotiations did not represent violation of rule 10b-5 without finding that merger negotiations independently were material); Greenberg v. Heublein, Inc., 742 F.2d 751, 760 (3d Cir. 1984) (Higginbotham, J., dissenting) (false denial of preliminary merger negotiations violates rule 10b-5). But see Note, A Hard Look at Soft Information, 16 SETON HALL L. REV. 511, 523-25 (1986) [hereinafter Hard Look] (arguing that Gerstle court focused on nature of information and rejected view that soft information was inherently misleading).

70. 426 U.S. 438 (1976).

71. Id. at 449. The statement reads as follows:

An omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote. . . . It does not require proof of a substantial likelihood that disclosure of the omitted fact would have caused the reasonable investor to change his vote. What the standard does contemplate is a showing of a substantial likelihood that, under all the circumstances, the omitted fact would have assumed actual significance in the deliberations of the reasonable shareholder. Put another way, there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the "total mix" of information made available.

Id. The courts have applied the TSC Industries standard in corporate acquisition situations under various anti-fraud provisions and disclosure rules. See, e.g., Piper v. Chris-Craft Indus., Inc., 430 U.S. 1, 50 (1977) (TSC Industries standard applies to tender offers under § 14(e)); Starkman v. Marathon Oil Co., 772 F.2d 231, 238 (6th Cir. 1985) (TSC Industries standard applied to tender offer under § 10(b)), cert. denied, 475 U.S. 1015 (1986); Pavlidis v. New England Patriots Football Club, Inc., 737 F.2d 1227, 1231 (1st Cir. 1984) (TSC Industries standard applied to mergers under § 14(a) and rule 14a-9 for proxies drafted by insiders or outsiders); Howing v. Nationwide Corp., 625 F. Supp. 146, 151 (S.D. Ohio 1985) (TSC Industries definition of materiality applicable to action involving rule 13e-3); Resources Exploration v. Yankee Oil Gas, Inc., 566 F. Supp. 54, 62 (N.D. Ohio 1983) (involving tender offers under § 14(e)); cf. Staffin v. Greenberg, 672 F.2d 1196, 1205 (3d Cir. 1982) (TSC Industries should be used in both rule 10b-5 and § 14(e) cases); Cook v. Avien, Inc., 573 F.2d 685, 693 (1st Cir. 1978) (TSC Industries standard applicable to projections in action under § 12(2)).

72. The Supreme Court did acknowledge that some information may be so unreliable that disclosure may cause more harm than good. TSC Indus., Inc., 426 U.S. at 448.

73. 478 F.2d 1281 (2d Cir. 1973).

disclosure of asset appraisals in a merger transaction.⁷⁴ After gaining control of General Outdoor Advertising (GOA), the defendants sold twenty-three of its thirty-six advertising plants. Gamble-Skogmo then proposed a merger with its subsidiary, offering one share of Gamble-Skogmo preferred stock for each share of GAO. Plaintiffs sued, alleging a violation of rule 14a-9(a) for, inter alia, Gamble-Skogmo's failure to disclose in the proxy statement its appraisals of the remaining plants. Even though the appraisals were developed based on information concerning the actual market value of the recently sold plants, the court relied on the SEC's long-standing policy of discouraging such disclosure in SEC filings in reversing the trial court.⁷⁵ The court also rejected the arguments of the SEC in its amicus curiae brief advocating a case-by-case approach rather than a blanket view that asset appraisals were not material.⁷⁶ Although Gerstle involved asset appraisals, the Second Circuit has also applied this view to projections.⁷⁷

More recently, in Pavlidis v. New England Patriots Football Club, Inc. 78 the First Circuit applied an absolute standard to nondisclosure of projections. In 1960, the New England Patriots Football Club (Patriots) was incorporated with 100,000 privately held voting shares. After purchasing all the voting shares, William Sullivan created a separate shell corporation into which the Patriots could be merged. 79 In November 1976, a proxy statement offering shareholders cash for their shares was issued. 80 After the merger was approved, plaintiffs brought suit under section 14(a) and rule 14a-9, alleging the proxy statement omitted material information including a favorable projection of future income. 81 Even though the district court found the proxy statement "an artful attempt to minimize the future profitability of the Patriots," 22 the court of appeals upheld the lower court's ruling that there was no obligation to disclose the financial projections. 83

^{74.} Id. at 1294.

^{75.} Id. The court stated, "[i]t has long been an article of faith among lawyers specializing in the securities field that appraisals of assets could not be included in a proxy statement." Id. at 1293.

^{76.} Id. The court believed such an approach violated both the Commission staff's own practices and legal precedent. Id.

^{77.} See Mendell v. Greenberg, 612 F. Supp. 1543, 1550 (S.D.N.Y. 1983); Flum Partners v. Child World, Inc., 557 F. Supp. 492, 499 (S.D.N.Y. 1983); Lewis v. Oppenheimer & Co., 481 F. Supp. 1199, 1208 (S.D.N.Y. 1979).

^{78. 737} F.2d 1227 (1st Cir. 1984).

^{79.} The creation of a separate corporation wholly owned by one or several persons with no business purpose other than to be a merger partner for the target corporation is a common method for turning a public corporation into a private corporation. See Berkowitz v. PowerMate Corp., 135 N.J. Super. 36, 342 A.2d 566 (1975); Rothschild, Going Private, Singer and Rule 13e-3, 7 SEC. REG. L.J. 195 (1979). Certain "going private" transactions by way of merger, tender offer, or purchase of stock are now federally regulated. See rule 13e-3 (17 C.F.R. 240.13e-3 (1988)) and Schedule 13E-3 (17 C.F.R. § 240.130-100 (1988)).

^{80.} Under Massachusetts state law, a majority vote of each class of shareholders including those owning nonvoting shares had to approve a merger. 737 F.2d at 1230.

^{81.} Id. at 1232. Two days after the merger vote, defendants prepared a prospective income statement revealing expectations of greater future earnings than otherwise indicated in the information in the proxy statement. Id. at 1232-33.

^{82.} Id. at 1230 (quoting district court).

^{83.} Id. at 1233.

In its opinion the court restated the traditional absolute position that "the federal securities laws do not require corporate management to include speculations about future profitability in proxy statements..." In an ambiguous qualification the court said that specific information in a financial projection may be subject to required disclosure as material, but "failure to disclose the projection itself does not establish a [section] 14(a) violation." Although the court did not elaborate, this qualification may have been an attempt to distinguish any "objective" facts on which a projection is based from the perceived "subjective" projection itself. This approach only highlights the incongruity in the courts' treatment of soft information.

The traditional absolute approach had its origins in the strict position of the SEC that projections were inherently misleading.⁸⁷ Now that the SEC has substantially modified its policy by encouraging disclosure, this approach no longer has any supporting foundation.⁸⁸ Moreover, this view violates the intent of the securities laws in providing full disclosure of material information.⁸⁹ Clearly, the traditional absolute approach is an anachronism with no place in the modern investment environment.

b. Reasonable Certainty Standard

Some courts have applied a "reasonable certainty" test to disclosure of

^{84.} *Id.*; see Freeman v. Decio, 584 F.2d 186, 199-200 (7th Cir. 1978) (financial projections not material in insider trading action); Marsh v. Armada Corp., 533 F.2d 978, 987 (6th Cir. 1976) (disclosure of projections not required to be disclosed under rule 10b-5 in merger proxy statement), cert. denied, 430 U.S. 954 (1977). The court also stated that the SEC policy was to discourage disclosure of projections at the time the proxy statement was issued. Pavlidis, 737 F.2d at 1233. This statement was clearly incorrect. As early as 1973, the SEC had announced its decision to abandon its earlier position in favor of permissive disclosure of projections. See supra note 23 and accompanying text. While it had withdrawn the proposed rules that had required disclosure under certain circumstances, the SEC had published proposed Guides 62 and 5 and stated a position of not discouraging disclosure of projections in April 1976, approximately six months prior to issuance of the defendants' proxy statement. See supra notes 33-34 and accompanying text.

^{85. 737} F.2d at 1233.

^{86.} See, e.g., Strauss v. Holiday Inns, Inc., [1978 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 96,383 at 93,339 (S.D.N.Y. 1978) (defendant need not disclose earnings projection in prospectus, but must disclose underlying primary data which could indicate prior earnings trend would not continue).

^{87.} See, e.g., Christopher v. Time, Inc., [1974-1975 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 95,056 at 97,690 (S.D.N.Y 1975) (court felt constrained to adhere to rule forbidding disclosure of appraisals despite equitable and other reasons favoring disclosure).

^{88.} But see Mendell v. Greenberg, 612 F. Supp. 1543, 1550 n.8 (S.D.N.Y. 1985) (applying traditional approach to financial projections despite change in SEC policy because new disclosure policy is only voluntary and not mandatory).

^{89.} Schreiber v. Burlington N., Inc., 472 U.S. 1, 11 (1984) (Williams Act intended to provide full disclosure); Santa Fe Indus., Inc. v. Green, 430 U.S. 462, 478 (1977) (the "fundamental purpose" of the 1934 Securities Act was to implement a "philosophy of full disclosure"); SEC v. Capital Gains Research Bureau, Inc., 375 U.S. 180, 186 (1963) (the purpose of the securities acts "was to substitute a philosophy of full disclosure for the philosophy of caveat emptor . . ."); Feit v. Leasco Data Processing Equip. Corp., 332 F. Supp. 544, 563 (E.D.N.Y. 1971) ("the keystone of the Securities Act of 1933, and of the entire legislative scheme of the securities laws is disclosure"). Concerning Congress's intent to promote full disclosure in tender offers through the Williams Act, see supra note 16.

projections. For instance, in *Panter v. Marshall Field & Co.* 90 Marshall Field's management sent a letter to the company's shareholders during a fierce takeover battle stating that interim nine-month consolidated net income increased 13%. 91 After the suitor had withdrawn the proposed tender offer, plaintiff shareholders sued target management under section 10(b) and rule 10b-592 for failing to disclose earnings projections contained in a five-year plan, which had indicated an anticipated decline of 7% in consolidated net income. The court held that disclosure of the earnings projections was not required because they were not "reasonably certain." 93

In determining whether these projections were reasonably certain, the court emphasized the intended purpose of the projections and the expected limited audience. The five-year plan generally was used internally for planning and budgeting. The evidence indicated that the projections were continually updated, and varied from the estimates of Marshall Field's investment banking advisors. Even though the projection differed significantly from the published statements, the court concluded that no disclosure duty arose because the projections were merely tentative estimates prepared for management with no expectation that they would be made public. The court made no analysis of the potential relevance of this information. Additionally, the court's failure to explain why information suitable for review by directors in assessing a takeover bid is not also suitable for shareholders faced with that same issue implies a belief that the disclosure laws should be applied with the view that shareholders are very unsophisticated.

^{90. 646} F.2d 271 (7th Cir.), cert. denied, 454 U.S. 1092 (1981).

^{91.} Id. at 292. The letter also indicated that income before deducting taxes and losses on certain ventures was up 24.4%, and that sales had increased 9.4%. The letter mentioned several actions management had taken to improve earnings such as modernization of stores, analysis of new store locations, and disposition of unprofitable ventures.

^{92.} The court rejected liability based on § 14(e) because, the bidder had withdrawn the offer before it had become effective. 647 F.2d at 283. This questionable conclusion is characteristic of the conservative tenor of the entire opinion, including its discussion of projections and the court's attempt to limit the protection afforded shareholders in a takeover battle. See generally Note, Panter v. Marshall Field & Company: A Tender Offer Field's Could Refuse, 58 CHI.[-]KENT L. REV. 1151 (1982) (arguing court improperly applied business judgment rule to shield directors); Comment, Panter v. Marshall Field & Co.: The Good Faith Standard for Corporate Directors, 16 U. RICH. L. REV. 405 (1982) (criticizing the decision).

^{93. 646} F.2d at 293. The court actually mentioned two standards for disclosure of projections. First, it said that as an initial matter, "there is no duty upon management or directors to disclose financial projections." *Id.* at 292. Then the court noted that once partial disclosure occurs, there is a duty to make full disclosure of all material facts necessary to avoid making the statements not misleading. *Id.* It was in this latter situation, often referred to as half-truths, that the court implied the theoretically lower reasonableness standard would apply. Given the financial disclosures specifically required in takeover situations, however, many circumstances will involve the half-truth aspect of the anti-fraud laws. *See supra* notes 61, 67.

^{94.} Panter, 646 F.2d at 292.

^{95.} Id. The court said the projections had been "hastily" updated on the same day the Marshall Field directors met to consider the bidder's first takeover proposal. Id. It also mentioned the substantial variance between the actual results for net income, a 25% decline, and the forecasted performance, a 7% decline, as an indication of the tentative nature of the projections. Id. This type of post hoc reasoning lends little support to the conclusion that the projections were tentative when originally prepared.

^{96.} Id. at 293; see also Kademian v. Ladish Co., 792 F.2d 614, 625 (7th Cir. 1986) (no duty to disclose internal valuations under federal securities laws).

Similarly, in *Vaughn v. Teledyne, Inc.*⁹⁷ the court declined to impose a duty to disclose financial projections unless they were reasonably certain.⁹⁸ In this case, Teledyne made a series of six major issuer tender offers between 1972 and 1976, which substantially reduced the number of outstanding shares and increased the percentage of shares owned by the defendants, Teledyne management.⁹⁹ Also, Teledyne's earnings increased dramatically in 1975 and 1976. The plaintiffs, who had sold their shares in the tender offers, sued, alleging the defendants perpetrated a scheme to enhance their control and earnings income and failed to disclose favorable earnings projections as part of the plan.

The court noted first that the SEC does not require companies to disclose financial projections. ¹⁰⁰ Defendants admitted that separate operating units of the company prepared semi-annual business plans that included sales and earnings forecasts. ¹⁰¹ As in *Panter*, the court discounted the value of these forecasts because of their expected limited use. "It is just good general business to make such projections for internal corporate use. There is no evidence, however, that the estimates were made with such reasonable certainty even to *allow* them to be disclosed to the public." ¹⁰² Furthermore, the court noted the absence of evidence suggesting the need for disclosure to make prior statements not misleading. ¹⁰³

The rather abbreviated treatment of this issue demonstrates the court's deference to corporate management's decision not to disclose its earnings expectations. Especially in situations involving issuer tender offers, however, this deference is suspect. The mere fact that the projections were part of the internal budgets does not prove they were unreliable or would be especially inaccurate. Even more important, the exclusive concentration on the intended internal use of the projection totally ignores the potential relevance of this information, thereby shifting the focus from the needs of the shareholders to the protection of management. This approach puts total control of the disclosure issue in the hand of company officers. ¹⁰⁴ Both *Vaughn* and *Panter* identified few elements of the "reasonable certainty" standard.

A recent Fourth Circuit case, Walker v. Action Industries, Inc., 105 how-

^{97. 628} F.2d 1214 (9th Cir. 1980).

^{98.} Id. at 1221.

^{99.} Id. at 1217. The number of outstanding shares decreased from 38 million to 11 million, and the defendants' stock ownership increased from 4% to 10.5%.

^{100.} Id. at 1221.

^{101.} Id.

^{102.} Id. (emphasis in original).

^{103.} Id.

^{104.} The court's opinion also represents a type of circular reasoning in that internal projections are not required to be disclosed publicly simply because they are not released publicly. Internal budgets may indeed often be of questionable merit for purposes of public use when they are prepared primarily as a motivational tool. See Schachner, Published Forecasts and Internal Budgets, CPA J., Jan. 1975, at 19, 20 (published forecast cannot be simply abridged version of a budget). Nevertheless, merely labeling a projection an "internal budget" without assessing its suitability for public use and its information content is an unsatisfactory way of handling the issue.

^{105. 802} F.2d 703 (4th Cir. 1986).

ever, more fully specifies the factors associated with reasonably certain projections. 106 In July 1982, Action made a tender offer to purchase 15% of its own shares at \$4.00 per share. In the tender offer statement, Action reported unaudited interim financial statements showing a \$4 million net loss, compared with a \$1 million net gain for the same period the previous year. Action stated an expectation of increased sales but lower annual earnings from the prior year. In August 1982, Action issued a press release stating its audited financial statements showed that fiscal 1982 sales were up and earnings were down. 107 During this period, Action had prepared internal sales forecasts indicating substantial increases in sales in the first quarter of fiscal 1983; this information, however, was never publicly disclosed. Walker sold his shares in September 1982 at \$5.25. In October 1982, Action issued another press release revealing a 75% sales increase and net earnings of \$1.5 million for the August-October 1982 period, causing the stock price to rise to \$15.75 shortly thereafter. Walker sued, arguing Action had a duty to disclose its financial projections in the tender offer statement and August press release.

The court gave several reasons for rejecting Walker's claim. First, it noted the absence of an express federal requirement to disclose projections. ¹⁰⁹ Second, it felt the SEC policy of permissive disclosure as expressed in rule 175 should not be disturbed by imposition of mandatory disclosure by the courts. ¹¹⁰ Then the court identified three factors militating against disclosure in this specific instance: uncertainty, potentiality to mislead, and impracticality. Action revised its quarterly sales forecasts monthly. The erratic pattern of the forecasts, which showed expected increases ranging from 30% to 129% over a four-month period, evidenced their uncertain na-

^{106.} The court stated that it was not adopting any specific standard enunciated by the other circuits. *Id.* at 709 n.11. Nevertheless, it rejected the traditional approach of no duty to disclose financial projections under any circumstances and condoned release of projections that were "reasonably certain." *Id.* at 710.

^{107.} This result was due to proportionally higher costs associated with the additional sales. 108. *Id.* at 705. Action Industries' fiscal year 1983 actually covered the period from July 1982 through June 1983.

^{109.} Reviewing the requirements of rule 13e-4 (17 C.F.R. § 240.13e-4 (1988)) and schedule 13E-4 (17 C.F.R. § 240.13e-101 (1988)), the court noted that financial statements for the two most recent fiscal years and most recent quarter were to be reported, but no similar specific provision required disclosure of financial projections. *Walker*, 802 F.2d at 709. Of course, this finding goes to an initial duty to disclose and not full disclosure relative to statements already made as was alleged in this case.

^{110.} This court viewed the SEC policy as a continuing evolutionary process that had moved from the earlier total ban to a voluntary disclosure position.

We perceive the current SEC regulatory environment to be an experimental stage regarding financial projection disclosures. Respecting these evolutionary processes, we believe that a further transition, from permissive disclosure to required disclosure, should be occasioned by congressional or SEC adoption of more stringent disclosure requirements for financial projections, rather than by the courts.

Id. at 709. While the Walker court was one of the few courts stating it, this reluctance to go beyond the voluntary policy of the SEC seems to pervade many court decisions in this area. Given the SEC expressions of "encouraging" disclosure and the required disclosure of other types of soft information, this extreme reluctance is questionable.

ture.¹¹¹ The forecasts also tended to be highly inaccurate because of the volatile actual sales pattern of the company; therefore, disclosure had a high potential for misleading investors. Finally, disclosure would have been impractical because of the need to update the projections frequently.¹¹² Both the uncertainty of the disclosure and its potential to mislead concern the reliability of the information. Although the court refused to accept an absolute absence of duty to disclose, its deference to the SEC voluntary disclosure policy leaves the impression that a fairly high standard of "reasonable certainty" would be required.¹¹³

c. Balancing Approach

The Third Circuit has taken a unique position on mandatory disclosure of soft information. In Flynn v. Bass Brothers Enterprises, Inc., 114 the court adopted a balancing test that incorporates elements of both relevance and reliability. "Courts should ascertain the duty to disclose asset valuations and other soft information on a case-by-case basis, by weighing the potential aid such information will give a shareholder against the potential harm, such as undue reliance, if the information is released with a proper cautionary note." This approach utilizes both the relevance criteria of TSC Industries and the reliability aspects of the typical judicial analysis of projections. 116

Flynn involved a tender offer for National Alfalfa Dehydrating and Milling Company by Bass Brothers Enterprises, Inc. in March 1976. The defendants acquired two reports prepared by Prochemco, Inc. containing asset appraisals based on alternative hypothetical valuations that indicated per

^{111.} Id.

^{112.} Id. at 710.

^{113.} Due to the extreme facts in this case, the level of certainty, potential to mislead, and impracticality generally necessary to evoke a disclosure duty is unclear. The court indicated that disclosure of information on actual orders and sales also suffered from the problems of a potential to misleading investors and impracticality that might have prevented imposing a disclosure duty even though this was certain or "hard" information. *Id*.

^{114. 744} F.2d 978 (3d Cir. 1984).

^{115.} Id. at 988.

^{116.} See, e.g., Hard Look, supra note 69, at 534. This balancing approach was not altogether unique. Before TSC Industries, the Second Circuit in the Texas Gulf Sulphur case mentioned a balancing approach that should be applied for determining the materiality of prospective events.

[[]W]hether facts are material within Rule 10b-5 when the facts relate to a particular event and are undisclosed by those persons who are knowledgeable thereof will depend at any given time upon a balancing of both the indicated probability that the event will occur and the anticipated magnitude of the event in light of the totality of the company activity.

SEC v. Texas Gulf Sulphur Co., 401 F.2d 833, 849 (2d Cir. 1968), cert. denied, 394 U.S. 976 (1969). The decision in TSC Industries is not inconsistent with the Texas Gulf Sulphur balancing test. See Dirks v. SEC, 681 F.2d 824, 842-43 (D.C. Cir. 1982), rev'd on other grounds, 463 U.S. 646 (1983). Other cases have applied the Texas Gulf Sulphur approach. See, e.g., State Teachers Retirement v. Fluor Corp., 654 F.2d 843, 854 (2d Cir. 1981); Elkind v. Liggett & Myers, Inc., 635 F.2d 156, 166-67 (2d Cir. 1980); SEC v. Mize, 615 F.2d 1046, 1051 (5th Cir. 1980); Harkavy v. Apparel Indus., Inc., 571 F.2d 737, 741 (2d Cir. 1978); SEC v. Bausch & Lomb, Inc., 565 F.2d 8, 17-18 (2d Cir. 1977).

share values up to 250% above the tender offer price.¹¹⁷ Prochemco had prepared the reports in anticipation of its own tender offer, but it was unable to obtain sufficient financing. In addition, a vice president of National Alfalfa had prepared a stock valuation study also indicating a per share value double the tender offer price.¹¹⁸ Plaintiffs contended that Bass Brothers' failure to disclose these asset valuations represented a material omission under sections 10(b) and 14(e).

The court reviewed the historical treatment of soft information by the courts and the focus on reliability.¹¹⁹ Unlike several other courts,¹²⁰ this court viewed the movement by the SEC from a policy of discouraging disclosure to one of permissive disclosure of projections as a significant recognition of the importance of this information. Noting that the time lag between issuance of a tender offer or proxy statement and a final court decision had retarded the evolution of the law in this area, the court declared that its new balancing approach would be applied prospectively.¹²¹

One set of factors to be considered includes those concerning reliability, such as the facts upon which the soft information was based, the qualifications of those who prepared it, its original purpose, and the degree of subjectivity or bias reflected in its preparation. Other factors, reflecting the importance of the information, include the relevance to the shareholders' impending decision, the uniqueness of the information, and the availability of other more reliable sources of information. Unfortunately, the court gave no guidance on the weights to be accorded these factors. Relevance should be the initial consideration, with disclosure prevented only if the information is clearly unreliable or the potential to mislead could not be mitigated through fuller disclosure. Applying the typical approach to the

^{117.} Flynn, 774 F.2d at 982. The two reports contained various per share valuations such as \$6.40 realizable through liquidation under stress, \$12.40 realizable through orderly liquidation, and \$16.40 as a going concern. Id. The tender offer price was \$6.45.

^{118.} Id. at 989.

^{119.} Several indicia of reliability as to asset appraisals utilized by the courts include the following: (1) the qualifications of those who prepared the appraisal; (2) the certainty of the underlying data; (3) the purpose for which it was prepared; and (4) potential reliance on the appraisal by shareholders. *Id.* at 986. *See, e.g.*, South Coast Servs. Corp. v. Santa Ana Valley Irrigation Co., 669 F.2d 1265, 1272 (9th Cir. 1982); James v. Gerber Prods. Co., 587 F.2d 324, 327 (6th Cir. 1978); Gerstle v. Gamble-Skogmo, Inc., 478 F.2d 1281, 1292-94 (2d Cir. 1973); Alaska Interstate Co. v. McMillian, 402 F. Supp. 532, 571 (D. Del. 1975).

^{120.} See, e.g., Walker v. Action Indus., Inc., 802 F.2d 703, 709 (4th Cir. 1986); South Coast Servs. Corp., 669 F.2d at 1271; Mendell v. Greenberg, 612 F. Supp. 1543, 1550 n.8 (S.D.N.Y. 1985).

^{121. 744} F.2d at 987-88.

^{122.} Id. at 988.

^{123.} Id.

^{124.} See, e.g., Note, Disclosure of Soft Information in Tender Offers After Flynn v. Bass Brothers Enterprises, Inc., 42 WASH. & LEE L. REV. 915, 927 (1985) [hereinafter Tender Offers After Flynn]; (discussing the Flynn factors); Note, Target Corporation Disclosure of Soft Information in Tender Offer Contests, 54 FORDHAM L. REV. 825, 831 (1986) [hereinafter Target Corporation Disclosure].

^{125.} Current SEC policy reflects the view that greater disclosure will alleviate potential to mislead. See regulation S-K, item 10(b) (17 C.F.R. § 229.10(b) (1988)) (allowing outside review provided adequate disclosure of relationships between reviewer and registrant, and encouraging disclosure of assumptions used in forecast, prior forecasting accuracy, and

facts because the tender offer occurred in 1976, the Flynn court held the plaintiffs had not demonstrated that either the Prochemco reports or the target manager's valuation study had sufficient indicia of reliability to require disclosure. The court, however, added that under the new standard "the case might well have been for the jury."126

Substantial Certainty Standard

The Flynn decision represented a logical departure from the prior judicial approach to disclosure of soft information. The opinion recognized the factors that led the SEC to change its policy and ameliorate the extremely paternalistic prior approach. Nevertheless, in a recent case, Starkman v. Marathon Oil Co., 127 the Sixth Circuit declined to follow the Flynn court. instead applying yet a fourth standard, the "substantial certainty" standard, which also analyzes disclosure solely in terms of reliability. Starkman concerned the takeover battle between Mobil Oil Company and United States Steel Corporation (USS) for control of Marathon Oil Company. Aware of Marathon's status as a prime takeover target, the company's president instructed John Strong, a company vice president, to prepare a valuation that included discounted cash flow estimates of proven, probable, and potential oil reserves. 128 The Strong Report, based partly on nonpublic information, valued Marathon's net assets at between \$276 and \$323 per share, with the discounted value of the oil reserves constituting a large part of the total value. 129 A second report was prepared by First Boston, an investment banking firm hired by Marathon to assist in handling any takeover bids. This report, which did not take into consideration the more speculative potential oil reserves, estimated Marathon's value at between \$177 and \$225 per share. 130 Marathon's market price just before the \$85 Mobil tender offer was \$63.75 per share. 131

Marathon's board of directors fought the Mobil offer, telling shareholders

minimum items); see also Tender Offers After Flynn, supra note 124, at 923, 934 (disclosure should be required if information has some relevance and is neither clearly reliable nor unreliable); Hard Look, supra note 69, at 534-35 (reasonable shareholders' perception should be analyzed before weighing harm and benefits of disclosure); cf. Fiflis, supra note 18, at 133-34 (advocating balancing approach and listing several factors including degree of hardness of information, potential harm to shareholders through disclosure, and facility of disclosing and qualifying information).

^{126. 744} F.2d at 990-91, 991 n.22. 127. 772 F.2d 231 (6th Cir. 1985), cert. denied, 106 S. Ct. 1195, 89 L. Ed. 2d 310 (1986); see also Radol v. Thomas, 772 F.2d 244 (6th Cir. 1985), cert. denied, 477 U.S. 903 (1986) (companion case). In an earlier related case, Mobil Corp. v. Marathon Oil Co., 669 F.2d 366 (6th Cir. 1981), the Sixth Circuit had held that a lock-up option given United States Steel to purchase a valuable oil field and stock from Marathon at very favorable prices constituted "manipulative acts or practices" in violation of § 14(e) of the Williams Act. This position was subsequently rejected by the Supreme Court. See Schreiber v. Burlington N., Inc., 472 U.S. 1 (1985).

^{128. 772} F.2d at 234.

^{129.} Id.

^{130.} Id. Three other available asset appraisals by two securities analysts and an oil industry appraisal company based only on publicly available information about the company estimated per share values at between \$199 and \$210. Id.

^{131.} *Id*.

it was grossly inadequate and soliciting other bidders to serve as a "white knight." During negotiations, Marathon provided USS with the Strong Report, First Boston Report, and separate five-year earnings and cash flow forecasts. After reaching agreement with Marathon's board, USS made a two-step tender offer for an initial purchase of 51% of Marathon's shares at \$125 per share and a second stage merger with shareholders receiving a subordinated debenture with a face value of \$100.133 The USS offer was successful, and USS obtained control of Marathon. The plaintiff sued under section 10(b), alleging that Marathon's failure to disclose publicly the Strong Report, the First Boston Report, and the earnings and cash flow forecasts constituted an omission of material facts that rendered the other statements by the company misleading. 134

Adhering to the standard enunciated in prior Sixth Circuit cases, the Starkman court stated that soft information such as asset appraisals and projections generally need not be disclosed unless they are "virtually as certain as hard facts."135 Once the tone reflected in this general approach was established, a similar very limited disclosure duty followed with respect to corporate acquisition contests. The court indicated that a tender offer target must disclose projections and asset appraisals based upon predictions of future conditions "only if the predictions underlying the appraisal or projection are substantially certain to hold."136 As stated, this test looks to all the underlying assumptions on which a forecast is based and requires a very high level of certainty. The concentration on the assumptions rather than the ultimate forecast itself is interesting but troublesome because of the potentially large number of assumptions associated with any forecast. As a practical matter, this standard virtually eliminates the finding of a duty to disclose by creating an insurmountable barrier. By their very nature, assumptions as to prospective events are uncertain.¹³⁷ Establishing that each of the potentially numerous assumptions will be substantially certain to hold is virtually impossible. Also, the court failed to provide useful guidance on

^{132.} Id. at 235.

^{133.} Id

^{134.} The company statements included a press release and letter to shareholders challenging the Mobil offer as grossly inadequate, not reflective of current asset values, and depriving the long-term investor of the opportunity to participate in the potential future values of the company. *Id.* at 235-36. Similar statements appeared in the schedule 14D-9 filed with the SEC. *Id.* The plaintiff also contended that Marathon should have informed shareholders of the negotiations with United States Steel. *Id.* at 236.

^{135.} Id. at 241.

^{136.} *Id.* (emphasis added); see also James v. Gerber Prod. Co., 587 F.2d 324, 327 (6th Cir. 1978) (interim earnings reports rise to level of materiality only when they can be calculated with substantial certainty).

^{137.} See, e.g., Brown, supra note 47, at 798 n.257.

Requiring substantial certainty for appraisals and projections as a precondition to disclosure represents somewhat of an oxymoron. Future-looking information, such as a projection, is by definition speculative and uncertain. Indeed, courts generally do not even consider a statement about future revenues or profits a projection if the revenue or profits are substantially certain to occur.

the meaning of "substantial certainty," 138 Moreover, this standard focuses almost exclusively on accuracy, ignoring other criteria such as relevancy and the procedures used by the preparers.

Not surprisingly, the court found no duty to disclose the Strong and First Boston Reports or the Marathon five-year earnings and cash flow projections. According to the court, the reports were based on "highly speculative assumptions" concerning potential oil and gas reserves, recovery rates, and future oil prices over a period of several decades. 139 As for the earnings and cash flow projections, the court provided no analysis; it merely stated they did not rise to the level of substantial certainty. 140 Furthermore, the court held disclosure of these projections was not necessary to make Marathon's statements concerning the inadequacy of the Mobil offer not misleading because they indicated Marathon's shares were worth more than the \$85 bid price and disclosure of the \$200 per share estimates could mislead shareholders to believe the higher price could actually be obtained.¹⁴¹

The Starkman court criticized the Flynn balancing approach for creating a "judicial cost-benefit analysis [that] is uncertain and unpredictable" and for neglecting the market's voluntary provision of information to shareholders through competing tender offers. 142 The court stated:

Our approach, which focuses on the certainty of the data underlying the appraisal or projection, ensures that the target company's shareholders will receive all essentially factual information, while preserving the target's discretion to disclose more certain information without the threat of liability, provided appropriate qualifications and explanations are made. 143

Despite the court's pronouncement that its "substantial certainty" standard represents a happy medium, its position falls short on both ends. First, the court misplaces reliance on the market to provide sufficient information on the true value of a company's shares.¹⁴⁴ Furthermore, most corporate

^{138.} A forecaster can usually determine only a range of probability figures based on prior projection variances that a projection will be accurate. The court used vague terms such as 'speculative" and "substantial" that give only a very imprecise indication of the degree of expected accuracy that would satisfy the standard.

^{139. 772} F.2d at 242.

^{140.} Id. The court supported this conclusion by merely citing two prior Sixth Circuit cases, Biechele v. Cedar Point, Inc., 747 F.2d 209 (6th Cir. 1984), and James v. Gerber Prods. Corp., 587 F.2d 324 (6th Cir. 1978). The lack of analysis is unfortunate, but the court probably believed these projections were too speculative partly because they were formulated primarily for use in a selling document. See, e.g., Biechele, 747 F.2d at 216.

^{141.} It is difficult to reconcile these two reasons for nondisclosure. If the \$200 per share estimate was so speculative, it should not provide support for the Marathon board's statement that the \$85 bid was "grossly inadequate." If the board did rely on the estimate for fighting the Mobil offer and for its statements, keeping this information from the shareholders who are the owners of the corporation and for whom the board merely acts as a representative seems counter-productive to their interests.

^{142. 772} F.2d at 242. 143. *Id*.

^{144.} See, e.g., Brudney & Chirelstein, Fair Shares in Corporate Mergers and Takeovers, 88 HARV. L. REV. 297 (1974); Lowenstein, Pruning Deadwood in Hostile Takeovers: A Proposal for Legislation, 83 COLUM. L. REV. 249, 257-58 (1983) (stock market prices not accurate reflection of a company's intrinsic value).

control acquisitions are not contested, so no competing offers are generated. Second, Starkman ignores the importance of soft information and utilizes a stringent standard abandoned by the SEC and arguably tougher than the "reasonable certainty" standard. Third, the court places too much authority in the target management's discretion on whether to disclose information. As this case illustrates, target management often has insufficient incentives to disclose forecasts voluntarily even with a hostile takeover attempt, and few companies have ever done so. The court's "substantially certain" test is vague and provides little substantive guidance. The Starkman approach represents a step backward toward the outmoded traditional, absolute view.

e. Probability/Magnitude Standard

A recent Supreme Court case supports the application of a balancing approach to determine the materiality of earnings projections, rather than a universal certainty standard. In *Basic, Inc. v. Levinson* ¹⁴⁸ the Court rejected the use of a standard that required an "agreement-in-principle" on the price and structure of a merger before preliminary merger negotiations would be considered material under the *TSC Industries* standard. Several of the policy rationales advanced for the merger negotiations agreement-in-principal test that the Court deemed insufficient are similar to the primary justifications for the certainty standards for projections. Although the Court declined to address other kinds of speculative information such as earnings

^{145.} See, e.g., Tender Offer Update: 1987, supra note 8, at 50. Instances where target management resisted the initial bid constituted approximately 24-38% of all tender offers from 1982-1986. Id. In 1987, approximately 29% of the tender offers were contested by management. See Tender Offer Update: 1988, supra note 9, at 25. Not even in all of these instances did a second bid materialize. Also, the number of contested takeovers represented only 7-14% of all mergers and acquisitions from 1982-1987. Compare Tender Offer Update: 1987, supra note 8, with 1987 Profile, supra note 6, at 45. See also Exchange Act Release No. 21,079, supra note 10, at 86,926 (26 out of 148 tender offers between 1981 and 1983 involved multiple bids); Dodd & Ruback, Tender Offers and Stockholder Returns: An Empirical Analysis, 5 J. Fin. Econ. 351 (1977).

^{146.} The forecasting process involves several elements concerning accuracy at various points in time. The Starkman standard focuses on two of these elements. The first concerns the confidence level of the forecaster that the projection will be accurate. The second involves the variance between the projections of the assumptions (or the ultimate forecast itself) and the actual results. The Starkman "substantially certain to hold" approach imposes high standards for both of these elements. It requires substantial certainty as to the ex ante forecaster confidence level and implies an expected actual variance error rate close to 0%. In other words, the forecaster must have some imprecise, high (substantial) level of confidence that his projection or assumptions will be absolutely correct. Although the cases are ambiguous, the reasonable certainty standard arguably imposes a lower level of forecaster confidence and a lower level of actual accuracy than the substantial certainty standard. For example, a forecast made with a confidence level of 80% to be within 10% of the actual results may be reasonably certain but probably would not satisfy the Starkman standard. It is particulary this apparent requirement of close to 100% accuracy that makes this standard so unrealistic.

^{147.} See, e.g., Merrifield, Projections in SEC Filings: Debate Rages Over Worth, in SEC '74, at 149, 154 (1974) (since institutional investors have access to forecasts, all investors should receive them); Reiling & Burton, Financial Statements: Signposts As Well As Milestones, HARV. Bus. Rev., Nov.-Dec. 1972, at 45, 53 (decision whether to disclose forecasts should not be left to corporate management).

^{148. 108} S. Ct. 978, 99 L. Ed. 2d 194 (1988).

projections, ¹⁴⁹ the reasoning of the decision is clearly applicable to management forecasts.

The major reason given for the certainty standards is the perceived need to protect shareholders from being misled. Many courts have feared that investors would attach too much importance to company forecasts. In *Levinson* the Supreme Court resoundly repudiated this type of juristic protective approach, and emphasized the congressional purpose of promoting full disclosure through the federal securities laws. "Disclosure, and not paternalistic withholding of accurate information, is the policy chosen and expressed by Congress." Investors should not be considered so unsophisticated that they are unable to appreciate the uncertain nature of contingent information. 151

A second rationale for the certainty test is the protection of corporate managements. This protection is accomplished in two ways. First, the certainty standards require fairly high thresholds or levels of certainty before the information is required to be disclosed. Second, the creation of a broadbased rule purportedly facilitates recognition by corporations of what information should be considered material. 152 The Supreme Court noted in Levinson, however, that while a bright-line rule is easier to use than assessing all the circumstances of each situation, "ease of application alone is not an excuse for ignoring the purposes of the securities acts and Congress' policy decisions."153 The Court cautioned against establishing materiality based on strict rules that are necessarily over- or under-inclusive, and are directed at aiding corporate managers. 154 The approach established in TSC Industries is essentially fact specific and investor oriented, rather than issuer oriented. The benefits from establishing a restrictive materiality rule are outweighed by the costs of excluding some potentially relevant information and conflict with the policy of full disclosure.

In Levinson the Court sanctioned a balancing test for determining the materiality of contingent or speculative information or events. It adopted the probability/magnitude standard enunciated earlier by the Second Circuit in SEC v. Texas Gulf Sulphur, 155 which said that materiality depended on "a balancing of both the indicated probability that the event will occur and the anticipated magnitude of the event in light of the totality of the company activity." 156 With respect to earnings forecasts, application of the

^{149.} Id. at 984 n.9, 99 L. Ed. 2d at 209.

^{150.} Id. at 984, 99 L. Ed. 2d at 210.

^{151. &}quot;The role of the materiality requirement is not to 'attribute to investors a child-like simplicity, an inability to grasp the probabilistic significance of negotiations,' . . . but to filter out essentially useless information." Id. at 985, 99 L. Ed. 2d 210 (emphasis added) (quoting Flamm v. Eberstadt, 814 F.2d 1169, 1175 (7th Cir. 1987)).

^{152.} As discussed earlier, the reasonable and substantial certainty standards are far from clear, and they tend to create rather than alleviate confusion. See supra notes 85, 104, 146 and accompanying text.

^{153. 108} S. Ct. at 985, 99 L. Ed. 2d at 211.

^{154.} *See id*.

^{155. 401} F.2d 833 (2d Cir. 1968) (en banc), cert. denied, 394 U.S. 976 (1969).

^{156. 401} F.2d at 849; see also supra note 116. The Texas Gulf Sulphur case involved, in part, scientific test results for an exploratory drill hole that indicated the discovery of a poten-

probability/magnitude standard would encompass factors related to both the reliability and relevance of the information such as those identified by the court in *Flynn*. The emphasis of the Court in *Levinson* on full disclosure, however, indicates that the materiality inquiry must focus on the reasonable investor's viewpoint, and the "total mix" of available information. Furthermore, in assessing reliability, a reasonable investor should not be deemed unsophisticated or unable to understand the inherently speculative nature of projections.

The most important aspect of the Court's opinion concerning materiality in *Levinson* is the clear repudiation of the outdated paternalistic approach towards soft information. Nevertheless, the decision did not solve all the problems associated with the existing policy on disclosure of earnings projections. The *TSC Industries* materiality test requires an analysis of all the facts on a case-by-case basis, and does not appear to permit a more specific broadbased rule. Clarity and simplicity are laudable characteristics for legal rules. The current certainty standards, however, contravene the purposes of the securities laws by facilitating the concealment of projections, and preventing shareholders from making decisions based on a full range of information. The SEC should review the evidence demonstrating the manifest relevance of management forecasts, and develop regulations calling for mandatory disclosure in a manner designed to moderate their unreliability.

II. EVIDENCE ON THE RELEVANCE OF FORECAST INFORMATION

A. Relevance of Future-Oriented Information to the Investment Decision Process

The traditional investment decision process is future-oriented.¹⁵⁷ The investor chooses the security expected to yield the highest return relative to the degree of risk.¹⁵⁸ Return represents the present value of the stream of expected future income, which depends on the company's earnings.¹⁵⁹ As a result, information about the projected earnings of a company is directly

tially large mineral ore deposit in Canada. The differences between earnings projections and the "events" or type of information involved in *Texas Gulf Sulphur* and *Levinson* should not preclude application of the same materiality test. Indeed, the performance of a company revealed through earnings figures could be considered an "event" occurring over a prolonged specified period.

^{157.} See Note, Disclosure of Future-Oriented Information Under the Securities Laws, 88 YALE L.J. 338, 341 (1978) ("In order to make a realistic, informed investment decision, investors need information about the future of the firm."); see also Fiflis, supra note 18, at 99-102.

^{158.} See H. LATANE, D. TUTTLE & C. JONES, SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT 236-37 (2d ed. 1975) [hereinafter H. LATANE]; W. SHARPE, PORTFOLIO THEORY AND CAPITAL MARKETS 19 (1970). Risk concerns the probabilities that the actual return will deviate from the expected return. See W. SHARPE, supra, at 25-26; see also Ofer, Investors' Expectations of Earnings Growth, Their Accuracy and Effects on the Structure of Realized Rates of Return, 30 J. Fin. 509 (1975).

^{159.} See B. Graham, D. Dodd & S. Cottle, Security Analysis (4th ed. 1962). Return may consist of dividend income or the increase (or decrease) in future sales price. Generally, corporate earnings ultimately result directly in dividends or are reflected in resale prices. See H. Latane, supra note 158, at 216; Miller & Modigliani, Dividend Policy, Growth, and the Valuation of Shares, 34 J. Bus. 411 (1961).

related to the estimation of return, which in turn relates to the present value of a security.¹⁶⁰ The SEC has repeatedly acknowledged the relevance of financial projections.¹⁶¹ While most cases dealing with required disclosure of projections ignore the issue of relevance, courts have acknowledged the importance of information contained in the projections.¹⁶²

Similarly, future-oriented information is relevant in the takeover context. When faced with a tender offer, a shareholder has three options: (1) tender the shares to the offeror, (2) sell in the market, or (3) retain the shares. A primary factor in choosing among these options is the intrinsic value of the target's shares. A shareholder must compare his estimate of the value of

To some extent, this is inconsistent with the most popular version of the efficient market theory (the semi-strong version) which states that market prices accurately reflect all publicly available information. See J. LORIE, P. DODD & M. KIMPTON, THE STOCK MARKET: THEORIES AND EVIDENCE 64-65 (1985); Fischel, Efficient Capital Market Theory, the Market for Corporate Control, and the Regulation of Cash Tender Offers, 57 Tex. L. Rev. 1, 3-5 (1978). This theory, however, has come under increasing criticism. See, e.g., Gordon & Kornhauser, Efficient Markets, Costly Information, and Securities Research, 60 N.Y.U. L. Rev. 761 (1985). In addition, market price adjustments based on new information reflect the collective reaction of traders to the information. This valuation may differ from the value placed on the target's shares by the individual shareholder who has unique investment concerns such as personal tax considerations. Hence, information concerning the intrinsic value of the company shares is

^{160.} See also Dean, Public Dissemination of Projected Earnings—Pro and Con, 25 MERCER L. REV. 511, 534 (1974); Fiflis, supra note 18, at 103; Mann, supra note 20, at 224 ("where the issuer is going, not where he has been, will determine future market prices and the ultimate success of the investment decision."); Ohlson, Price-Earnings Ratios and Earnings Capitalization Under Uncertainty, 21 J. ACCT. RES. 141 (1983) (empirical analysis of relationship between security prices and expected earnings); Sprouse, The Importance of Earnings in the Conceptual Framework, J. ACCT., Jan. 1978, at 64, 67.

^{161.} See Sec. Act Release No. 6084, supra note 45, at 81,940. Sec. Act Release No. 5992, supra note 39, at 81,037; Sec. Act Release No. 5699, supra note 33, at 86,202 n.3; Sec. Act Release No. 5362, supra note 23, at 82,671.

^{162.} E.g., Elkind v. Liggett & Myers, Inc., 635 F.2d 156, 164 n.12 (2d Cir. 1980) ("the materiality of management's views concerning [future earnings prospects] is beyond doubt") (citations omitted); REA Express, Inc. v. Interway Corp., 410 F. Supp. 192, 197-98 (S.D.N.Y.), rev'd on other grounds, 538 F.2d 953 (2d Cir. 1976); cf. Alfaro v. E.F. Hutton & Co., 606 F. Supp. 1100, 1105 (E.D. Pa. 1985) (predictions on future profitability of oil company actionable under rule 10b-5); Abrams v. Oppenheimer Gov't Sec., Inc., 589 F. Supp. 4, 9 (N.D. Ill. 1983) (forecasts can be material facts under federal securities laws); Kripke, A Search for a Meaningful Disclosure Policy, 31 Bus. LAW. 293, 298 (1975) (amount and method of disclosure varies depending upon purpose and evidence of disclosure).

^{163.} Although similar, the choices available to target shareholders in a merger situation have some important differences. With a merger, the shareholders are voting on the takeover offer, not actually tendering or giving up ownership rights to their shares at that time. In a tender offer situation, the offeror has the option of buying any shares tendered, so the choice of relinquishing ownership rights is more immediate than with a merger. Nevertheless, the target shareholders have the same information concerning valuation of their stock in either circumstance.

^{164.} The intrinsic value of the company's shares can vary from the market price. See Hagaman & Jensen, Investment Value and Security Analysis, FIN. ANALYSTS J., Mar.-Apr. 1977, at 63-64. Intrinsic value is based on the discounted stream of future income and changes only in response to the company's operating fortunes. Market price is much more volatile and affected by overall market movements. Id.; see also Lowenstein, supra note 144, at 257-58 (stock market price not an accurate reflection of company's intrinic value). Information for determining intrinsic value of the target shares is relevant whether the tender offer is for all cash or a combination of cash and securities or whether the offer is intended to result in the bidder obtaining control. In either an any-or-all offer or a partial offer, valuation of the target's shares is an important consideration in responding to the offer.

the target's shares with the offered price and the market price. 165 Since future earnings are important in valuing the target company's shares, earnings projections are especially relevant in assessing the options available to a target shareholder. Target management is a logical source for this information because of its extensive knowledge of the company's operations and future plans. 166 In addition, the short time-frame for tender offers 167 militates in favor of increased disclosure of pertinent information such as earnings projections by target management, which has the most information on which to derive forecasts. 168

B. Survey Evidence

Since 1973, when the SEC announced its decision to abandon its traditional position against disclosure of projections, several surveys have indicated that investors and market professionals consider future-oriented

relevant in and of itself, in addition to the market price. See also Johnson, Disclosure in Tender Offer Transactions: The Dice are Still Loaded, 42 U. PITT. L. REV. 1, 6 (1980) ("shareholder must evaluate his holdings in the target company and must compare his potential future benefits from that company with the benefits that might accrue to him if he accepts the offer"). Moreover, to the extent management forecasts represent new nonpublic information, the efficient market theory would recognize that such information may be important because it would not be incorporated into the market price. See REPORT ON DISCLOSURE, supra note 13, at XXXIV (efficient market theory makes no statement as to optimum amount of information that should be made available or desirable accuracy of it).

165. The factors involved in responding to a tender offer are much more complex than this statement would imply. First, determining the intrinsic value of the shares is difficult. Second, other relevant factors include the expected success of the offer, the expected post-takeover market price if the offer is successful, whether any competing bids will be made if the offer is unsuccessful, and the movement of market price during the pendency of the offer. See, e.g., Bebchuk, Toward Undistorted Choice and Equal Treatment in Corporate Takeovers, 98 HARV. L. REV. 1693, 1721 (1985) (major factor in target shareholder's decision is difference between offer price and expected post-takeover value of shares); Easterbrook & Fischel, The Proper Role of a Target's Management in Responding to a Tender Offer, 94 HARV. L. REV. 1161, 1164 (1981) (value of target stock is sum of two components: market price if no successful offer, multiplied by likelihood that there will be none, and a future tender offer price multiplied by likelihood that some offer will succeed); Hayes & Taussig, Tactics of Cash Takeover Bids, HARV. BUS. REV., Mar.-Apr. 1967, at 135, 147 (decision whether to hold or sell requires estimate of probabilities of tender offer's success or failure and estimate of subsequent price action of stock under either event); Johnson, supra note 164, at 10 (shareholder must weigh offer merits, chance for success, value of holdings as a continuing investment, and price on open market); Jorden & Woodward, An Appraisal of Disclosure Requirements in Contests for Control Under the Williams Act, 46 GEO. WASH. L. REV. 817, 826 (1978) (shareholder can sell in market or wait for competing bid but he incurs risk that his shares will not be purchased). 166. See Johnson, supra note 164, at 6, 30; Target Corporation Disclosure, supra note 124, at 836-37.

167. Rule 14e-1(a) (17 C.F.R. § 240.14e-1(a) (1988)) requires nonissuer tender offerors to hold open the offer at least twenty business days. Rule 14d-7 (17 C.F.R. § 240.14d-7 (1988)) allows shareholders to withdraw their tendered shares during the pendency of the tender offer. These rules were intended to give shareholders more time to analyze the offer and prevent the short offer periods common prior to passage of the Williams Act. Still, this is a much shorter period than occurs in statutory mergers, which often take several months to complete. This shorter time frame is the most attractive feature of the tender offer process for corporate acquirers. But see Lowenstein, supra note 144, at 317, 322-23 (arguing that shareholders need more time to consider tender offers and proposing six-month open period).

168. Studies indicate that corporate management forecasts tend to be more accurate than those of outsiders including securities analysts. See infra Part III.B.1.

information pertinent to investment decisions. For instance, an early survey of financial analysts and portfolio managers revealed that earnings forecasts played a significant role in investment decisions. Those surveyed believed that corporate forecasts contained "important information that would influence investment decisions." These professionals advocated expanded disclosure of management forecasts. The Another survey of both sell-side brokers and buy-side analysts indicated the utility of management projections. Over 90% of both groups said management projections of company performance were pertinent to development of their investment recommendations. The Another survey conducted in 1981, professional securities analysts rated forecasts from company management as the most important source for direct forecast information. Additionally, they considered management's projections of future sales the second most important type of assistance given analysts by companies.

Securities professionals find management forecasts valuable because they advise and sometimes act for shareholders. The argument that the disclosure of projections would mislead the naive does not apply to these sophisticated professionals. Given the expanded role of analysts and portfolio managers in the present securities markets, ¹⁷⁶ expanded public disclosure of earnings forecasts would enhance the quality of their services, thereby benefitting both individual investors and the efficiency of the market as a

^{169.} Stewart, Research Report on Corporate Forecasts, Fin. Analysts J., Jan.-Feb. 1973, at 77, 84. This 1972 survey involved Financial Analysts Federation (FAF) members with 757 analysts and 235 portfolio managers responding to a mail questionnaire. Id. at 81.

^{170.} Id. at 84.

^{171.} See, e.g., id. at 82, exhibit H (over 80% favored either requiring or permitting systematic disclose of management forecasts).

^{172.} See Reckers & Taylor, The U.S. Takes a New Look at Financial Forecasts, COST & MGMT., Mar.-Apr. 1980, at 26, 27. Sell-side brokers are analysts who produce research and then sell it to other brokers and clients. Buy-side analysts purchase research from the larger sell-side firms and use it in making stock recommendations to individual clients. Id. at 26. This survey done by the 1977 Advisory Committee on Corporate Disclosure staff took almost two years to complete and covered a wide range of New York brokers, regional brokers, and analysts for institutional investors such as foundations, pension funds, insurance firms, and mutual funds. Id. at 26, 30 n.3.

^{173.} Id. at 28, table 3. The survey covered several types of future-oriented information regarding budgets and performance projections, as well as management analysis of projected relationships of general economic ratios and specific industry factors. With each type, over 90% of the analysts said the information was either vital or supplementary. Id. at 27. More specifically, 45% of the buy-side and 64% of the sell-side analysts felt performance projections were vital, while 45% and 32%, respectively, said this information was supplementary. Id. at 28. See also Danos & Imhoff, The Auditor and Financial Forecasts, J. ACCT., June 1981, at 104, 109 (most of the 42 auditors interviewed felt that forecasts would be very useful to investors and creditors).

^{174.} See F. LEES, PUBLIC DISCLOSURE OF CORPORATE EARNINGS FORECASTS, CONFERENCE BOARD REPORT No. 804, at 33 (1981). Management's forecasts ranked ahead of forecasts by other analysts. *Id*.

^{175.} *Id*.

^{176.} See, e.g., Brown, supra note 47, at 803 (analysts' reports and recommendations can have a significant impact on company's stock); Parker, A Professional's Thoughts—Needed Information, 24 Bus. Law. 63, 64 (1968) (analysts influence preponderance of investment decisions of institutions and individuals).

whole.177

Concomitantly, investors have expressed a need for prospective information. A 1975 survey of shareholders of New York and American stock exchange companies indicated a desire for future-oriented information by both sophisticated and unsophisticated investors. 178 Just over 77% said they wanted earnings forecasts in the corporate annual report. 179 A second, more comprehensive study of investor attitudes by the 1977 Advisory Committee on Corporate Disclosure revealed that most investors regarded future-oriented data useful. 180 Seventy-five percent responded that the company's own assessment of its future business prospects was extremely useful or moderately useful in the investment decision process.¹⁸¹ Support for a specific earnings per share forecast in the annual report was less enthusiastic. but a majority of those offering an opinion expressed approval. 182 The primary reason given by those opposed to earnings forecast disclosure was the belief that forecasts would not be precise. 183 Concern about this problem. however, could be alleviated by disclosure of the imprecision of the forecast and improvement in forecasting techniques. These surveys demonstrate the desire of shareholders for future-oriented information generally and for earnings forecasts in particular. More importantly, the surveys illustrate the relevance of prospective information to the individual investor. Review of the surveys of analysts and investors reveals the usefulness of forecasts to both audiences. 184

^{177.} Analysts often acquire some information from corporate managements concerning their forecasts, but this information is generally vague and disclosure is inconsistent. Public disclosure would promote more equitable distribution of forecast information and improve accuracy.

^{178.} See Epstein, The Shareholder's View of Earnings Forecasts, MANAGERIAL PLAN., Nov.-Dec. 1975, 33, 35. The survey analyzed responses to mailed questionnaires from 432 shareholders who owned at least 100 shares. Id. at 35. The study showed that sophisticated shareholders, determined on the basis of several factors such as education, money invested in securities, and employment in the area of finance, were as likely to find the company president's letter in the annual report useful in investment decisions as nonsophisticated shareholders. Id. at 35. The president's letter was the only item in annual reports at that time that included information on future expectations.

^{179.} Id. at 36. Epstein concluded, "The corporate shareholder wants the [earnings forecast] information and can use the information in his investment decisions." Id.

^{180.} See Reckers & Taylor, supra note 172, at 26. The investor survey involved approximately 4,730 shareholders of publicly held companies, all of whom held less than 1,000 shares. Id.

^{181.} Id. at 27, table 1.

^{182.} Id. at 27. Forty-seven percent favored this action, 34% opposed it, and 19% were undecided. Id.

^{183.} Id. Fifty-two percent said the large number of variables that entered into earnings forecasting prevented them from being precise. Id. Other areas of concern included management's excessive optimism, management's increased legal vulnerability, and fear of erratic market responses to forecasts. Id.

^{184.} See, e.g., REPORT ON DISCLOSURE, supra note 13, at D-15 ("Management forecasts of sales and earnings seem to be of special interest to investors and analysts.").

C. Information Content of Earnings Forecasts

1. Market Impact Test

Prior to the Supreme Court's enunciation of the reasonable investor standard in TSC Industries, some courts proposed a "market impact" standard for determining materiality under the federal securities law. This standard requires evidence that improper disclosure of the material fact would impact the market price of the security. 185 The two standards are similar to the extent both involve the expected actions of a broad spectrum of investors. 186 They differ, however, in the required reaction to the information. A fact is material under the reasonable investor standard if it would have influenced the decision-making process; it need not actually make the investor change his decision.¹⁸⁷ The market impact standard, however, necessarily requires the information to be significant enough to cause an investor to buy or sell the security. Hence, if the information would cause enough investors to trade so as to affect the market price, it would be considered material. 188 The TSC Industries standard is broader than the market impact standard because the former includes facts that would not cause the market price to change if disclosed. 189 Therefore, the market impact standard is included within the reasonable investor standard; satisfying the former would necessarily satisfy the latter. 190 Evidence on the changing market price in connec-

^{185.} See, e.g., Myzel v. Fields, 386 F.2d 718, 734 (8th Cir. 1967), cert. denied, 390 U.S. 915 (1968); Kohler v. Kohler Co., 319 F.2d 634, 642 (7th Cir. 1963); SEC v. Texas Gulf Sulphur Co., 258 F. Supp. 262, 280 (S.D.N.Y. 1966), rev'd, 401 F.2d 833 (2d Cir. 1968); see also Note, Securities Regulation—Fraud in Securities Transactions and Rule 10b-5—A Survey of Selected Current Problems, 46 N.C.L. Rev. 599, 618-20 (1968) (material fact will have direct effect on market value of securities).

^{186.} The TSC Industries standard is an objective test involving the hypothetical prototypical reasonable investor. See TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 445 (1976); Kin-Ark Corp. v. Boyles, 593 F.2d 361, 366 (10th Cir. 1979); SEC v. Blatt, 583 F.2d 1325, 1331 (5th Cir. 1978); Dura-Bilt Corp. v. Chase Manhattan Corp., 89 F.R.D. 87, 94 (S.D.N.Y. 1981). The market impact test concerns the activities of a reasonable investor buying or selling a particular security. See Lilly v. State Teacher Retirement Sys. Pension Fund, 608 F.2d 55, 60 (2d Cir. 1979), cert. denied, 446 U.S. 939 (1980); SEC v. National Student Mktg. Corp., 457 F. Supp. 682, 708 (D.D.C. 1978).

^{187.} See TSC Industries, Inc., 426 U.S. at 449; Kramas v. Security Gas & Oil, Inc., 672 F.2d 766, 768-69 (9th Cir.), cert. denied, 459 U.S. 1035 (1982); Huddleston v. Herman & MacLean, 640 F.2d 534, 548 (5th Cir. 1981), rev'd on other grounds, 459 U.S. 375 (1983).

^{188.} The market impact test is better suited to publicly held corporations with dispersed stock ownership. Where stock prices could be affected by a few large shareholders, the underlying assumption of a collective judgment by a broad range of investors on the importance of the information would be lacking. But see Myzel, 386 F.2d at 734 (applying market impact test to closed corporation).

^{189.} See, e.g., Knauss, Disclosure Requirements—Changing Concepts of Liability, 24 Bus. Law. 43, 60 (1968); Leavell, The Texas Gulf Sulphur Opinion in the Appellate Court: An Open Door to Federal Control of Corporations, 3 Ga. L. Rev. 141, 145 n.26 (1968). But see Painter, Rule 10b-5: The Recodification Thicket, 45 St. John's L. Rev. 699, 710 (1971) (similar results under either standard).

^{190.} See Dirks v. SEC, 681 F.2d 824, 842 (D.C. Cir. 1982), rev'd on other grounds, 463 U.S. 646 (1983); see also SEC v. Texas Gulf Sulphur Co., 401 F.2d 833, 849 (2d Cir. 1968) (reasonable investor standard encompasses any fact that might objectively impact the value of a corporation's securities), cert. denied, 394 U.S. 976 (1969); SEC v. Shapiro, 349 F. Supp. 46, 53 (S.D.N.Y. 1972) (reasonable investor standard includes facts that might affect the value of a company's stock). Some commentators have advocated exclusive use of a market impact test

tion with release of information is thus indicative of materiality under either standard. 191

2. Information Content of Management Forecasts

Several studies have investigated stock price movements associated with public announcements of management forecasts. The underlying rationale for these studies is similar to that of the market impact test for materiality. If stock prices change in reaction to the public disclosure of corporate forecasts, this fluctuation is some evidence that the forecasts contain new information not already incorporated into the market price and of interest to investors. ¹⁹² The typical procedure for measuring "information content" involves analysis of price changes of the subject security surrounding the date the management forecast was publicly disclosed (often called the announcement period). In order to determine the price movement related to the forecast, these studies usually utilize the market model, ¹⁹³ which separates the

when possible. See, e.g., Dennis, Materiality and the Efficient Capital Market, 25 WM. & MARY L. REV. 375 (1984); Fischel, Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities, 38 BUS. LAW. 1 (1982). Indeed, some courts have continued to use this test even after the TSC Industries opinion and despite its more narrow range. See, e.g., Susman v. Lincoln Am. Corp., 578 F. Supp. 1041-1058 (N.D. Ill. 1984) (materiality demonstrated by change in market price). One court mistakenly equated the TSC Industries standard with the market impact test. See SEC v. Bausch & Lomb, Inc., 565 F.2d 8, 15 (2d Cir. 1977); cf. Arber v. Essex Wire Corp., 490 F.2d 414, 418 (6th Cir.), cert. denied, 419 U.S. 830 (1974) (recognizing difference between reasonable investor and market impact tests).

191. See, e.g., Fischer v. International Tel. & Tel. Corp., 78 F.R.D. 237, 244 n.5 (E.D.N.Y. 1978) (absence of market reaction probative of lack of materiality); Gold v. DCL, Inc., 399 F. Supp. 1123, 1129 n.13 (S.D.N.Y. 1973) (same proposition); Sandler & Comwill, Texas Gulf Sulphur: Reform in the Securities Marketplace, 30 Ohio St. L.J. 225, 244 n.111 (1969).

192. See, e.g., Ball & Brown, An Empirical Evaluation of Accounting Income Numbers, 6 J. ACCT. RES. 159 (1968); Foster, Stock Market Reaction to Estimates of Earnings per Share by Company Officials, 11 J. ACCT. RES. 25 (1973).

193. William Sharpe developed the market model primarily to isolate two major components of the stock price movement of individual securities, the systematic market component and the individual firm component. See Sharpe, A Simplified Model for Portfolio Analysis, 9 MGMT. Sci. 277 (1963). The market model formula is as follows: $R_1 = a_i + b_i R_{mt} + e_{it}$ where

 R_t = the return of security i in period t

 a_i b_i = the intercept and slope of the linear relationship between R_i and R_{mt} = the return on the market portfolio in period t

 $e_{it} = \text{the stochastic error (or residual value) term for security } i$ in period t $E(e_{it}) = 0$

The market model is based on market studies indicating that security prices normally move in a linear relation with general market price changes and individual residual values being random with an expected value of zero. See, e.g., Fama, Efficient Capital Markets: A Review of Theory and Empirical Work, 25 J. Fin. 383 (1970); Jensen, Risk, the Pricing of Capital Assets and the Evaluation of Investment Portfolios, 42 J. Bus. 167 (1969). As a result, the information content of an announcement can be identified by measuring the individualistic component separate from the price movements reflected by the general market movement. See Beaver, The Behavior of Security Prices and Its Implication for Accounting Research (Methods), 47 ACCT. REV. 407 (Supp. 1972). For a thorough statistical discussion of the market model, see E. FAMA, FOUNDATIONS OF FINANCE 62-98 (1976). Most empirical studies of information content use the individual firm time-series market model rather than the cross-sectional Capital Asset Pricing Model (CAPM) to measure abnormal returns. See Lev & Ohlson, Market-Based Empirical Research in Accounting: A Review, Interpretation and Extension, 20 J. ACCT. RES. 249 (Supplement 1982).

price change associated with information affecting the market as a whole and the change associated with information related to the individual security. 194

Early studies tended to indicate that management forecasts have information content, but they suffered from methodological problems such as contamination from other sources of information. Nichols and Tsay conducted a study of longer-term executive forecasts to isolate the market reaction to the forecast information alone. Their results, showing abnormal returns in the announcement week and cumulative abnormal returns over a seventeen-week period (eight weeks both before and after forecast announcement), indicated that management forecasts do have information content. Not surprisingly, the extent of the market reaction varied symmetrically with the size of the forecasted change in earnings. Although the returns were abnormal during the announcement week, indicating some information content, the sample contained a sufficient number of small

^{194.} Empirical studies usually indicate the reliability of their findings through the use of statistical significance information. Utilizing probability distribution analysis, researchers can determine the probability that their results are erroneous. The probabilities are typically expressed in terms of significance or confidence levels with the most commonly recognized levels being 1% (.01), 5% (.05), and 10% (.10). These levels correspond to the degree of assurance that the evidence supports the particular finding, with lower levels of significance representing higher degrees of confidence. For expample, a .05 significance level means a 95% probability that the particular finding is correct given certain assumptions. Significance levels are an important indicator of the validity of the results of any statistical study.

^{195.} See, e.g., Foster, supra note 192, at 25; Patell, Corporate Forecasts of Earnings Per Share and Stock Price Behavior: Empirical Tests, 14 J. ACCT. RES. 246 (1976). In Foster's study only 9 out of the 68 annual earnings per share forecasts reviewed occurred more than 30 days before release of the actual earnings figures. The possibility of influence on price reaction by news other than the forecasts weakened the results in Patell's study. One hundred and fifty-three of the 336 forecasts were released simultaneously with figures on actual first or second quarter earnings. Id. at 250.

^{196.} Nichols & Tsay, Security Price Reaction to Long-Range Executive Earnings Forecasts, 17 J. ACCT. RES. 140 (1979). The authors included only forecasts unaccompanied by other financial news or a cash dividend declared within a week of the forecast announcement and where no stock split occurred within eight weeks before or after the forecast announcement. Id. at 143. The annual earnings forecast also had to be published at least six months prior to fiscal year-end. Id. at 142. The Wall Street Journal reported the sample forecasts from 1968 to 1973.

^{197.} See id. at 154. Abnormal returns deal with individual period returns, while adding the returns for all prior specified periods gives the cumulative abnormal returns up to each designated period. Both figures were analyzed because the absence of abnormal returns during the immediate announcement period would not prove the lack of information content if the announcement was anticipated or leaked beforehand, and prices had already adjusted in the earlier period. Therefore, cumulative abnormal returns, which reveal price movements for the entire period, were also reviewed. For instance, in the Nichols & Tsay study the abnormal returns were much larger during the announcement week for those firms with positive earnings forecasts than for those with negative forecasts, while the latter had larger market reaction prior to the announcement. Id. at 152.

^{198.} Id. at 150-51. The fact that investors already have some expectation about future earnings complicates the measurement of the effect of earnings forecasts. A management forecast that mirrors a commonly expected figure generally would cause no abnormal market reaction, implying no information content and lack of materiality. Cf. Comment, The SEC Policy for Projection: New Problems in Disclosure, 21 UCLA L. REV. 242, 266 (1973) (forecast probably not material if it follows pattern of earnings in prior years). This conclusion, however, does not necessarily follow from this evidence. Management's forecast may be material under the TSC Industries reasonable investor standard because it reinforces the expected belief and offers a new and important source to verify the reasonableness of that belief.

change securities that the authors were unable to state that the average of the abnormal returns was statistically significant. 199

Another study by Jaggi of forecasts by 121 firms between 1971 and 1974 used daily returns rather than weekly returns as in the Nichols and Tsay study.²⁰⁰ This method reduced the possible dilution of the impact of the forecast announcement. Jaggi analyzed returns for the twenty-one days surrounding the forecast date to capture the impact of the forecast, some of which often occurs before and after the actual announcement date.²⁰¹ His results illustrate statistically significant price adjustments on the day of announcement of the management forecasts, as well as shortly before and after this day.²⁰² Jaggi also analyzed the returns in relation to the expectations of investors for future earnings. He used three naive prediction models as proxies for investor expectations.²⁰³ Price adjustments occurred around the announcement date even allowing for these expectations, which supports the other evidence of significant price adjustments because of the forecast.²⁰⁴

In a more recent study, Waymire examined more specifically the causes for stock price adjustments to management forecasts.²⁰⁵ Some authors of the earlier studies had cautioned that other factors may have influenced their conclusions that investors had significantly adjusted their expectations of future earnings based on the information in the management forecasts.²⁰⁶ Abnormal residuals or returns based on the market model demonstrated that

^{199.} Nichols & Tsay, supra note 196, at 151, 153. The rank test, however, did indicate abnormal returns during the announcement week at the .01 (10%) level of significance (or confidence level). *Id.* at 149.

^{200.} Jaggi, A Note on the Information Content of Corporate Annual Earnings Forecasts, 53 ACCT. REV. 961 (1978) (involving 144 forecasts). The sample included only annual forecasts released at least eight months before fiscal-year end. Id. at 962.

^{201.} This impact pattern may be due to several factors, including premature leakage of the specific information, anticipation of the information spurred by disclosure of related information or predictions by analysts, or imprecise identification of the exact disclosure period in the study. Most studies use the publication date of the Wall Street Journal as the disclosure date, but the forecast actually may have been released earlier or reported elsewhere such as on The Broad Tape.

^{202.} Id. at 964. The period showing statistically significant abnormal returns for the entire sample occurred primarily between day -6 and +2 where announcement day was day 0. Id. at 965, table 1. Seven of the nine days in this period had abnormal returns significant at the .05 (5%) level with the -2 to 0 period having the greatest number of significant returns. Id. Moreover, each of the four years, 1971-1974, had abnormal returns, significant at the .01 (1%) level during the three days surrounding the announcement day. Id.

^{203.} The three naive models used were: (1) a no-change model, which predicts earnings per share (EPS) will be the same as the previous year; (2) an equal dollar change model, which predicts that EPS will change by the same amount as the previous year; (3) an equal percentage change model, which predicts that EPS will change by the same percent as the previous year. *Id.* at 965.

^{204.} Id. at 965-66.

^{205.} Waymire, Additional Evidence on the Information Content of Management Earnings Forecasts, 22 J. Acct. Res. 703 (1984).

^{206.} See, e.g., Jaggi, supra note 200, at 966 (price adjustments may have been caused by voluntary act of disclosure); Patell, supra note 195, at 273, 274 (same). Finding significant price reactions, however, is strong evidence of at least some information content because other possible explanations for this finding are unlikely to create statistically significant price movements. To the extent the market is efficient, expectations of future earnings will already be impounded into the stock price. New information leading to adjustment of these expectations will be reflected in price movements.

investors had altered their expectations of future stock returns. Given the close relationship between returns and earnings, it is possible to imply information content in the management forecasts from the abnormal stock return movements. Some studies, however, showed that the abnormal residuals were associated primarily with forecasts of positive future earnings ("good news"), while little or even slightly positive price reaction to forecasts of negative future earnings ("bad news") occurred.²⁰⁷ These findings suggest that the act of disclosing the forecast, rather than the content of the forecast itself, may have been the information signal causing the price movement.

Waymire utilized a more sophisticated methodology to identify price reactions to management forecasts and the specific information content reflecting future earnings performance. He found the following: (1) statistically significant positive price reactions to good news forecasts and negative price reactions to bad news forecasts, and (2) significant positive association between the magnitude of forecast deviation, defined as the difference between management forecast and "expected" earnings, and the magnitude of abnormal residuals surrounding the forecast disclosure date. Unlike the earlier studies, which used time-series forecast models to determine expected future earnings, he utilized analysts' forecasts published within two weeks prior to the management forecast as the proxy for investors' expectations. Furthermore, the effects of contemporaneous financial information disclosures were taken into account.

Waymire examined 479 management forecasts of annual earnings per share published between 1969 and 1973. Calculating the forecast deviation as the difference between management forecast and a "consensus" analyst forecast, he determined the unexpected component of the management forecast. Good news forecasts were more prevalent than bad news forecasts only

^{207.} See Nichols & Tsay, supra note 196, at 152 (no significant price movement for "bad news" forecasts during week of forecast announcement); Patell, supra note 195, at 270-71 (finding positive abnormal residuals associated with "bad news" forecasts during one week prior to and the week of the forecast announcement); see also Penman, An Empirical Investigation of the Voluntary Disclosure of Corporate Earnings Forecasts, 18 J. ACCT. RES. 132, 156-57 (1980) (negative price movement on day of "bad news" forecast announcement, but cumulative abnormal residuals not statistically significant).

^{208.} See Waymire, supra note 205, at 704; see also Jennings, Unsystematic Security Price Movements, Management Earnings Forecasts, and Revisions in Consensus Analyst Earnings Forecasts, 25 J. ACCT. RES. 90, 95 n.10, 99 (1987) (finding both significant price reaction to management forecasts during week of forecast and correlation between direction of movement and good news or bad news of forecast relative to analyst forecasts).

^{209.} Id. See Waymire, supra note 205 at 704. An earlier study found a stronger association between stock price movements and predictions of future earnings derived from analysts' forecasts than from two time-series models (modified submartingale and index model), which supports use of analysts' forecasts as surrogates for investor expectations rather than naive forecast models. See Fried & Givoly, Financial Analysts' Forecasts of Earnings: A Better Surrogate for Market Expectations, 4 J. ACCT. & ECON. 85 (1982). Another recent study compared stock price association and unexpected earnings based on five measuring proxies including three sophisticated Box-Jenkins models, a seasonal random with model, and analyst forecasts. The authors discovered that analyst forecasts exhibited the greatest association with abnormal stock prices. See Brown, Hagerman, Griffin & Zmyjewski, An Evaluation of Alternative Proxies for the Market's Assessment of Unexpected Earnings, 9 J. ACCT. & ECON. 159 (1987).

in 1972 and 1973.²¹⁰ Analysis of abnormal residuals demonstrated that the stock price reaction correlated with the sign (positive or negative) of the forecast deviation. The good news stock group had statistically significant positive cumulative abnormal returns between days -1 and $+1.^{211}$ Also, the abnormal residuals on day 0 (the announcement day) and -1 were statistically significant at a .01 (1%) level. Conversely, the bad news portfolio had a negative price reaction during the -1 to +1 day period, and significant negative residuals on day 0 at the .01 (1%) level.²¹² Additionally, when the stocks were divided into twenty-five portfolios and ranked according to the size of deviation from expected earnings, the price revisions corresponded with the size of the forecast deviation.²¹³

Waymire also attempted to excise the effects from disclosure of other types of financial information on the stock price movements. Only 94 of the 479 sample forecasts were issued without some contemporaneous information disclosure. Utilizing simple time-series models to categorize the other types of contemporaneous financial information disclosures as good, bad, or neutral news based on their unexpected component (or deviation from the expected model prediction), Waymire found a statistically significant association between the sign of the management's forecast deviation and the similar type of contemporaneous disclosures. Nonetheless, the majority of negative forecasts issued with only one type of contemporaneous disclosure (good, bad, or neutral) were accompanied by good news disclosures. This mixing of favorable disclosures with negative forecasts tends to dilute the stock price impact of the forecasts.

Waymire also divided the negative forecast deviation group into two portfolios, one where at least one contemporaneous disclosure was good news,

^{210.} Waymire, supra note 205, at 712-13. Good news forecasts were those where the forecast deviation (difference between management forecasts and analysts' consensus forecasts) was positive, and bad news forecasts were those with a negative forecast deviation. Id. at 708. The large predominance of good news forecasts in 1972 and 1973 resulted in the overall sample's containing a majority (54.5%) of good news forecasts. Id.

^{211.} Id. at 710. Day 0 is the day of publication of the forecast in the Wall Street Journal. 212. Id. Consistent with the earlier studies, the bad news portfolio exhibited statistically significant negative cumulative abnormal residuals for days -100 to -2, which indicates the existence of alternative sources of negative information concerning these companies prior to release of the management's forecast. Id.

^{213.} Id. at 711. The rank order correlation between the median forecast deviation and the cumulative abnormal returns (CAR)(-1 to +1) was statistically significant at the .002 level. Id.

^{214.} Waymire divided the other kinds of information disclosed near the time of his sample forecasts into seven categories: quarterly earnings reports, quarterly earnings forecasts, dividend disclosures, long-range forecasts, stock dividends and splits, corporate acquisitions or mergers, and miscellaneous. *Id.* at 713. The two most frequent categories of contemporaneous disclosures were miscellaneous (35.5%) and quarterly earnings reports (33.4%). *Id.* The occurence of a forecast with no other contemporaneous disclosure was the third most common situation (19.6%), ranking behind one additional disclosure (41.3%) and two additional disclosures (29.6%), respectively. *Id.* This breakdown shows that multiple disclosures are frequent with forecast announcements.

^{215.} See id. at 714.

^{216.} Id. at 714-15. Sixty-five of the 98 negative forecasts (66.3%) were accompanied by solely good news disclosures, while only 19 (19.4%) were accompanied by solely bad news disclosures.

and the second consisting of the rest of the forecasts in this group. The first portfolio had cumlative positive returns for days -1 to +1, 217 while the second portfolio had cumlative negative returns for this period. The difference between these two portfolios was statistically significant, 218 and illustrates that the presence of conflicting contemporaneous disclosures reduces the likelihood of finding significant price revisions with negative forecasts even where the forecasts have information content. Like Nichols and Tsay, Waymire found that the price reactions were commensurate with the size of the forecast deviation from expectations. Of those forecasts issued with no contemporaneous disclosures, the cumulative returns for days -1 to +1 were significantly positive and negative for the large magnitude positive and negative forecasts, respectively. 219

The findings in the Waymire study are important for several reasons. First, they indicate that the specific information concerning future earnings rather than the voluntary act of disclosure is the primary impetus causing the stock price movement. Second, the study demonstrates the occurrence of statistically significant price reactions to management forecast disclosure despite the existence of alternative forecasts by professional analysts. Third, it dispels the doubts about the importance of both positive and negative management forecasts raised in earlier studies.²²⁰

The stock returns studies have clearly demonstrated the relevance of management forecasts to investments decisions. They have consistently found market reaction to forecast disclosure. These studies establish the materiality of management forecasts by providing evidence that would satisfy even the stricter market impact test, as well as the reasonable investor standard. This evidence strongly supports the investor surveys and theoretical framework of the investment decision process that places a premium on future-oriented information.

^{217.} Id. at 716.

^{218.} Id. (statistical significance was at the .002 level).

^{219.} Id. at 716-17. The abnormal returns for the small magnitude forecasts were conversely related, with positive forecasts having negative (-.00242) cumulative abnormal returns and negative forecasts having positive cumulative abnormal returns (.00945) for days +1 to -1. Id. at 716. These results were not significantly different from 0, so little can be concluded from the converse relationship. The lack of statistical significance does imply only a weak stock price reaction to this information.

^{220.} See also Ajinka & Gift, Corporate Managers' Earnings Forecasts and Symmetrical Adjustments of Market Expectations, 22 J. ACCT. RES. 425, 442 (1984) (finding price movements symmetrically related to direction (positive or negative) and size of deviation from expectations of management's forecast); Ruland, Management Forecasts, Stock Prices and Public Policy, 14 REV. BUS. & ECON. RES. 16, 26 (1978-1979) (finding stock price adjustments in direction of deviation from naive model). The finding of a symmetrical market reaction to the positive or negative character of the management forecast is consistent with other studies concerning price reaction to actual earnings disclosures. See, e.g., Beaver, Clarke & Wright, The Association Between Unsystematic Security Returns and the Magnitude of Earnings Forecast Errors, 17 J. ACCT. RES. 316 (1979); Brown, Earnings Changes, Stock Prices and Market Efficiency, 33 J. FIN. 17 (1978); Brown & Kennelly, The Information Content of Quarterly Earnings: An Extension and Some Further Evidence, 45 J. BUS. 403 (1972); Foster, Quarterly Accounting Data: Time-Series Properties and Predictive Ability Results, 52 ACCT. REV. 1 (1977); Jones, Rendelman & Latene, Earnings Announcements: Pre & Post Responses, 11 J. PORTFOLIO MGMT. Spring 1985, at 28.

III. FORECAST ACCURACY

Any thorough discussion of forecast disclosure policy cannot deal with management forecasts in isolation. One indication of the importance of forecast information is the lively market in forecasts by securities analysts. To the extent analysts already provide prospective information, any recommendation of mandatory disclosure of forecasts by companies must demonstrate the benefits of such a policy.²²¹ A major issue affecting all forecasts is accuracy. Traditionally, the accuracy of forecasts has been used—and misused—as a measure of their value. Accuracy is also relevant to the proper allocation of social resources because investor's capital investment decisions are heavily influenced by forecast information. The courts focus on accuracy as the primary element in determining whether disclosure of existing company forecasts should be compelled under the federal securities laws.²²² Examination of the accuracy of analyst as well as of management forecasts provides some insight into the problems of forecasting.

A. General Accuracy of Analyst and Management Forecasts

1. Analysts' Forecast Accuracy

Attempts to determine the accuracy of analyst forecasts have involved various methods including surveys and empirical analysis. In an early research study by the Financial Analysts Federation (FAF), the group of portfolio managers surveyed indicated that 41% of the analyst annual forecasts were accurate within 10%, and 93% were within 20%.²²³ A review of forecasts by several large institutions conducted for this same research project showed a 10-15% error rate in annual earnings forecasts for the "average" firm.²²⁴ The errors, however, varied greatly based on the particular industry.²²⁵ A review of analyst forecasts for the period 1972 to 1976 involving ninety-two New York Stock Exchange (NYSE) companies revealed error frequency rates of 30% or less in 84.8%, 20% or less in 71.4%, and 10% or less in 50% of the forecasts.²²⁶ A simple analysis of earnings forecasts appearing in Standard & Poor's Earnings Forecaster between 1977 and 1979 revealed absolute forecast errors of 10% or less in half of the forecasts, but errors greater than 15% in just over one-third of the forecasts.²²⁷ These

^{221.} See generally Gonedes, Dopuch & Penman, Disclosure Rules, Information-Production, and Capital Market Equilibrium: The Case of Forecast Disclosure Rules, 14 J. ACCT. RES. 89 (1976) (costs of mandatory disclosure must be weighed against benefits).

^{222.} See, e.g., supra notes 143 & 146 and accompanying text.

^{223.} See Stewart, supra note 169, at 82. The survey included responses from 757 analysts and 235 portfolio managers. Id. at 81.

^{224.} Id. at 79. The study reviewed forecasts by seven large institutional investors from 1960 to 1964.

^{225.} Id. at 80. Forecast errors for the food industry were very small (approximately 3%), while the errors for automotive firms were quite large (approximately 47%). Id.

^{226.} Richards, Benjamin & Strawser, An Examination of the Accuracy of Earnings Forecasts, 6 Fin. MGMT. 78, 82 (1977).

^{227.} F. LEES, supra note 174, at 35. Standard & Poor's Earnings Forecaster contains annual forecasts for approximately 1,500 firms by Standard & Poor's in-house analysts and approximately 70 outside analysts. The analysis covered 90 corporations and constituted a

evaluations of accuracy provide only a very general picture and do show the range of possible forecast error.

More sophisticated analysis requires a more comprehensive evaluation process. For instance, in one study of over 4,000 forecasts by more than thirty-five brokers and analysts in England, the authors discovered that analyst forecasts had a smaller variation from the mean of the actual results than did the realized security returns.²²⁸ This result indicates that analyst forecasts are generally conservative, with predictions falling within a narrower range than occurred in the actual stock price movements. In another study, analyst forecasts covering 100 companies listed on the NYSE between 1967 and 1972 averaged errors of 16.07% over this period.²²⁹ These studies illustrate analyst forecasts generally exhibit error rates between 5-40%, with few exceedingly inaccurate forecasts.

2. Corporate Forecast Accuracy

After 1973, when the SEC announced its policy change, the issue of the ability of corporate managements to generate accurate forecasts received greater scrutiny. Given the general corporate practice not to publish forecasts, 230 but often to provide them to analysts, 231 opinion surveys of analysts and managements on company forecast accuracy are enlightening. Analysts in the FAF survey said that 85% of corporate annual forecasts were within 20% of the actual result, while 35% were within 10%.232 Interestingly, portfolio managers gave management performance a higher rating, saying that 92% of the forecasts were within 20% of the actual results, and 50% were within 10%.233

A survey of corporate managements for the Financial Executives Research Foundation (FERF) involving 338 companies showed that company forecast accuracy varied with the type of item forecast. For example, sales and expense forecasts tended to be somewhat more accurate than earnings

simple comparison of actual reported net incomes with forecast incomes. Fifty-one percent of the forecasts were within 10%, 12% were within 10-15%, and 37% had errors greater than 15%. Id.

^{228.} Dimson & Marsh, An Analysis of Brokers and Analysis' Unpublished Forecasts of UK Stock Returns, 39 J. Fin. 1257, 1268 (1984). The standard deviation for the broker group for the 12-month forecast period was 10.2%, while the standard deviation for the realized returns during this period was 30.9%. Id.

^{229.} Barefield & Comiskey, The Accuracy of Analysts' Forecasts of Earnings per Share, 3 J. Bus. Res. 241, 245 (1975).

^{230.} See Abdelsamad & Gilbreath, Publication of Earnings Forecasts: A Report of Financial Executives' Opinions, MANAGERIAL PLAN., Jan.-Feb. 1978, at 26, 27. Out of 119 responses to a mail questionnaire sent to large corporations, only ten (8.4%) had published forecasted earnings in the previous five years, and five of those planned not to do so again in the near future. Id. at 27. See also F. Lees, supra note 174, at 29 (approximately 10% of 376 companies surveyed provided some public disclosure of earnings forecasts).

^{231.} Axelson, A Businessman's Views on Disclosure, J. ACCT., July 1975, at 42.

^{232.} FINANCIAL ANALYSTS FEDERATION, DISCLOSURE OF CORPORATE FORECASTS TO THE INVESTOR 143 (1973) [hereinafter FAF STUDY ON DISCLOSURE]; see also F. Lees, supra note 174, at 36 (12% of analysts responding said management forecasts were very reliable and 84% said they were somewhat reliable).

^{233.} FAF STUDY ON DISCLOSURE, supra note 232, at 143.

forecasts.²³⁴ As for corporate annual sales forecasts, 95% of the companies had variances from actual results within 20%, 84% had variances within 10%, and 53% had variances within 5%.²³⁵ With corporate earnings forecasts, 87% of the companies experienced variances within 20%, 70% had variances within 10%, and only 37% came within 5% of actual results.²³⁶ These differences demonstrate that a uniform error rate should not be expected with different types of financial items.²³⁷ A more recent survey of sales forecasting revealed that accuracy decreased with longer time horizons and narrower product grouping. For corporate sales forecasts of three months to two years, the mean absolute percentage error (MAPE)²³⁸ was 11%, and for forecasts over two years, it was 18%.²³⁹ The MAPE for product line forecasts for the less than two-year and over two-year forecast horizons was 21% and 26%, respectively.²⁴⁰ These results support the belief that conglomerate sales forecasts tend to be more accurate than individual segmented forecasts.

Several early studies of published management earnings forecasts indicated varying levels of accuracy. For instance, one study of fifty forecasts made during 1968 found an average absolute percentage error of 20%.²⁴¹ A more expansive review of 201 forecasts made between 1966 and 1970 by McDonald examined several aspects of accuracy.²⁴² He found that 35.3%

^{234.} Financial Executives Research Foundation, *How Accurate Are Forecasts*?, FIN. EXECUTIVE, Mar. 1973, at 26, 27 [hereinafter FERF Study]. The greater accuracy may result from the more numerous components involved in a net income or earnings calculation as opposed to a sales or expense calculation.

^{235.} Id.

^{236.} Id. Variances exceeding 20% occurred in only 5% of the company's sales forecasts, but occurred in 13% of the earnings forecasts. Id.

^{237.} Id. Differences in forecast accuracy may also vary based on the aggregate nature of the company grouping. For example, the FERF Study showed that for expenses by division (and corporate expenses), 53% (65%) were within 5%, and 82% (90%) were within 10%. For sales by division (and corporate sales), 36% (53%) were within 5%, and 74% (84%) were within 10%. For earnings by division (and corporate earnings), 22% (37%) were within 5%, and 73% (80%) were within 10%.

Some evidence shows that use of segmented data for generating forecasts of earnings, rather than actual aggregate earnings figures, may produce more accurate forecasts. See, e.g., Collins, Predicting Earnings with Sub-Entity Data: Some Further Evidence, 14 J. ACCT. RES. 163 (1970). Better research, however, indicates that use of segmented data for predicting aggregate earnings either produces no improvement in accuracy, see Hopwood, Newbold & Silhan, The Potential for Gains in Predictive Ability Through Disaggregation: Segmented Annual Earnings Forecasts, 20 J. ACCT. RES. 724 (1982) (use of segmented variables that contribute to aggregate earnings amount does not necessarily lead to more accurate forecasts), or any improvement would be specific to a particular forecasting situation, see, e.g., Ang, Aggregate versus Component Forecasts of Financial Statement Items, 15 REV. Bus. & Econ. Res. 30 (1979).

^{238.} The mean absolute percentage error measure represents the difference between the actual value and the forecasted value divided by the actual value. This calculation permits analysis of errors for firms with varying earnings values because it provides a uniform relative percentage error measure.

^{239.} Mentzer & Cox, Familiarity, Application, and Performance of Sales Forecasting Techniques, 3 J. Forecasting 27, 33 (1984).

^{240.} Id.

^{241.} Copeland & Marioni, Executive's Forecasts of Earnings per Share Versus Forecasts of Naive Models, 45 J. Bus. 497, 505 (1972).

^{242.} McDonald, An Empirical Examination of the Reliability of Published Predictions of Future Earnings, 48 ACCT. REV. 502 (1973). The forecasts were taken from the Wall Street

were within 5%, 48.8% were within 10%, and 70% were within 20% of the actual results.²⁴³ The average relative prediction error was 13.6%; but when four extremely erroneous forecasts were removed, the average error dropped to 10.2%.²⁴⁴ The study also found a tendency toward over-predicting earnings.²⁴⁵

Based primarily upon these types of general accuracy evaluations, critics questioned the value of publishing management forecasts.²⁴⁶ This evidence provides a very limited picture of management forecasts and is inadequate to determine their potential usefulness. Any assessment of the materiality of published management forecasts cannot be ascertained solely on their accuracy or in isolation. The current majority approach of the courts toward mandatory disclosure of existing company forecasts suffers from the same myopia. Disclosure policy should be based on an evaluation of the information content of management forecasts in relation to other available sources of this information.

B. Comparison of Management Forecasts with Competing Sources

The two most prominent alternative sources of prospective information are analysts and predictions derived from statistical models. Management forecasts have been compared to both of these on the basis of accuracy, but other issues such as availability and costs should also be considered. Nevertheless, unless management forecasts offer at least a comparatively similar degree of accuracy, imposing mandatory disclosure may not be justified. As a result, it is important that the empirical evidence tends to favor management forecasting ability over these two other sources.

Journal and appeared between eight to twelve months before fiscal year-end. Id. at 503. Only specific point estimates were included, with forecasts of point ranges being excluded. Id. The sample covered 152 firms in four major industries and a few smaller industries. Id. at 504-05.

^{243.} Id. at 507-08.

^{244.} *Id.* at 508. The four outliers ranged from an overprediction of 395.6% to an underprediction of 108.5%. The relative prediction error represented the difference between the actual results and the prediction expressed as a proportion of the predicted amount. This accuracy measurement differs slightly from the MAPE, which measures error as a proportion (percentage) of the actual value. Nonetheless, comparisons with other studies are still possible because the results should not differ significantly between the two error measures. The average prediction error ranged from 1.7% to 32.1% over the five years, with the largest average errors in the two years of general economic declines. *Id.*

^{245.} *Id*. at 509.

^{246.} See, e.g., P. McGrath & F. Walsh, Disclosure of Financial Forecasts to Security Analysts and the Public, Conference Board Report No. 602, at 3-9 (1973); Asebrook & Carmichael, Reporting on Forecasts: A Survey of Attitudes, J. Acct., Aug. 1973, at 38; Corn, The Case Against Forecasting Earnings, MSU Bus. Topics, Summer 1974, at 11; Skousen, Sharp & Tolman, Corporate Disclosure of Budgetary Data, J. Acct., May 1972, at 50. But see Benjamin & Strawser, The Disclosure of Forecast Information, Ohio CPA, Summer 1973, at 79 (managements were much more pessimistic about public disclosure than user groups). See generally Daily, The Feasibility of Reporting Forecasted Information, 46 Acct. Rev. 686, 686-72 (1971); FERF Study, supra note 234, at 26. Executives' opposition to disclosure is heavily influenced by the fear of liability for inaccurate forecasts. See Abdelsamad & Gilbreath, supra note 230, at 29; Benjamin & Strawser, supra, at 84-85.

1. Management Forecasts Versus Analyst Forecasts

While the separate studies of management and analyst forecasts illustrated the general range of accuracy of each, a more meaningful test compares forecasts by each group for a particular company over the same time period. One review of the early literature on management and analyst forecasts revealed no real difference in accuracy between them.²⁴⁷ Later studies, however, have consistently rated management forecasts as more accurate than those of analysts.

For instance, in a study of eighty-eight forecasts between 1970 and 1971, the MAPE of management forecasts was approximately 3.7% lower than that of the "consensus" analyst forecast. Another study of sixty-five forecasts between 1970 and 1973 also discovered that management forecasts were more accurate than analyst forecasts. Although these studies showed that management forecasts were generally better, neither originally indicated that the differences were statistically significant. For the case of the studies are generally better.

Later studies determined that management forecasts are significantly more accurate than analyst forecasts. In a comparative analysis of 156 forecasts covering 141 firms during the period 1971 to 1974 conducted by Jaggi, the MAPE for the entire period was 26.7% for management forecasts and 28.3% for analyst forecasts.²⁵² More importantly, for the entire period the

^{247.} See Richards & Fraser, The Predictability of Corporate Earnings, 28 ATLANTA ECON. REV. 43, 47 (1978).

^{248.} Typically, the analyst forecast used for comparison is the average of several analysts' forecasts. This method is necessary to facilitate comparison, but combining analysts' forecasts has also been found to improve predictive accuracy. See, e.g., Dimson & Marsh, supra note 228, at 1289 (finding true differences in predictive ability among analysts with improvement in accuracy over any single analyst by averaging all forecasts); Zarnowitz, An Analysis of Annual and Multiperiod Quarterly Forecasts of Aggregate Income, Output and the Price Level, 52 J. Bus. 1, 8 (1979).

^{249.} Basi, Carey & Twark, A Comparison of the Accuracy of Corporate and Security Analysts' Forecasts of Earnings, 51 ACCT. REV. 244, 249 (1976). In addition, 70% of analyst forecasts and 78% of management forecasts were within 10% of the actual results. Id. at 251.

250. Ruland. The Accuracy of Forecasts by Management and by Financial Analysts, 53.

^{250.} Ruland, The Accuracy of Forecasts by Management and by Financial Analysts, 53 ACCT. REV. 439, 446-47 (1978).

^{251.} After further analysis, Basi, Carey & Twark, supra note 249, did conclude that the differences were statistically significant at the .01 level. See Basi, Carey & Twark, A Comparison of the Accuracy of Corporate and Security Analysts' Forecasts of Earnings: A Reply, 52 ACCT. REV. 741 (1977). But see Albrecht, Johnson, Lookabill & Watson, A Comparison of the Accuracy of Corporate and Security Analysts' Forecasts of Earnings: A Comment, 52 ACCT. REV. 736 (1977) (criticizing Basi, Carey & Twark study). Two other studies also failed to findn statistically significant differences between management and analysis' forecasts. See Imhoff, The Representativeness of Management Earnings Forecasts, 53 ACCT. REV. 836, 846 (1978) (management forecasts slightly better than analyst forecasts, but difference not statistically significant); Imhoff & Pare, Analysis and Comparison of Earnings Forecast Agents, 20 J. ACCT. RES. 429, 436 (1982) (analysis of 46 forecasts between 1971 and 1974 showed lower average absolute errors for management than for analysts, but difference not statistically significant). The failure of Imhoff & Pare to find a statistically significant difference could be due to the small sample or the failure to take into account the sequence of disclosure by the two groups. See infra notes 257-268 and accompanying text.

^{252.} Jaggi, Comparative Accuracy of Management's Annual Earnings Forecasts, 7 Fin. MGMT. 24, 28 (1978) (covering 141 firms). The MAPE for management forecasts ranged from 13.9% in 1972 to 37.1% in 1971, while analysts' forecast errors ranged from 15.5% in 1972 to 47.8% in 1971. Id. Also, the distribution of error rates shows that fewer analyst forecasts

difference in accuracy between management and analyst forecasts was statistically significant at the .05 (5%) level.²⁵³ Moreover, management forecasts were more accurate in each of the four years, with statistical significance at the .01 (1%) level in 1971 and 1973 and at the .05 (5%) level in 1972 and 1974.254 Another study in 1979 involving 134 forecasts made during the 1967 to 1969 and 1972 to 1974 periods, also revealed the significantly greater accuracy of management forecasts.²⁵⁵ The MAPE for management forecasts was 11.7%, while analyst forecasts had an error rate of 13.8%, the difference between them being statistically significant at the .06 (6%) level.²⁵⁶ The utilization of a larger group of forecasts covering more firms over a longer time period in these two studies may have contributed to their finding a statistically significant difference in accuracy between these two groups. Nonetheless, the overall general superiority of management forecasting ability seems evident from these studies.

Measuring management and analyst forecast accuracy involves another important factor, that of disclosure sequence. Some of the earlier studies failed to account for the influence of the prior release of a forecast by either management or the analyst. This factor may be relevant to mandatory disclosure in tender offer situations if the management forecast was required to be disclosed in close proximity to an existing published analyst forecast. Recent research has more closely scrutinized the accuracy of analyst forecasts that predate and postdate management forecasts. Jaggi, for example, reported that the analyst forecasts that appeared before the management forecasts for the same firms were significantly less accurate, but no statistically significant difference in accuracy occurred when management forecasts predated the analyst forecasts.²⁵⁷ This finding implies that analysts improve their forecasts by incorporating the information in the management forecast into their predictions.

A more extensive study by Waymire supports Jaggi's results. The data sample consisted of 425 annual earnings forecasts by management and ana-

were in the lower error range. Out of 156 total forecasts, the number of management (analyst) errors within 5% was 47 (32), 73 (63) were within 10%, and 111 (102) were within 25%. Id. The analyst forecast was taken from Value Line's Investment Survey, which has been shown to be among the most accurate sources of analysts' forecasts. See Brown & Rozeff, The Superiority of Analysts Forecasts as Measures of Expectations: Evidence from Earnings, 33 J. Fin. 1, 12 (1978).

^{253.} Jaggi's use of the Wilcoxon Signed Rank Test to determine statistical significance enhances the validity of the results. The Wilcoxon Signed Rank Test, a nonparametric test, is particularly suited to matched pair analysis such as comparing two forecasts for the same firm. This methodology is generally more appropriate than the use of the parametric paired t-test. which assumes that the differences in the matched pairs (forecast versus actual results) are independent and drawn from the same population. Also, the Wilcoxon Test is not affected by extreme outliers in one group that might bias general average error comparisons. See Brown & Rozeff, supra note 252, at 3. For a description of the Wilcoxon Signed Rank Test, see D. HARNETT, STATISTICAL METHODS 704-05 (3d ed. 1982); C. HAWKINS & J. WEBER, STATIS-TICAL ANALYSIS: APPLICATIONS TO BUSINESS AND ECONOMICS 525-27 (1980).

^{254.} Jaggi, supra note 252, at 29, exhibit 2.
255. Barefield, Comisky & McDonald, Accuracy of Management and Security Analysts' Forecasts: Additional Evidence, 7 J. Bus. Res. 109 (1979).

^{256.} Id. at 114.

^{257.} Jaggi, supra note 252, at 29; see also Ruland, supra note 250.

lysts between 1970 and 1973.²⁵⁸ The author segregated the independent analysts' forecasts into two groups that *preceded* publication of the management forecasts by fourteen days or less (group 1) and more than fourteen days (group 2); and two groups that *postdated* management forecasts by fourteen days or less (group 3) and more than fourteen days (group 4). The results demonstrated that management forecasts were more accurate than analyst forecasts at statistically significant levels for both group 1 (.01 level) and group 2 (.02 level).²⁵⁹ No statistically significant difference (at a .05 level) in accuracy occurred between management forecasts and analyst forecasts in groups 3 and 4.²⁶⁰ These results show that management forecasts are significantly more accurate than prior analyst forecasts, and just as accurate as the postdated analyst forecasts.²⁶¹ One possible explanation for these findings is that management possessed inside information that allowed them to produce superior forecasts.²⁶²

A third study reviewed this timing disclosure issue, but extended the analysis to cover analyst forecasts twelve weeks before and after the management forecast.²⁶³ The authors found that management forecasts occurring twelve weeks after and up to four weeks before analyst forecasts were significantly more accurate at a .05 (5%) or less level.²⁶⁴ Furthermore, management forecasts published subsequent to analyst forecasts were significantly more

^{258.} Waymire, Additional Evidence on the Accuracy of Analyst Forecasts Before and After Voluntary Management Earnings Forecasts, 61 ACCT. REV. 129, 131 (1986). The management forecasts were taken from the Wall Street Journal, and the analyst forecasts were from Standard & Poor's Earnings Forecaster, which contains forecasts from independent analysts and Standard & Poor's in-house analysis. See supra note 227.

^{259.} Waymire, supra note 258, at 136, 137. These results occurred utilizing two alternative error metrics, an absolute percentage error metric and a raw absolute value error metric. Id. at 134-35.

^{260.} Id.

^{261.} Waymire also compared the accuracy of management forecasts with forecasts by Standard & Poor's in-house analysts with similar results. Consequently, neither set of analysts produced significantly more accurate forecasts than management even when they postdated the management forecasts. *Id.* at 140.

^{262.} See id. Inside information may consist of future plans, unaudited financial data, or other nonpublic information that impacts upon the firm's performance.

^{263.} Hassell & Jennings, Relative Forecast Accuracy and the Timing of Earnings Forecast Announcements, 61 ACCT. REV. 58 (1986). The management forecasts were gathered from the Dow Jones News Retrieval Service, a computerized service including stories from the Wall Street Journal, Barrons, and the Broad Tape. The analyst forecasts were from Zacks Investment Company's Icarus Service, which accumulates forecasts from up to 60 analysts. The procedures for dating analyst forecasts used by Zacks allows for greater precision in categorizing them relative to publication of the management forecasts. See id. at 62-63. Although the forecasts were from a more recent time period than Waymire's, the sample was smaller, covering 124 forecasts.

^{264.} Id. at 67. With management forecast release date being week 0, analyst forecasts released in weeks -12 to +2 were less accurate at a .01 level, weeks +3 and +4 were less accurate at a .05 level, weeks +5 to +8 showed no significant difference, and weeks +9 to +12 showed analysts to be more accurate at a .05 level. Id. Further analysis showed the more accurate analyst forecasts were primarily those appearing in the last two quarters before fiscal year end. Id. at 70. As a result, the superior accuracy was likely due to the accumulation of additional information on the company's actual results through interim earnings reports rather than forecasting ability. See, e.g., Abdel-khalik & Espejo, Expectations Data and the Predictive Value of Interim Reporting, 16 J. ACCT. Res. 1 (1978) (analysts revise forecasts based on interim earnings data).

accurate at a .01 (1%) level whether the forecasts were released early or late in the fiscal year. 265 The differential in accuracy varied somewhat according to the number of analysts following a company. Those companies with a higher number of analyst forecasts had significantly better accuracy for their forecasts released after the analyst forecasts, and the company forecasts were as accurate as the analyst forecasts that were released up to seven weeks after the management forecasts. 266 Firms with low analyst following (fewer than seven) had significantly more accurate forecasts for their forecasts occurring after and up to four weeks before the analyst forecasts; and the management forecasts were as accurate as the analyst forecasts released after the company's forecast. 267 These results are consistent with those of Waymire.

The comparative accuracy research indicates that management forecasts are generally more accurate than those of analysts. Possible explanations for this result include management's possession of nonpublic inside information, and its control over performance results. While manipulation of earnings reports or actual performance to coincide with forecasts may exist to some degree, 268 it is unlikely that this is a major factor because of the difficulty of effective manipulation on a continuous and widespread basis. The disclosure sequence studies indicate that management's superiority is probably rooted in its informational advantages because the accuracy differential declines after management releases its forecast. At this time, analysts are able to incorporate information contained both in the forecast itself and in contemporaneous financial disclosures that often accompany management forecasts. Management, however, retains some significant accuracy advantage for up to four weeks after its forecast disclosure, implying some continued superior utilization of current and inside information. Additionally, this lag period indicates some skepticism of management's forecasts by analysts who do not immediately adjust their forecasts to coincide with management.²⁶⁹ This research provides further support for the conclusion drawn from the stock return impact (information content) studies that management forecasts contain information valuable to shareholders.²⁷⁰

The implications of these studies for forecast disclosure in takeovers is twofold. First, at any point in time, management forecasts tend to be more

^{265.} Hassell & Jennings, supra note 263, at 69, 70.

^{266.} Id. at 72.

^{267.} Id.

^{268.} See, e.g., Kamin & Ronen, The Smoothing of Income Numbers: Some Empirical Evidence on Systematic Differences Among Management-Controlled and Owner-Controlled Firms, 3 ACCT. ORGANIZATIONS & SOC'Y 141 (1978); Kross, Earnings and Announcement Time Lags, 9 J. Bus. Res. 267 (1981); Ronen, Sadan & Snow, Income Smoothing: A Review, 1 ACCT. J. 11 (1977); Smith, The Effect of the Separation of Ownership from Control on Accounting Policy Decisions, 51 ACCT. Rev. 707 (1976).

^{269.} See, e.g., Hassell & Jennings, supra note 263, at 71 (indicating that analysts do not respond as quickly to "good news" management forecasts that exceed analyst forecasts as they do to "bad news" forecasts); R. Jennings, Reaction of Financial Analysts to Corporate Management Earnings per Share (Financial Analysts Research Foundation, Monograph No. 20, 1984) (analysts' forecast revisions are statistically correlated with release of management forecasts).

^{270.} See supra part II.c.2.

accurate than analyst forecasts. As a result, any contemporaneous analyst forecast will be less valuable than management's forecast. Moreover, mandating forecasts in a tender offer or merger situation allows management to utilize the most recent information, which will enhance their relative accuracy. Second, forecast information is relevant and management forecasts contain new information important to the shareholder's investment decision, especially with tender offers where strong time pressures exist. While analyst forecasts may provide information counterbalancing an extremely unreliable management forecast, they are not a perfect substitute.

Moreover, analyst forecasts may be few or nonexistent for a particular target company. The 1977 Advisory Committee on Disclosure noted that many public companies have no consistent analyst following.²⁷¹ Analysts tend to provide forecasts for larger firms that have higher investor interest.²⁷² The major analyst forecast services cover between 1,500 and 3,000 companies, with substantial overlap.²⁷³ As a result, an analyst forecast many not be available to shareholders or may be out-of-date. Lastly, the accuracy of consensus analyst forecasts decreases correspondingly with the number of individual analyst forecasts.²⁷⁴ Both the superior accuracy of management forecasts and the limited availability of analyst forecasts weigh in favor of mandatory disclosure of management forecasts in tender offers and takeovers.

2. Comparison of Management and Analyst Forecasts with Time-Series Models

a. Analyst Forecasts Versus Models

Statistical models provide a second alternative source of forecasts for shareholders. Models represent a replicable methodology that is not dependent on an individual forecasting agent. Therefore, if a model can predict

^{271.} See REPORT ON DISCLOSURE, supra note 13, at XXII-XXIII; see also Reckers & Taylor, supra note 172, at 29-30 (only 22% and 46% of surveyed analysts followed companies with capitalization less than \$50 million and \$100 million, respectively).

^{272.} See Reckers & Taylor, supra note 172, at 29 ("Given the limited number of stocks followed per analyst, and a probable appreciable overlap of coverage, service by the financial analyst community seems highly restricted to relatively large companies."). See, e.g., Waymire, supra note 258, at 133-34. In his study, Waymire noted that over one-third of the 425 forecast periods involved one analyst, while only 8% had five or more. Id. at 133. Also, 62% of the smaller firms had one analyst forecast available compared to 37% of the larger firms. Id. The NYSE companies, which were typically larger, had more analyst forecasts. Id. at 134; see also Givoly, The Formation of Earnings Expectations, 60 ACCT. REV. 372, 375 (1985) (in study including 6,020 forecasts between 1969 and 1979 covering 424 NYSE companies, only 58 companies had forecasts in at least 7 of the 11 years); Imhoff & Pare, supra note 251, at 431 (more analysts' forecasts for NYSE firms than for AMEX, Over-the-Counter (OTC), or locally traded firms).

^{273.} These include Standard & Poor's Earnings Forecaster (forecasts for approximately 1,500 companies by S&P internal analysts and 70 other analysts), Value Line's Investment Survey (covering approximately 1,600 companies with forecasts by internal analysts), and Lynch, Jones, and Ryan's Institutional Brokers Estimation Service (consensus earnings forecasts for approximately 1,500 companies). Another recent source is Zacks Investment Company's Icarus Service, which covers approximately 3,000 firms with forecasts by up to 60 analysts.

^{274.} See supra note 248; notes 266-267 and accompanying text.

earnings more accurately than analysts or management, disclosure by the latter sources offers little benefit subject to any cost differentials. Statistical models have been utilized for comparative studies because they provide an understandable process for cross-sectional comparisons of various forecasting methods available to management and analysts. They also are more susceptible to further examination for improvement of accuracy. In this area, researchers have concentrated on time-series models, which use primarily data of past results of the particular item being projected. Partly due to the greater number of analyst forecasts, more research has taken place comparing projections derived from models to those by analysts than to forecasts by companies. Nonetheless, these comparisons indirectly provide information relevant to management forecasts given that other studies show managements' superior accuracy over analysts.²⁷⁵

After reviewing the early research comparing models with both analyst and management forecasts, one pair of commentators stated that the evidence was inconclusive.²⁷⁶ For instance, some early studies showed insignificant differences in accuracy between models and analyst forecasts. One of the first studies was by Cragg and Malkiel, who reviewed 185 five-year forecasts made in 1962 and 1963 by five investment firms and two sets of naive models. They concluded that the analysts' performance was only slightly better than that of the models.²⁷⁷ These results were supported by a 1972 study by Elton and Gruber examining annual forecasts by three groups of analysts and the best of nine naive models, which showed no statistically significant difference in accuracy.²⁷⁸

Later more comprehensive studies contradict these findings and indicate that analysts tend to be more accurate than statistical models. A 1977 study by Richards, Benjamin, and Strawser comparing three naive models to analyst annual earnings forecasts for the 1969 to 1972 period for fifty firms and the 1972 to 1976 period for ninety-two firms revealed that the analysts generally were more accurate.²⁷⁹ The MAPE for the analysts for the 1969 to 1972 period was 18.1%, while the models errors ranged from 20.8% to 26.6%.²⁸⁰ Similarly, the analysts had a MAPE rate of 24.1% and the models had error rates of 28.9% to 40.9% for 1972 to 1976.²⁸¹ These differences

^{275.} See supra part III.B.1.

^{276.} See Abdel-Khalik & Thompson, Research on Earnings Forecasts: The State of the Art, 1 ACCT. J. 180, 202 (1977-1978).

^{277.} Cragg & Malkiel, The Consensus and Accuracy of Some Predictions of the Growth of Corporate Earnings, 23 J. Fin. 67, 77 (1968) (involved a no-change model and change-equal-to-past-change models).

^{278.} See Elton & Gruber, Earnings Estimates and the Accuracy of Expectational Data, 18 MGMT. SCIENCE B-409 (1972). The analysts included a large pension fund, an investment advisory service, and a large brokerage house. Id. at B-418. The nine models consisted of two variations of moving averages, two linear regressions, four exponential smoothing models, and a naive model. Id. at B-410 to -414. The brokerage house and pension fund outperformed the best model, but the difference was not significant at even a .20 level. Id. at B-419.

^{279.} Richards, Benjamin & Strawser, supra note 226, at 81. The three naive models projected based on: (1) no change in earnings, (2) constant dollar growth, or (3) constant percentage growth. *Id*.

^{280.} Id. at 85.

^{281.} Id. at 82.

were statistically significant at the .05 (5%) level for two of the five years in the later period as to the most accurate model and for three and four of the five years as to the other two models.²⁸² Also, the error distribution range revealed that the analysts had a greater incidence of smaller errors. Half of the analysts errors were within 10%; whereas 34.7% of the best model's errors were in this category.²⁸³

Another extensive study of 6,020 annual forecasts between 1969 and 1979 involving 424 companies also revealed the superior performance of analysts over two more simple extrapolation models, a univariate time-series model (Model 1) and a linear trend regression model (Model 2).²⁸⁴ The MAPE was 16.4% for the analyst forecast over the entire period, 19.3% for Model 1 and 20.3% for Model 2.²⁸⁵ The difference between the analyst forecast and each of the two models was statistically significant at the .01 (1%) level.²⁸⁶ Analyst forecasts were less accurate than Model 1 in only two of the eleven years and were less accurate than Model 2 in only one year.²⁸⁷ The analyst forecast error range of 10.4% to 25.9% was also lower and narrower than the error ranges of the two models.²⁸⁸

Two studies comparing analyst forecasts to more sophisticated time-series models also indicate the superiority of analysts to extrapolation models. One study by Brown and Rozeff reviewed quarterly forecasts (one to five quarters ahead) between 1972 and 1975 by an investment service, two simple models, and the more sophisticated Box-Jenkins method.²⁸⁹ The hypothesis

^{282.} Id. at 81, 82. No test for statistical significance existed for the 1969-1972 period.

^{283.} Id. at 82; see also Brandon & Jarrett, Accuracy of Externally Prepared Forecasts, REV. BUS. & ECON. RES., Fall 1977, at 35. The authors compared analyst forecasts for 27 firms between 1970 and 1974 with seven naive models using six different error measuring-metrics. In an average rank test, analyst forecasts were more accurate than any of the models regardless of which error metric was applied. Id. at 41-42. The differences were statistically significant for the general error metrics, but not for the relative error metrics. Id. at 43-44. The authors stated, however, "we should still conclude for all practical purposes . . . the mean forecasting error . . . [for analyst] forecasts is less than the mean error of all naive forecasting models." Id. at 45.

^{284.} Fried & Givoly, Financial Analysts' Forecasts of Earnings: A Better Surrogate for Market Expectations, 4 J. Acct. & Econ. 85 (1982). The univariate time-series model was a submartingale modified by an exponential smoothing process for years following large fluctuations in earnings. Id. at 89-90. The regression model involved a linear relationship between the expected change in market earnings using the average earnings of companies in the Standard & Poor's Index as proxy for the market. Id. at 89. The expected change in market earnings was estimated as the average growth over the prior five years. Id. See also Bamber, The Information Content of Annual Earnings Releases: A Trading Volume Approach, 24 J. Acct. Res. 40, 46-47 (1987) (finding analyst annual forecasts to be statistically significantly better than random walk model forecast for sample of 397 firms); Bhaskar & Morris, The Accuracy of Brokers' Profit Forecasts in the UK, 14 Acct. & Bus. Res. 113 (1984) (finding accuracy of analyst forecasts for English companies superior to three naive models).

^{285.} Id. at 91.

^{286.} Id. at 92. Analysts were also statistically significantly better at a .01 level for both positive prediction errors (actual earnings above expectation) and negative prediction errors (actual earnings below expectation). Id.

^{287.} See id. at 91. In none of these instances were the differences statistically significant. 288. See id.

^{289.} Brown & Rozeff, supra note 252 (covering 50 firms). The sample forecast size ranged from 200 to 50 depending on the period. The analyst forecast was taken from Value Line's Investment Survey. The two naive models were a seasonal martingale (no change from the

of equal accuracy for the annual forecasts of all four agents was rejected at the .01 (1%) significance level in three of the four years.²⁹⁰ Comparisons of individual sources showed the annual analyst forecast was more accurate in every instance with the difference being statistically significant in eight out of twelve situations.²⁹¹ With quarterly forecast evaluations, again equal accuracy among the four methods was rejected in fourteen of sixteen quarters at statistically significant levels.²⁹² Out of fifty-two comparisons, the analyst forecast was more accurate in forty-five, with statistical significance at a .05 (5%) level (or better) in thirty-three instances.²⁹³ The analyst forecasts' general superiority was not confined to any model, year, or forecast horizon.

A more recent study also provides evidence of the superiority of analyst forecasts to three universal variants of the sophisticated Box-Jenkins procedure, which have been shown to be more accurate than firm-specific Box-Jenkins models.²⁹⁴ This study, comparing quarterly forecasts for 233 firms between 1975 and 1979, found the analyst forecasts to be more accurate than the three sophisticated models for one quarter, two quarters, and three quarters ahead in 100%, 91%, and 81% of the instances, respectively.²⁹⁵ In addition, the analyst forecast errors were distributed in a more narrow range than the models' errors.²⁹⁶ More important, the analysts' superiority was statistically significant at the .01 (1%) level for all three forecast horizons as to each of the models.²⁹⁷ This research demonstrates the generally superior accuracy of analyst forecasts over sophisticated time-series models for shortterm horizons.²⁹⁸

same period a year before) and a seasonal submartingale (same as martingale except add change of latest period over that of previous year). Id. at 5. The Box-Jenkins method creates a firm specific model for each period. See generally G. Box & G. JENKINS, TIME-SERIES ANAL-YSIS: FORECASTING AND CONTROL (rev. ed. 1976); C. NELSON, APPLIED TIME-SERIES ANALYSIS FOR MANAGEMENT FORECASTING (1973) (providing a more accessible explanation of Box-Jenkins methodology); Mabert & Radcliffe, A Forecasting Methodology as Applied to Financial Time-Series, 49 ACCT. REV. 61 (1974).

290. Brown & Rozeff, supra note 252, at 6.

291. Id. at 6-8. In two of the four years, the analyst forecast was not statistically significantly better than the Box-Jenkins forecast.

292. Id. at 8. The null hypothesis of equal accuracy was rejected in 13 quarters at the .01 level and in one quarter at the .05 level. Id. at 9, table 3.

293. Id. at 8, 10. In only one instance, a Box-Jenkins forecast, was a model forecast statis-

tically significantly more accurate than the analyst forecast. See id.

294. Brown, Hagerman, Griffin & Zmijewski, Security Analyst Superiority Relative to Univariate Time-Series Models in Forecasting Quarterly Earnings, 9 J. ACCT. & ECON. 61 (1987). The study involved analyst forecasts from the Value Line's Investment Survey, and the three statistical models developed by Brown and Rozeff, Foster, and Watts and Griffin. See Brown & Rozeff, Univariate Time-Series Models of Quarterly Accounting Earnings Per Share: A Proposed Model, 17 J. ACCT. RES. 179 (1979); Foster, Quarterly Accounting Data: Time-Series Properties and Predictive Ability Results, 52 ACCT. REV. 1 (1977); Griffin, Time-Series Behavior of Quarterly Earnings: Preliminary Evidence, 15 J. ACCT. RES. 71 (1977).

295. Brown, Hagerman, Griffin & Zmijewski, supra note 294, at 67-68

296. Id. For example, for the one quarter ahead forecasts, approximately 75% of the analyst forecasts were within 10% of the actual results compared to approximately 58% for the best model. Id. at 69-71.

297. Id. at 72-74.

298. See Collins & Hopwood, A Multivariate Analysis of Annual Earnings Forecasts Generated from Quarterly Forecasts of Financial Analysts and Univariate Time-Series Models, 18 J. ACCT. RES. 390 (1980). The authors reviewed quarterly forecasts (one to four quarters ahead) The mixed results of this research have several possible explanations. First, the forecasts in the early studies involved only a few years.²⁹⁹ Second, Cragg and Malkiel reviewed five-year ahead forecasts, which are longer than the mere common annual and quarterly forecasts in the later studies. Third, the later studies utilized more recent data and offered a broader spectrum of analysts. Analysts' forecasting ability probably has improved over time and use of larger numbers of analysts in a "consensus" forecast also improves accuracy. Therefore, the results of the later studies demonstrating the superior accuracy of analyst forecasts over the statistical models tested are more persuasive.

b. Management Forecasts Versus Models

Fewer studies directly compare management forecasts with statistical models. Those that have been conducted are consistent with the research comparing analysts and models, which indicates the inferiority of statistical models. An early study in 1972 reviewing forecasts by forty-nine companies and six naive models for one year revealed that the former were generally more accurate.³⁰⁰ A later study by Ruland involving a longer, four-year period and forecasts by sixty-five firms supports this position.³⁰¹ Ruland utilized a simple regression extrapolation model expected to be suitable for a large number of investors.³⁰² Management forecasts were more accurate than the model in 68% of the instances, which was statistically significant at the .01 (1%) level.³⁰³

A third study by Hagerman and Ruland compared management forecasts with a larger number of models. The authors analyzed ninety-eight annual

for 50 companies by Value Line analysts in the 1970-1974 period and four variations of the Box-Jenkins model. The MAPE for the analyst forecast was lower than each of the models for all of the forecast periods. *Id.* at 398. The differences were statistically significant at the .01 level for two of the models. *Id.* at 401. Also, the differences among the forecasts for the entire period was statistically significant at the .01 level, which supports the finding of the general superiority of the analyst forecast. *See id.* at 400-01. *But see* Imhoff & Pare, *supra* note 251 (finding no statistically significant difference between analysts and four Box-Jenkins based models after adjusting for earnings variability).

299. Cragg and Malkiel's study covered forecasts made in only two years, 1962 and 1963. Elton and Gruber's forecasts were made during a three-year period, 1964 through 1966. Also, Cragg and Malkiel's study suffered from methodological problems such as the use of a definition of the earnings variable that was imprecise and not uniform across the forecasts sampled.

300. Copeland & Marioni, Executives Forecasts of Earnings per Share Versus Forecasts of Naive Models, 45 J. Bus. 497 (1972). The MAPE for the management forecasts was 20.1%, while the MAPE was 27.9%, 40.3%, and 39.7% for the three annual earnings models. Id. at 505; see also Green & Segall, The Predictive Power of First Quarter Earnings Reports, 40 J. Bus. 44 (1967) (finding management and models to be similar in accuracy). But see Holton, Discussion of the Predictive Power of First Quarter Earnings Reports: A Replication, 4 EMPIRICAL RES. ACCT.: SELECTED STUDIES 1966, at 37 (1966); Welsh, Discussion of the Predictive Power of First Quarter Earnings Reports: A Replication, id. at 40 (criticizing the findings of Green and Segall).

301. See Ruland, supra note 250 (covering 1970 to 1973). The four years included both poor and normal economic periods, unlike the Copeland and Marioni study. Id. at 445-46.

302. Id. at 444. The model estimated the forecasted change in earnings as a linear function of the change in earnings over the prior six years. Id.

303. Id. at 445. Ruland used the Wilcoxon Matched Pairs Signed Ranks Test to determine the significance level. See supra note 253.

corporate forecasts for the five-year period 1969 through 1973 with projections of four models including the no-change model and three simple regression-based models.³⁰⁴ The results showed that the management forecasts were more accurate than each of the four models.³⁰⁵ Furthermore, managements' superior accuracy over each of the models occurred in four of the five years, illustrating that no particular year dominated the overall results.³⁰⁶ Company forecasts also had fewer large errors than the models.³⁰⁷ These results confirm those of the other studies.³⁰⁸

Combining the results of the comparative studies demonstrates the general accuracy advantage of management forecasts over both analysts and extrapolative statistical models. This outcome is consistent with the information content studies that show investors react to management forecast disclosure. Neither analyst nor model forecasts provide adequate substitutes for management forecasts. Accuracy should not be the sole criterion for determining a disclosure policy, but the empirical evidence on the accuracy of management forecasts relative to other available alternative sources for forecasts indicates that shareholders would benefit from increased disclosure.

3. Representativeness of Voluntary Management Forecasts

The above studies of management forecasts all involved voluntary fore-

^{304.} Hagerman & Ruland, The Accuracy of Management Forecasts and Forecasts of Simple Alternative Models, 31 J. Econ. & Bus. 172, 173 (1979). The four models were: (1) simple time trend regression; (2) linear time trend adjusted for most recent earnings change; (3) no change; and (4) regression based on expected change in general corporate profits. Id. at 172-73.

^{305.} Id. at 175. The accuracy and significance levels varied from .02 to .07 depending on the model. Id.

^{306.} Id.

^{307.} See id. at 174-75 (tables 1 and 2 illustrate that company error percentages were in the lower fractiles). Also, the median management forecast error (7.4%) was below that of the models (13.1%-14.6%). Id.

^{308.} But cf. Kodde & Schreuder, Forecasting Corporate Revenue and Profit: Time-Series Models Versus Management and Analysts, 11 J. Bus. Fin. & Acct. 381 (1984) (involving Dutch firms) (reporting no significant difference between management, analyst, and model forecasts using random walk and exponential smoothing models for 38 firms for 1980); Nichols & Groomer, A Study of the Relative Accuracy of Executives' Estimates of Earnings, 15 ABACUS 113 (1979) (additive exponential smoothing model was more accurate than management forecasts for 87 firms between 1968 and 1970). Both of these studies are limited by the small sample sizes and the few number of years analyzed. Two other studies comparing management forecasts with more sophisticated Box-Jenkins models are equivocal. A study by Lorek, McDonald, and Patz found that Box-Jenkins forecasts were superior in some instances, but only for those management forecasts in the least accurate range, with no differences between the two sources for forecasts considered relatively accurate. See Lorek, McDonald & Patz, A Comparative Examination of Management Forecasts and Box-Jenkins Forecasts of Earnings, 51 ACCT. REV. 321 (1976). In another study by Imhoff and Pare, management forecasts were more accurate than four variations of the Box-Jenkins model based on an average rank test and MAPE. See Imhoff & Pare, supra note 251, at 435. Additionally, these differences were statistically significant at the .05 level or better as to three of the models. Id. at 436. After adjusting the forecast errors by the standard deviation of the past earnings series, however, no statistically significant difference resulted among any of the forecast sources and management forecasts were only slightly better. *Id.* The small sample of only 46 forecasts may have contributed to these conflicting results. In addition to the unclear superiority of Box-Jenkins models, the complexity of this method and its general inferiority to simpler models makes its usefulness questionable for public forecasts.

casts. The possible motivations for voluntary disclosure of earnings forecasts are unclear.³⁰⁹ Nonetheless, the explanatory implications derived from these studies may vary to the extent the disclosures are unrepresentative of the type of disclosure that would occur under a mandatory system. Absolute resolution of this problem is impossible, but research comparing firms that do and firms that do not disclose earnings forecasts tends to support mandatory disclosure in takeover situations.

Since direct comparison of forecasts by disclosure and nondisclosure firms is impractical, research comparing forecasting firms and nonforecasting firms has concentrated on several factors believed to influence the ability to make accurate forecasts. These factors include variability of income, firm size, and market risk. A study by Imhoff reviewed the variability of earnings, systematic market risk, and the accuracy of analyst forecasts. Tomparing a random sample of 100 firms to ninety-two forecast disclosure firms, he discovered that the mean of the coefficient of variation of four earnings variables was lower for the disclosure firms. Haso, time-series tests of the earnings variables over an eleven-year period showed disclosure firms had a smoother earnings history. Imhoff also reported that the average systematic market risk of the disclosure firms exceeded that of the companies in the Standard & Poor's index. The study also showed that analyst forecasts for nondisclosure firms tended to be more variable and less accurate than both management and analyst forecasts for the disclosure firms.

A more recent study by Cox supports the general belief that disclosure and nondisclosure firms differ in certain respects. This study analyzed approximately 200 pairs of firms with respect to earnings variability, systematic market risk, and size.³¹⁵ Consistent with Imhoff's results, Cox found that the coefficients of variation of net earnings and earnings per share differed between the two groups at statistically significant levels of confi-

^{309.} See, e.g., Ajinka & Gift, supra note 220 (suggesting disclosure provides technique for management to correct existing unrealistic estimates of future earnings in market); Trueman, Why Do Managers Voluntarily Release Earnings Forecasts?, 8 J. ACCT. & ECON. 53 (1984) (postulating one motive as managers' desire to inform investors of their ability to anticipate future changes).

^{310.} Imhoff, supra note 251.

^{311.} Id. at 844. The author defined the coefficient of variation as the standard deviation of the earnings variable divided by its mean value. The coefficient of variation provides a measure of the variability of the item over time. The four earnings variables consisted of net income, net income before extraordinary items, operating income, and earnings per share. Id. at 842.

^{312.} Id. at 844.

^{313.} *Id.* at 844-45. The value of this finding has been shown to be questionable. *See infra* notes 314-315 and accompanying text. In addition, the ex post stock returns of the disclosure firms were generally more volatile than the returns of the Standard & Poor's Index for the 1971 to 1974 period.

^{314.} Imhoff, supra note 251, at 846. The variance in the relative prediction error for the analyst forecasts was statistically significantly higher for the nondisclosure firms compared to the forecasts by management (at a .01 level) and analysts (at a .05 level) for disclosure firms. *Id.* The MAPE was also higher, but not at a statistically significant level, which weakens the importance of this difference.

^{315.} Cox, Further Evidence on the Representativeness of Management Earnings Forecasts. 60 ACCT. REV. 692 (1985).

dence.³¹⁶ Furthermore, disclosure firms were generally larger than nondisclosure firms.³¹⁷ Contrary to the impression in Imhoff's study, however, the systematic market risk was not significantly different between the two groups.³¹⁸ Given evidence of the positive relationship between earnings variability and systematic risk,³¹⁹ Cox held the coefficient of variation and size variables constant when measuring market risk, which resulted in the more precise finding. Therefore, any differences in risk between the two groups was already reflected primarily in the differences in earnings variability.

In a study by Jaggi and Grier of eighty forecast firms and a similar group of nondisclosure firms, the authors made comparisons of earnings variability and expected growth rate.³²⁰ They compared the expected earnings growth rates of the two groups based on four statistical models, finding no significant difference between them.³²¹ There was, however, a significant difference in the variance of *actual* earnings growth rates over the preceding ten years, with the forecast group having more stable growth rates.³²² Combining these two elements showed that variability in earnings was the major factor differentiating the two groups, with no demonstrated difference in unexpected growth rates.³²³

While these studies consistently demonstrate differences between disclosure and nondisclosure firms as to variability of earnings and size, the effect

^{316.} Id. at 698. The significance levels varied from .035 to .042. Id. No statistically significant difference in the coefficient of variation existed for operating income before depreciation, indicating that the variability in earnings was attributable primarily to much lower fixed costs as opposed to variable costs for the nondisclosure firms. Id.

^{317.} *Id.* This finding was reliable at a .002 significance level. *See also* Hagerman & Ruland, *supra* note 304, at 177-78 (finding forecast firms to be larger with .01 level of significance).

^{318.} Cox, supra note 315, at 698-99. The null hypothesis of equal betas could not be rejected at the .05 level of significance. See also Hagerman & Ruland, supra note 304, at 178 (finding betas close to 1.0 for 69 forecast firms).

^{319.} See, e.g., Beaver, Kettler & Scholes, The Association Between Market Determined and Accounting Determined Risk Measures, 45 ACCT. REV. 654 (1970); Bowman, The Theoretical Relationship Between Systematic Market Risk and Financial (Accounting) Variables, 34 J. Fin. 617 (1979). Cox found a statistically significant negative correlation between beta and size, and a positive correlation between beta and earnings variability. Cox, supra note 315, at 694. Evidence showed a slight negative association between size and earnings variability, but not at statistically significant levels. Id.

^{320.} Jaggi & Grier, A Comparative Analysis of Forecast Disclosing and Non-Disclosing Firms, FIN. MGMT., Summer 1980, at 38. The nondisclosure group was made up of firms appearing on the COMPUSTAT tape and were selected so as to be similar to the forecast firms in terms of assets, yearly sales, debt equity ratios, sales asset ratios, rate of return, beta, and total risk. Id. at 40-41.

^{321.} Id. at 40-41. The four models were: (1) change equal to same dollar amount as previous year; (2) change equal to same percentage growth as previous year; (3) change equal to average growth over prior ten years; and (4) no change from previous year. Id. at 39.

^{322.} Id. at 41-42. Statistical significance was at the .05 level.

^{323.} Id. The differences in the two groups as to the existence of a high or low unexpected growth rate varied among the models. Id. at 42-43. High growth rates existed for both groups with two models, while both groups had low growth rates for the other two models. These differences might be due to the weakness of the models. These statistics indicate, however, that forecast disclosure firms are not necessarily firms that tend to exceed historical earnings patterns. Cf. Penman, supra note 207, at 157 (nondisclosure firms in this study tended to have relatively poor earnings prospects and low security returns).

of these factors on forecast accuracy is somewhat uncertain. The research has produced conflicting evidence. Imhoff found a significant positive association between earnings variability and management forecast errors.³²⁴ He also found statistically significant lower error variance and generally lower mean errors in management and analyst forecasts for disclosure firms than in analyst forecasts for nondisclosure firms.³²⁵ In a more recent study, Elton, Gruber, and Gultekin analyzed the relationship between analyst forecast error and uncertainty about earnings growth. Using dispersion or the standard deviation among the analysts' forecasts as a proxy for uncertainty, they discovered a statistically significant positive relationship between forecast error and uncertainty.³²⁶ A probable cause of analysts' uncertainty is earnings variability. Barefield and Comiskey have also reported a positive relationship between analyst earning forecast errors and systematic market risk,³²⁷ which in turn is positively related to earnings variability.³²⁸

Some evidence to the contrary implies little or no correlation between forecast accuracy and earnings variability or systematic market risk. For example, Imhoff reported no significant relationship between forecast accuracy and systematic market risk for the disclosure firms in his study.³²⁹ Additionally, Jaggi and Grier identified different earnings variability for disclosure and nondisclosure firms of similar size and market risk, but no statistically significant difference in expected earnings growth.³³⁰ This latter finding rested on the difference between actual growth rates and projected growth rates derived from four statistical models. The finding provides some weak evidence of similarity in the ability of at least these common models to forecast the earnings of these two groups of firms. This outcome might have been due, however, to an insufficiently large difference in the earnings variability of the two groups.³³¹

Similarly, contrasting evidence exists on the relationship between firm size and forecast accuracy. Hagerman and Ruland reported a statistically significant association between increasing management forecast accuracy and larger size.³³² But they did not isolate size from other potential causes of

^{324.} See Imhoff, supra note 251, at 844 n.11, 846.

^{325.} Id. at 846.

^{326.} Elton, Gruber & Gultekin, Professional Expectations: Accuracy and Diagnosis of Errors, 19 J. Fin. & QUANTITATIVE ANALYSIS 351, 361-62 (1984).

^{327.} See Barefield & Comiskey, The Association of Forecast Error with Other Risk Measures, 2 J. Bus. Fin. & Acct. 315 (1975).

^{328.} See supra note 319 and accompanying text.

^{329.} Imhoff, supra note 251, at 845. This finding is rather dubious given his other findings of a correlation between earnings variability and nondisclosure analyst forecast errors.

^{330.} See supra notes 321-322 and accompanying text. The selection of firms of similar size and beta may have resulted in an uncharacteristic sample of nondisclosing firms, which cautions against generalizing the results.

^{331.} The selection of disclosing and nondisclosing firms with similar betas, 1.08 and 1.03, respectively, supports this possible explanation because of the close association between earnings variability and beta. See supra note 319.

^{332.} See Hagerman & Ruland, supra note 304, at 176-77 (statistical significance at the .01 level). See also Basi, Carey & Twark, supra note 249, at 247. Some possible reasons for greater forecast accuracy by larger firms include better data bases, expertise, and financial resources for generating forecasts.

differences in forecast accuracy. Also, size was not a dominant factor in terms of relative forecast accuracy between management and the forecast models. When analyzing the interaction of size and forecast horizon on accuracy, they discovered that management outperformed the four models for both large and small companies for short horizon forecasts, but not for small company, long horizon forecasts.³³³ This result suggests that factors other than size, such as earnings variability, which is not as significant in long-term as in short-term forecasts, might have influenced their results. Another recent study of 397 firms between 1977 and 1979 found a statistically significant (at a .001 level) inverse or negative relationship between firm size and analyst forecast accuracy for the sample as a whole.³³⁴ This study, however, also indicated that this inverse relationship between size and analyst forecast accuracy did not exist for one group of non-NYSE firms in the sample.³³⁵

Meanwhile, a study by Jaggi revealed no significant relationship between management or analyst forecast errors and increasing firm size.³³⁶ He divided the sample firms into six size categories and found larger mean percentage errors in the two smallest and the largest firm groups.³³⁷ This pattern suggests that Hagerman and Ruland's results may have been biased by the much larger errors in the smallest firms, while the increasingly larger firms had less significant differences in accuracy. Although Jaggi found management forecasts significantly more accurate than analyst forecasts overall, differences in accuracy between them was statistically significant for only three of the six size groups.³³⁸ Therefore, no trend of higher accuracy accompanied larger size.

Although ambiguous, the weight of evidence not surprisingly tends to indicate that higher earnings variability negatively affects forecast accuracy. The association between firm size alone and forecast accuracy is more dubious. Furthermore, the research does not reveal the extent of the increased inaccuracy related to these factors. While the consistent finding of earnings variability and size differences between disclosure and nondisclosure firms implies that the latter will probably produce less accurate forecasts, this effect does not seriously weaken the argument for mandatory disclosure. Absolute forecast accuracy is subsidiary to relative forecast accuracy and tangential to the main issue, the relevance of management forecasts.

^{333.} Hagerman & Ruland, supra note 304, at 176.

^{334.} Bamber, The Information Content of Annual Earnings Releases: A Trading Volume Approach, 24 J. Acct. Res. 40, 53 (1986).

^{335.} Id. at 55. The study segregated the sample by both exchange membership and fiscal year-end. The group exhibiting no significant relationship between size and forecast accuracy included those firms traded on the AMEX and OTC with fiscal year-ends of December 31.

^{336.} Jaggi, Further Evidence on the Accuracy of Management Forecasts Vis-á-Vis Analysts' Forecasts, 55 Acct. Rev. 96 (1980); see also Daily, supra note 246, at 692 (finding no relationship between management forecast accuracy and size of firm based on both revenue and net income); Rothe, Effectiveness of Sales Forecasting Methods, 7 INDUS. MKTG. MGMT. 114, 117 (1978) (sales forecasting error did not vary inversely with firm size for firms surveyed).

^{337.} Jaggi, supra note 336, at 100. The smallest errors occurred in the third and fifth largest size categories.

^{338.} Id. The three groups were the second, third, and fifth groups in ascending order of size.

Moreover, the earnings variability and size differences between the two groups of firms militates in favor of mandatory disclosure. First, earnings variability would have a similar impact on the accuracy of management and analyst forecasts; and the variability probably would have a lesser negative effect on management's forecasting ability because of management's greater knowledge of the company's business. Second, management forecasts would tend to lessen the uncertainty associated with firms with volatile earnings, thereby at least narrowing the range of investors' earnings expectations.

4. Firm Size and the Value of Information

Firm size also is associated with the value of new information to investors. Typically, the amount of public information available is related to the size of a firm. Factors responsible for this phenomenon include production of information within the firm and incentives for external producers. Larger firms have greater resources to produce financial information.³³⁹ Financial analysts and business writers concentrate on larger firms, which have more extensive investor interest, and thus provide a more lucrative return on information production.³⁴⁰ Greater production and dissemination of information increases investors' ability to evaluate independently firms and stock values, so that additional disclosures by company management become marginally less important.³⁴¹ Conversely, where less public information about a firm exists, disclosures by management take on heightened importance.

For instance, in a study of NYSE and Over-the-Counter (OTC) firms, Grant demonstrated that the information content of company disclosures is related to the amount of existing public information available on the firm. 342 The OTC firms had fewer published interim news items than the NYSE firms. 343 Grant found that the stock market reacted much more strongly to annual earnings announcements by the OTC companies than the NYSE companies. 344 The differences between the information content measures of the two groups during the week of the announcement was statistically signif-

^{339.} See, e.g., Alchian, Information Costs Pricing and Resources Unemployment, 7 W. ECON. J. 109 (1969).

^{340.} See, e.g., Stern & Norby, Investment Research and Market Structure: Today and Tomorrow, Fin. Analysts J., Jan.-Feb. 1972, at 24.

^{341.} See, e.g., Gonedes, Corporate Signaling, External Accounting and Capital Market Equilibrium: Evidence on Dividends, Income, and Extraordinary Items, 16 J. ACCT. RES. 26, 29 (1978). This does not mean that management disclosures on items for which alternative sources exist are totally unimportant because this information may possess superior reliability or incremental informational value. See, e.g., Foster & Vickrey, The Incremental Information Content of the 10-K, 53 ACCT. REV. 921 (1978). Company disclosures may also have a cost advantagecompared to generation of the same information by external sources. All of these factors are relevant to disclosure of management forecasts.

^{342.} Grant, Market Implications of Differential Amounts of Interim Information, 18 J. ACCT. RES. 255, 267 (1980). The sample included 211 OTC and 101 NYSE firms. Id. at 259. 343. Id. at 256-57.

^{344.} Id. at 262-63. Both the mean (2.596) and the median (1.066) information content measures based on abnormal price variability for the OTC firms during the week of the earnings announcement exceeded those (mean of 1.282, median of .454) of the NYSE firms. Id.

icant at a .001 level.³⁴⁵ Also, the study indicated some relationship between the number of published news items and the size of the market reaction to the announcements.³⁴⁶

Two more recent studies provide even stronger evidence that information content of earnings disclosure is associated with the size of the firm. One study by Zeghal involving over 1,400 companies indicated an inverse relationship between firm size and the informational content of company announcements.³⁴⁷ He analyzed the information value based on "adjusted returns" and on trading volume.³⁴⁸ After categorizing the sample into small, medium, and large firms based on market value, Zeghal found the informational value of the announcements based on adjusted returns differed significantly for each category.³⁴⁹ In addition, the informational value of the announcements increased as the size of the company decreased.³⁵⁰

A second study by Atiase of earnings announcements involving 200 firms also revealed an inverse relationship between stock market reaction and firm size. Analyzing weekly abnormal returns surrounding release of the earnings announcements relative to average returns during the predisclosure period, Atiase found stock price movements more than two times above average during the week of disclosure for the smaller firms.³⁵¹ In addition,

^{345.} Id. at 265. The median of the information content measure for the OTC firms was significantly greater than for the NYSE firms. Id.

^{346.} See id. at 266.

^{347.} Zeghal, Firm Size and the Informational Content of Financial Statements, 19 J. Fin. & QUANTITATIVE ANALYSIS 299 (1984). The study reviewed 16,119 announcements of quarterly and annual financial statements by 1,402 companies in 200 industry categories for 1973 to 1975. *Id.* at 301.

^{348. &}quot;Adjusted return" was defined as the difference between a security's actual return and the return on a comparison portfolio. Zeghal used a variance measurement methodology rather than the typical capital asset market risk-return methodology. This approach compensates for some of the problems associated with the capital asset pricing model, especially related to firm size. See id. at 302, 304; Brown, Kleidon & Marsh, New Evidence on the Nature of Size-Related Anomalies in Stock Prices, 12 J. Fin. Econ. 33 (1983) (finding anomalous excess market returns for smaller firms using Capital Asset Pricing Model).

^{349.} Zeghal, supra note 347, at 306. The significance level was 0.000, indicating virtually 100% certainty that the null hypothesis of no informational value could be rejected. See also Firth, The Relative Information Content of the Release of Financial Results Data by Firms, 19 J. ACCT. RES. 521, 528 (1981) (finding inverse relationship between size and information content of company announcements for English firms).

^{350.} Zeghal, supra note 347, at 306; see also Collins, Kothari & Rayburn, Firm Size and the Information Content of Prices with Respect to Earnings, 9 J. ACCT. & ECON. 111 (1987) (earnings announcements have greater effect on prices of small firms because less public information available than for large firms).

^{351.} Atiase, Predisclosure Information, Firm Capitalization, and Security Price Behavior Around Earnings Announcements, 23 J. ACCT. RES. 21 (1985). The author evaluated abnormal price movements according to an indexed variance base for both the 104-week period prior to fiscal year-end, and a 26-week period from the end of the fiscal year to the beginning of the earnings announcement week. The sample was partitioned into equal numbers of large and small firms based on the size of capitalized equity values. The 100 small firms consisted of 50 OTC and 50 NYSE and AMEX firms. The 104-week price movement for the small firms was 222% above average, while the 26-week price movement was 137% above average. These results were statistically significant at a .005 level of confidence. Id. at 29-30. The OTC firms experienced the largest market reaction—104-week (284% above average) and 26-week (194% above average)—suggesting the earnings announcement contained more information content for these firms, probably due to less predisclosure financial information concerning them.

abnormal returns were pervasive, occurring for 89% of the smaller firms.³⁵² More importantly, a statistically significant (at a .0001 level) negative or inverse association between stock price revaluation and firm size existed, with larger abnormal return variance as firm size grew smaller.³⁵³ The careful methodologies used by Zeghal and Atiase, combined with the high statistical confidence levels, furnish strong evidence supporting their findings. These price impact studies establish that the information content of company disclosure varies inversely with the amount of public information and size of a firm.

In addition to the price impact studies, recent research on trading volume indicates that earnings announcements contain information content that is related to firm size. Consistent with the price reaction, Zeghal found a significantly larger volume of trading during the announcement period for smaller firms.³⁵⁴ Two other recent studies by Bamber support this view. The first study of approximately 1,200 annual earnings announcements revealed that trading volume increased significantly during the three-day period surrounding the announcement over the median volume for the year.³⁵⁵ Moreover, trading volume related inversely to firm size with proportionately greater abnormal volume for the smaller companies.³⁵⁶ This differential market reaction can be attributed to the greater surprise value of earnings announcements for smaller firms for which less public information is available.³⁵⁷

The second study by Bamber focused on the impact on the magnitude and

^{352.} Id. at 32-33, table 6. Only 20% of the large firms experienced abnormal returns during the announcement week, which indicates that information concerning the earnings report had already been impounded into the security price. This is consistent with the view that more information affecting stock prices exists for larger firms with a greater investor following and is incorporated into stock prices more quickly. See also Freeman, The Association Between Accounting Earnings and Security Returns for Large and Small Firms, 9 J. ACCT. & ECON. 195 (1987) (results consistent with Atiase's hypothesis).

^{353.} Atiase, supra note 351, at 33-34. These results were statistically significant utilizing both parametric and nonparametric tests. Id.; see also Freeman, supra note 352, at 220-26 (cumulative abnormal returns were statistically significantly greater in both positive trend and in final month of earnings announcement for small firms than large firms).

^{354.} Zeghal, supra note 347, at 306; see also Beaver, The Information Content of Annual Earnings Announcements, 6 J. Acct. Res. 67 (Supp. 1968); Morse, Price and Trading Volume Reaction Surrounding Earnings Announcements: A Closer Examination, 19 J. Acct. Res. 374 (1981).

^{355.} Bamber, supra note 334, at 48. The author's analysis included two types of measurement procedures to determine abnormal trading volume. One type used the median trading volume for the year as the normal expectation variable; the second type used the percentage of shares traded adjusted by a market index utilizing a linear regression model. The primary results were essentially the same for both approaches with only minor differences in specific areas. The author also found that trading volume was positively correlated with the absolute value of unexpected earnings using both analyst forecasts and the no-change random walk model to determine the value of the "unexpected" earnings component. Id. at 49-50.

^{356.} Id. at 51-52. The median trading volume measurement metric indicated a stronger correlation than did the market adjusted volume metric. Also, the inverse correlation was most significant for NYSE firms not having December 31 fiscal year-ends and less pronounced for the non-NYSE firms. Id.

^{357.} Another potential cause for the surprise value could be the greater difficulty in accurately forecasting earnings for small firms because of greater variability in their earnings series. See Bamber, supra note 334, at 51-52 (finding correlation between size and forecast errors of

duration of trading volume for quarterly earnings announcements. The results from this study were consistent with those of the prior study, with the magnitude of trading volume being inversely related to firm size for each of the first three quarterly announcements.³⁵⁸ Further, trading volume was positively correlated with the amount of the unexpected earnings based on both analyst and a seasonal random walk model's forecasts.³⁵⁹ This study also showed that the duration of trading volume tended to be related to firm size and the value of unexpected earnings. Generally, significant trading volume extended for several days beyond the day of the earnings announcement for the smaller firms and firms with higher unexpected earnings.³⁶⁰ This result suggests that earnings announcements were more informative for small firms that generated less public and private information and for firms whose earnings were more difficult to predict. The latter fact was further evidenced by the finding that the magnitude and duration of trading volume was positively associated with the value of unexpected earnings even when firm size was held constant.³⁶¹ These trading volume studies furnish additional support that corporate financial disclosures provide useful information for investors, especially concerning smaller firms.

The above research demonstrates a positive association between firm size and the value of disclosure of actual earnings. Other research by Cox indicates that this relationship also exists for prospective information. In a review of management forecasts, Cox found a statistically significant positive correlation between the information content of company forecasts as shown through abnormal returns, and both firm size and earnings variability. In addition, the research indicated some evidence that the information content of the forecasts was not significantly dependant on forecast horizon. This outcome suggests that although longer horizon projections tend to be more inaccurate, longer term company forecasts still provide valuable information to investors. Moreover, the positive association between earnings variability and the information content of the management forecasts illustrates that accuracy is not the determinant factor in the value of this information to investors, despite greater inaccuracy associated with increased variability. This study provides direct evidence that the differences between disclosure and

random walk model). This factor is likely to be less influential than the absence of information factor.

^{358.} Bamber, Unexpected Earnings, Firm Size, and Trading Volume Around Quarterly Earnings Announcements, 62 ACCT. REV. 510, 520-21 (1987); see also Kiger, An Empirical Investigation of NYSE Volume and Price Reactions to the Announcement of Quarterly Earnings, 10 J. ACCT. RES. 113 (1972) (economic models demonstrate impact of release of interim reports on price and volume of NYSE stocks traded).

^{359.} Bamber, supra note 358, at 518-20.

^{360.} Id. at 521-24.

^{361.} See id. at 524-28.

^{362.} Cox, Earnings Variability, Firm Size, and the Information Content in Management Forecasts of Annual Earnings, 6 J. ACCT. & Pub. Pol'y 139, 149 (1987) (involving 284 forecasts between 1969 and 1976). The author found statistically significant abnormal stock returns for the two days surrounding the announcement of the forecasts. No similar significant correlation existed as to systematic market risk (beta). Id.

^{363.} Id. at 150-51. The study showed no statistically significant correlation between forecast horizon and the size of the abnormal market returns.

nondisclosure firms should lead to enhanced information content for forecasts of the latter, and supports the validity of other research on the information content of management forecasts that utilized voluntary company projections.

In summary, management forecasts for nondisclosure firms are likely to be less accurate, but the degree of greater inaccuracy is unknown. The relative accuracy of management forecasts compared to available alternative sources probably would not differ. The smaller size of nondisclosure firms suggests fewer analyst forecasts and less public financial information for these firms. Empirical research illustrates that the market's reaction to corporate disclosure is a function of firm size, primarily due to the generation of less public information about smaller firms. As a result, management forecasts would tend to have even more information content and be more valuable to shareholders of smaller firms.

The limited available research on the size of takeover targets tends to show that a substantial majority are small to medium based on market value of common stock. For instance, approximately two-thirds of all the tender offers between 1981 and 1986 involved targets of less than \$100 million. 364 The average size for targets of any-or-all tender offers between 1981 and 1983 was \$113.7 million, with 67% of the firms' value being less than \$80 million. 365 Similarly, 60% of the targets of partial offers were valued at less than \$80 million. 366 A review of merger and acquisition activity for 1984 through 1987 reveals that over 50% of the acquisitions during this period involved a purchase price of \$25 million or less, while 75% involved purchases of \$50 million or less. 367 Furthermore, those acquisitions in the lowest priced category, involving purchases valued at between \$1 million and \$5 million, constituted either the largest or second largest number of mergers and acquisitions for the 1984 to 1987 period. 368 This evidence indi-

^{364.} See Sec. Exchange Act Release No. 2,1079, supra note 10, at 86,931 (discussing tender offers occurring between 1981 and 1983). The percentage of total tender offers below the \$100 million level was 75% for 1984, see Austin & Bernard, Tender Offer Update: 1985, MERGERS & ACQUISITIONS, Spring 1985, at 67, 67; the percentage was 64% for 1985, see Tender Offer Update: 1986, supra note 9, at 55; and the percentage was 68% for 1986, see Tender Offer Update: 1987, supra note 8, at 49.

^{365.} See Sec. Exchange Act Release No. 21,079, supra note 10, at 86,931, 86,932. Any-orall offers constituted 62% of all tender offers in this period. Firms valued at below approximately \$100 million can be considered small to medium size companies. See, e.g., Zeghal, supra note 347, at 306, where firms of less than \$20 million were categorized as small, and firms between \$20 million and \$130 million were classified as medium.

^{366.} See Sec. Exchange Act Release No. 21,079, supra note 10, at 86,932.

^{367.} In 1984 and 1985, three-fourths of the reported mergers were valued at less than \$50 million and two-thirds were below \$25 million. See A Lively Market in Small Deals, supra note 10, at 18 (1984 statistics); 1985 Profile, MERGERS & ACQUISITIONS, May-June 1986, at 45, 48 (1985 statistics). Acquisitions valued at \$25 million and below were involved in approximately one-half of all the mergers in 1986 and 1987. See Prominence of Small Deals, MERGERS & ACQUISITIONS, May-June 1988, at 11, 11. Takeovers valued at \$50 million or less made up approximately two-thirds of all acquisitions occurring in 1986 and 1987. Id.

^{368.} In 1984 and 1985, this group made up the largest category of mergers. See A Lively Market in Small Deals, supra note 10, at 18 (1984 acquisitions); 1985 Profile, supra note 367, at 48 (1985 acquisitions). In 1986 and 1987, takeovers valued in this range were the second most frequent type of purchase. See Prominence of Small Deals, supra note 367, at 11. In

cates that mergers and tender offers often involve target firms for which company forecasts will be especially valuable because of the lack of alternative public information.

IV. OBJECTIONS TO MANDATORY DISCLOSURE

A. Potential for Misleading Investors

The most common argument against mandatory disclosure of earnings forecasts is the potential for misleading investors.³⁶⁹ The SEC and the courts generally have focused on this issue with regard to investors' giving company forecasts undue credibility.³⁷⁰ Critics contend that mandatory disclosure of forecasts would produce harmful information because providing misleading or inaccurate information to shareholders could lead to improper allocation of resources.³⁷¹ Additionally, some contend that investor confusion about whether a forecast was possibly too optimistic or pessimistic would decrease its value.³⁷²

Underlying this objection is a belief that investors cannot estimate the quality of forecast information and are therefore likely to attach excessive credibility to it.³⁷³ First, this view exaggerates the naiveté of investors who deal regularly with prospective financial information.³⁷⁴ In addition, the SEC's adoption of the "differential disclosure" approach, whereby disclosures are designed to serve both sophisticated and naive investors, attempts to promote full disclosure even though some information might confuse unsophisticated investors.³⁷⁵ Reflecting this approach, the 1977 Advisory

addition, just under 50% of all mergers in 1984 and 1985 involved purchases valued at \$10 million or less. See A Lively Market in Small Deals, supra note 10, at 18; 1985 Profile, supra note 10, at 48. Meanwhile, mergers valued at less than \$10 million constituted approximately 30% and 32% of all mergers in 1986 and 1987, respectively. See Prominence of Small Deals, supra note 367, at 11.

369. See, e.g., Asebrook & Carmichael, supra note 246, at 41 (analysts, accountants and executives expressed concern about investors misinterpreting forecasts); Carpenter & Daily, Controllers and CPA's: Two Views of Published Forecasts, Bus. Horizons, Aug. 1974, at 73, 76-78 (executives surveyed felt users would misinterpret forecast information); Stewart, supra note 169, at 83 (investors placing too much faith in forecasts was most serious problem of public disclosure). But see Benjamin & Strawser, supra note 246, at 81 (executives much more pessimistic about investor confusion than analysts surveyed).

370. See supra notes 18-19, 68-69 and accompanying text; cf. Del Noce v. Delyar Corp., [1976-1977 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 95,670, at 90,293 n.7 (average investor lacks expertise to analyze appraisal information properly).

371. See, e.g, Note, Mandatory Disclosure of Corporate Projections and Goals of Securities Regulation, 81 COLUM. L. REV. 1525, 1534 (1981) [hereinafter Mandatory Disclosure] (published forecasts could reduce investors ability to evaluate competing investment opportunities accurately); see also Stewart, supra note 169, at 79 (management forecasting might increase market volatility, which would interfere with resource allocation).

- 372. Mandatory Disclosure, supra note 371, at 1536.
- 373. See Del Noce, supra note 370, at 90, 293 n.7.

374. See Sec. Act Release No. 5,362, supra note 23, at 82,667; FAF STUDY ON DISCLOSURE, supra note 232, at 36 (fear of misleading investors has been grossly exaggerated); REPORT ON DISCLOSURE, supra note 13, at 273-74, 300-01 (presenting empirical evidence that investors are not in large part unsophisticated); Schneider, supra note 13, at 269.

375. See Feit v. Leasco Data Processing Equip. Corp., 332 F. Supp. 544, 565-66 (E.D.N.Y. 1971); Proposed Amendments to Regulation S-X Providing for Disclosure of Significant Accounting Policies, Sec. Act Release No. 5,427, [1973 Transfer Binder] Fed. Sec. L. Rep. (CCH)

Committee on Disclosure advocated a disclosure policy based on a "reasonably knowledgeable investor" model, which included forecasts, and rejected the arguments based on investor confusion.³⁷⁶ Moreover, potential investor confusion can be partially alleviated by additional disclosure accompanying the forecast, such as a cautionary statement on the tentative nature of projections, a description of the underlying assumptions, and information on the extent of uncertainty in the forecast.³⁷⁷ The SEC has abandoned the paternalistic approach of protecting the uninformed investor because this approach represents an unrealistic view of the marketplace, which now has professional advisors filtering information for investors.³⁷⁸

A second aspect of the argument that investors could be misled is a pessimistic view of management forecast accuracy. This view originated in early studies evaluating absolute forecast accuracy based on the concept that error rates above 10 to 15% rendered the forecast potentially misleading.³⁷⁹ Such an approach ignores the more important issue of the *relative* accuracy of management forecasts. Empirical evidence supports the view that management forecasts tend to be more accurate than alternative sources such as analysts and statistical models.³⁸⁰ Additionally, stock market reaction to public disclosure of forecasts provides a signal for shareholders as to the value of the forecast information as judged by the market as a whole. As a result, claims that investors will be misled by forecasts that are exceedingly inaccurate or so inaccurate as to be immaterial are highly questionable. Moreover, mandatory disclosure should subject forecasts to greater scrutiny, thereby enhancing reliability and accuracy.³⁸¹

B. Costs of Mandatory Disclosure Policy

A balanced analysis of imposing disclosure obligations on corporations requires consideration of the potential costs of the proposal. Mandatory forecast disclosure would probably result in some increased financial expenditures by corporations, but several factors limit the extent of the addi-

^{¶ 79,519} at 83,242 (Oct. 4, 1973) (explaining differential disclosure); WHEAT REPORT, supra note 19, at 10.

^{376.} See REPORT ON DISCLOSURE, supra note 13, at D-9; Sommer, supra note 35, at 50. 377. The courts have recognized cautionary statements as a method of reducing undue reliance by investors. See South Coast Serv. Corp. v. Santa Anna Valley Irrigation Co., 669 F.2d 1265, 1269 (9th Cir. 1982); Alaska Interstate Co. v. McMillian, 402 F. Supp. 532, 573 (D. Del. 1975).

^{378.} See WHEAT REPORT, supra note 19, at 51-54; Fiflis, supra note 18, at 105-07.

^{379.} See, e.g., A. T. KEARNEY, INC. & SIDLEY & AUSTIN, PUBLIC DISCLOSURE OF BUSINESS FORECASTS 27 (1973) [hereinafter KEARNEY, INC., PUBLIC DISCLOSURE]; (Financial Executive Research Foundation study suggesting that an error rate above 15% rendered a forecast "unreasonable") Daily, supra note 246, at 687-88.

^{380.} See supra text accompanying notes 247-274.

^{381.} See, e.g., REPORT ON DISCLOSURE, supra note 13, at D-15 (formal publication of projections likely to cause firms to exercise greater care in their preparation); Fiflis, supra note 18, at 119 (better to have projections in filed documents receiving SEC review); New Approaches to Disclosure in Registered Security Offerings—A Panel Discussion, 28 Bus. L. 505, 508 (1973) (Carl W. Schneider expressed opinion that inclusion of soft information in SEC filings would increase report's reliability); Note, Corporate and Insider Disclosure of Asset Appraisals Under Rules 10b-5 and 14a-9, 61 B.U.L. REV. 683, 701 (1981).

tional costs. Furthermore, corporate disclosure of forecasts is the most efficient method for providing this information to shareholders.

The vast majority of corporations produce internal budgets.³⁸² Indeed, earnings and other financial projections are commonly prepared internally by most companies as a regular business practice. 383 Existing SEC regulations require reporting companies to collect much of the historical firm-specific data used in forecasting. Many companies also gather general industry and economic information for planning purposes. In addition, the advent of computers has expanded the ability of companies to store and retrieve information at a much lower cost. More importantly, target companies often develop financial evaluations of the firm when confronted with a takeover. Some courts have virtually required the boards of directors of target companies to consult firm valuation reports, which include prospective information, as a part of their duty of due care under state law.³⁸⁴ The cost of dissemination will often be small because target companies already must publish or send shareholders a statement on the tender offer. Additionally, shareholders expect some information from management.³⁸⁵ As a result. any additional preparation costs related to mandatory disclosure of forecasts should not be significant.

Public disclosure of management forecasts will be more cost efficient because a single entity with superior access to data can produce a forecast at lower cost than can individual investors. A theoretical study shows that public disclosure can result in lower expense for shareholders because, in the absence of public disclosure, investors would seek costly information; if information were publicly disclosed, all investors would abstain from generating the information.³⁸⁶ Based on a model assuming competitive traders with constant risk aversion preferences, the author demonstrates that public disclosure of information increases the *ex ante* utility of all traders for two main reasons: (1) the savings of resources that companies would otherwise devote to information production for individual investors, and (2) improved risk sharing because public disclosure brings together traders' beliefs and reduces

^{382.} See Gray, Proposal for Systematic Disclosure of Corporate Forecasts, Fin. Analysts J., Jan.-Feb. 1973, at 64, 71; Kripke, supra note 20, at 1197.

^{383.} See KEARNEY, INC., PUBLIC DISCLOSURE, supra note 379, at 11 (97% of companies surveyed prepared forecasts of earnings, expenses, and sales); Ellingsen & Rubin, Audition Developments, 1 J. ACCT., AUDITING & FIN. 76, 76 (N.S. 1986) ("The use of prospective financial statements has increased dramatically in recent years, and their use is quickly becoming an accepted part of life for many companies"); F. LEES, supra note 174, at 7, 12 (397 of 405 companies surveyed prepared internal forecasts); cf. Rothe, supra note 336, at 115 (forecasting rated as important or very important activity by 95% of firms in study).

^{384.} See, e.g., Hanson Trust PLC v. ML SCM Acquisition, Inc., 781 F.2d 264, 274-76 (2d Cir. 1986); Smith v. Van Gorkom, 488 A.2d 858, 876 (Del. 1985).

^{385.} See rule 14e-2a, (17 C.F.R. § 240.14e-2a (1988)) (target company to give statement recommending acceptance or rejection, or expressing no opinion, or stating unable to take position, within 10 days of offer); rule 14d-9f (17 C.F.R. § 240.14d-9f (1988)) (requiring filing of schedule 14d-9 in conjunction with compliance with rule 14e-2); see also Note, A Proposal for Affirmative Disclosure by Target Management During Tender Offers, 75 Colum. L. Rev. 190, 215-16 (1975) (congressional policy of Williams Act compels disclosure for shareholder's benefit).

^{386.} Diamond, Optimal Release of Information By Firms, 40 J. Fin. 1071, 1073 (1985).

the degree of speculative positions taken by informed traders.³⁸⁷

The value of information to investors depends on its information content both absolutely and relative to its possession by other investors. For example, if the information is sufficiently costly and the quality of prior information is high such that it is not cost effective to acquire new information, then investors will not acquire it even if that would give an investor some informational advantage over other investors. Likewise, if the cost of new information and the quality of prior information are low enough to justify acquiring the new information, then each investor will do so, even if all other investors also acquire it, in order to prevent the investor from being at an informational disadvantage. Between these two extremes, the number of investors acquiring the information will adjust according to a cost-benefit equilibrium.³⁸⁸

The public release of information will affect the private information decisions of investors as a whole only if they know whether or not the corporation will disclose the information. Therefore, a mandatory disclosure policy is preferred to the current voluntary policy, which severely limits the beneficial elimination of duplicative information production by investors. Generally, the firm has a cost advantage over investors in producing information about itself because of its superior access to and broader range of data. Comparing the costs of a firm to that of all investors in the aggregate in producing the same information reveals a large cost advantage for the firm. In effect, the firm's cost of producing the information, which would eliminate private information acquisition, becomes negligible on an individual investor scale.³⁸⁹ As a result, releasing information becomes more desirable because all investors will have a higher expected utility from this policy as opposed to nondisclosure.

In addition to cost savings, the homogenization of information improves risk sharing by reducing the speculative positions of traders who would otherwise possess privately acquired information. Traders could trade away from the risk allocation position based on the unequal possession of private information because of the uncertainty in the information content of the stock price.³⁹⁰ This improved risk sharing would enhance the efficient allocation of capital resources.

Applying this analysis to the issue of management financial forecasts militates in favor of mandatory disclosure. Only if the information has a very

^{387.} Id. at 1073.

^{388.} Id. at 1078.

^{389.} Id. at 1081-82.

The value of public release is that it homogenizes information and eliminates the use of resources to produce information. All traders are made better off: A key to this unanimity is the fact that the firm needs to produce much less information than the aggregate of all traders, implying that the cost of the firm producing the information is negligible, and no relevant questions of how the costs are shared across investors arise.

Id. at 1083.

^{390.} Id. at 1084. Public disclosure would reduce the variability of the market price by equalizing access to the information.

low cost per unit of precision and public disclosure would not reduce the number of investors willing to expend resources for private acquisition, would public disclosure not be cost effective. Forecast information is very important to investors who have demonstrated a willingness to expend a large amount of resources to acquire it. The desire for future-oriented information is especially high in tender offer situations where investors must make a quick decision on disposal of their shares. Firms have cost advantages in generating forecasts partially through greater access to information. These benefits would particularly favor smaller firms with less existing public information. Mandatory disclosure of forecasts would enhance shareholders' information acquisition and eliminate duplication. Improved risk sharing in takeover situations would increase efficient utilization of capital resources in the economy. As a result, cost considerations do not outweigh the benefits of mandatory public disclosure of financial forecasts.³⁹¹

V. Forecasts in Takeovers in England

A. Forecasts Recognized as Relevant

In England, takeover practices have been scrutinized since the early 1960s. An early attempt at control consisted of indirect regulation through rules applicable to licensed securities dealers (Licensed Dealer Rules),³⁹² which prescribed the content of offer documents. The Licensed Dealer Rules proved to be ineffective largely because the majority of takeovers were handled by intermediaries such as merchant banks that were not subject to these rules.³⁹³ In 1959, the Governor of the Bank of England established a body consisting of leading private London city institutions to study good business practices in the conduct of mergers and takeovers. After an active period of merger activity, they created the Panel on Take-overs and Mergers to propose rules and oversee takeovers. In 1968, the Panel issued The Code on Take-Overs and Mergers (City Code),³⁹⁴ which was designed to regulate

^{391.} But see Abdelsamad & Gilbreath, supra note 230, at 29 (executives surveyed felt benefits of publishing earnings forecasts were less than costs); Dean, supra note 160, at 522 (costs of publishing forecasts may outweigh any public benefit); Mandatory Disclosure, supra note 371, at 1539 (proponents of mandatory forecasting overestimate benefits and underestimate costs).

^{392.} The Licensed Securities Dealers (Conduct of Business) Rules 1960, STAT. INST. 1960, No. 1216, reprinted in M. Weinberg, M. Blank & A. Greystoke, Weinberg and Blank on Take-Overs and Mergers 717-26 (1979) (Appendix C). The Department (then Board) of Trade promulgated these rules, which set out schedules I and II, detailing information to be included in the offer document such as the specific terms of the offer. A third schedule (schedule III) required disclosure of information involving potential conflicts of interest in relation to a recommendation by the target board. Schedule III(8) did require target management to delineate any material change in the financial prospects of the target, but this was the only provision involving prospective information. Some other general criminal anti-fraud statutes such as The Prevention of Fraud (Investments) Act 1958, 6 & 7 Eliz. 2, ch. 45, section 13(1), do prohibit intentionally or recklessly misleading forecasts in securities dealings.

^{393.} See P. BEGG, CORPORATE ACQUISITION AND MERGERS 128 (1985).

^{394.} THE CITY CODE ON TAKE-OVERS AND MERGERS (Council for the Securities Industry, 5th rev. ed. 1981 & 6th rev. ed. 1985) [hereinafter CITY CODE]. Since 1978, the Panel has been incorporated as a member of the Council for the Securities Industry, which was created to coordinate the efforts of the various private institutions involved with securities matters. Representatives from institutions that make up the membership of the Panel include in part:

merger practices. The City Code was more comprehensive than the Licensed Dealer Rules and applied to all public companies. As a result, in 1983, the Licensed Dealer Rules were revised, substantially eliminating the provisions dealing with takeovers.³⁹⁵ This left the City Code as the primary regulatory reference. As a private organization, the Panel relies on extralegal enforcement mechanisms such as adverse publicity and industry peer pressure.³⁹⁶

From its inception, the Panel has recognized that earnings (profit) forecasts contain information relevant to shareholders' decisions in takeover situations. The Panel stated that it believes that directors' opinions on the immediate future profitability of a company constitute the most important factor in deciding whether to invest or disinvest in the company.³⁹⁷ In its 1971 Annual Report, the Panel emphasized the importance of prospective information to shareholders.³⁹⁸ In contrast to the then prevailing practice in the United States forbidding projections, the Panel has encouraged forecasts as being consistent with the general policy that "shareholders must be put in possession of all the facts necessary for the formation of an informed judgment as to the merits and demerits of an offer."³⁹⁹ Given the importance of

The Stock Exchange, The Association of British Insurers, The Institute of Chartered Accountants in England and Wales, The Confederation of British Industry, The Issuing Houses Association, and The National Association of Pension Trusts. Other associations such as The National Association of Security Dealers, Investment Managers, and the Consultative Committee of Accounting Bodies also support the Panel and City Code. See CITY CODE introduction, constitution (a). The City Code was revised in 1985, resulting in modifications in its format, but the substance was not altered. See Morse, The New City Code, 1985 J. Bus. L. 277.

^{395.} The Licensed Dealers (Conduct of Business) Rules 1983, STAT. INST. 1983, No. 585. The revised rules do provide that an offer document must disclose "sufficient information about the investment to provide a person... with an adequate and reasonable basis for deciding whether or not, or on what terms, to accept the offer..." Id. rule 9 (1)(a). In addition, rule 27 requires licensed dealers to comply with any "generally accepted standards as to what constitutes good market practice," which would include the City Code. Furthermore, as to friendly takeovers involving private companies, the Department of Trade has issued a General Permission exempting takeover documents from the Prevention of Fraud (Investments) Act 1958 (section 14), which prohibits distribution of certain documents where full and fair disclosure has occurred. The documents must state that reasonable care has been used and no material facts have been omitted. Also, directors must obtain independent legal advice concerning the transaction, and the tenor of that advice must be made available to shareholders. See J. FARRAR, COMPANY LAW 516 (1985).

^{396.} See Demott, Current Issues in Tender Offer Regulation: Lessons from the British, 58 N.Y.U. L. REV. 945, 955 (1983). Some commentatores have criticized this lack of legal authority. See, e.g., P. DAVIES, THE REGULATION OF TAKE-OVERS AND MERGERS 45 (1976). The criticism is concentrated more on this aspect of the British system than the content of the rules. Demott, supra, at 955.

^{397.} Panel Report for Year Ended March 31, 1970, quoted in Damant, A Note on Practice In the United Kingdom: Financial Forecasting by Companies, Fin. Analysts J., Sept.-Oct. 1972, at 44, 45; see also A. Johnston, The City Take-Over Code 233 (1980).

^{398.} See Panel Report on the Year Ended 31st March 1971, quoted in Grieves, English Profit Forecasts, 5 Rev. Sec. Reg. 919, 922 (1972), in which the Panel stated, "[R]esponsible profit forecasts are a vital element in shareholders' assessment of the worth of equity investments." See also M. Weinberg, M. Blank & A. Greystoke, supra note 392, at 275-76.

^{399.} CITY CODE, rule 15(1) (1981 ed.); see A. JOHNSTON, supra note 397, at 113. See also CITY CODE, general principle 3 ("No relevant information shall be withheld from [shareholders].").

forecasts, the British believe that the absence of regulation results in a greater danger of circulation of suspect forecast information.

B. Provisions for Enhancing Reliability

In order to protect shareholders, the City Code requires that forecasts be reviewed by third-party consultants and be accompanied by a discussion of assumptions.⁴⁰⁰ These provisions attempted to prevent misleading forecasts, yet not inhibit distribution of relevant information.⁴⁰¹ In recognition of the importance attached to prospective information, forecasts released prior to the commencement of an offer fall within the City Code, and companies must again release the forecasts in the takeover documents, along with the

400. See CITY CODE, rules 28.2, 28.3, 28.4 (former rule 16(2)). Provisions dealing with profit forecasts now appear in rule 28 and the accompanying notes, whereas, prior to the revision in 1985, they appeared in rules 15 and 16 and practice notes 6 and 7. These rules state in part:

Rule 28.2 The Assumptions

- (a) When profit forecasts appear in any document addressed to shareholders in connection with an offer, the assumptions, including the commercial assumptions, upon which the directors have based their profit forecasts, must be stated in the document.
- (b) When, after an offer document has been posted, a profit forecast is given in a press announcement, any assumptions on which the forecast is based should be included in the announcement.

Rule 28.3 Reports Required in Connection with Profit Forecasts

(b) [T]he accounting policies and calculations for the forecasts must be examined and reported on by the auditors or consultant accountants. Any financial advisor mentioned in the document must also report on the forecasts.

Rule 28.4 Publication of Reports and Consent Letters

Where an offer document has been posted, the reports must be included in the document containing the forecast or, where the forecast has been made in a press announcement, in a circular which must be sent to shareholders with a minimum of delay after the announcement is published; the reports must be accompanied by a statement that those making them have given and not withdrawn their consent to publication.

Id. Originally, auditor reports were not required to be published with the document, but this requirement was added a year later in 1969 to further the policy of providing relevant information to the shareholders. See A. JOHNSTON, supra note 397, at 55-56.

In addition to the rules, the City Code contains accompanying notes which further amplify aspects in the rules. The note to rule 28.2 discusses the requirement for assumptions. It states in part:

- 1.(a) It is important therefore that by listing the assumption on which the forecast is based some information should be given to help shareholders in forming a view as to the reasonableness and reliability of the forecast. This should draw the shareholders' attention to, and where possible quantify, those uncertain factors which could materially disturb the ultimate achievement of the forecast.
- (c) [A] duty is placed on the financial advisers to discuss the assumptions with their client and to satisfy themselves that the forecast has been made with due care and consideration. Auditors or consultant accountants should satisfy themselves that the forecasts, so far as the accounting bases and calculations are concerned, have been properly compiled on the footing of the assumptions made.

CITY CODE, rule 28.2 note.

401. See CITY CODE, practice note 6(1) (1981 ed.): "The Code is designed to strike a balance so that, although there is no room for recklessness and irresponsibility, the directors do not feel inhibited from communication to shareholders information which may be relevant to the value of their shares."

attending report by the third parties.402

Despite the acknowledged relevance of forecasts, mandatory disclosure does not appear to be a requirement of the City Code. Although disclosure of profit forecasts occurs more frequently in England than in the United States, target companies still release forecasts in fewer than a third of the takeover situations. In 1980 and 1981, 32% and 21%, respectively, of the published takeover documents contained forecasts by target management. The Panel monitors forecasts for compliance with the City Code as part of its enforcement process. Initially, the Panel supervised all forecasts, but found so few exceeded its general reasonableness range for accuracy that now it only checks them randomly or in response to a complaint. In fact, the Panel has never issued a public statement criticizing a company for releasing a misleading forecast.

A study by Westwick of forecasting accuracy in British takeovers between 1969 and 1970 reveals a fairly high level of reliability. For target company forecasts, approximately 71% were within 10% of actual results. 407 Targets who successfully fought off a suitor tended to produce more accurate forecasts than those who eventually succumbed to the takeover. 408 Moreover, the large forecast errors of the losing target companies tended to be overestimates rather than under-estimates. 409 These results suggest that excessively optimistic forecasts by targets did not fool the market and that natural market forces tend to mitigate the threat of forecasts misleading shareholders. Consistent with this conclusion was the discovery that the nature of the bid did not appear to affect significantly the reliability of the target company forecasts. Forecasts by target firms opposed to the bid were generally not less accurate than those in friendly takeovers. 410 Even though hostile targets

^{402.} See id., rule 28.6(b). Profit forecasts published in a press announcement after initial offer documents have been sent also fall under the City Code and must be sent to shareholders with disclosure of assumptions and third-party review. See also CITY CODE, rule 28.4, quoted supra note 400.

^{403.} See A. JOHNSTON, supra note 397, at 233; Ashton, The Role of the Reporting Accountant, in Profit Forecasts 81, 82 (C. Westwick ed. 1983).

^{404.} See Wade, The Role of the City Panel, in Profit Forecasts, supra note 403, at 119, 127. For offer documents issued in 1969-1970, target company forecasts appeared in approximately 36% of the offer documents. See Schmitthoff, British Business Law: Companies, 1971 J. Bus. L. 218, 222 (296 total offer documents circulated); cf. Westwick, Profit Forecasts in Bid Situations, Acct., July 1972, at 10, 13 (107 forecasts by target firms).

^{405.} See A. JOHNSTON, supra note 397, at 113. The Panel has adopted a standard of 10% error as reasonable. For 418 bids between May 1969 and September 1971 containing forecasts by both offeror and offeree firms, 80 were not within 10% of actual results, and in only five cases were the errors not adequately explained. Id. Similarly, 35 out of 173 forecasts in takeover documents issued in 1970-1971 had errors exceeding 10%, with unsatisfactory explanations in only two cases. See Carmichael, Reporting on Forecasts: A U.K. Perspective, J. ACCT., Jan. 1973, at 36, 44.

^{406.} See Wade, supra note 404, at 127.

^{407.} See Westwick, supra note 404, at 13.

^{408.} Id. Seventy-eight percent of the forecasts by targets that remained independent were within 10% of actual results compared to 70% of the targets where the bid was successful. Id.

^{409.} See id. at 14. Sixteen percent of the losing targets' forecasts were more than 22% above actual results; 5.4% had forecasts of that magnitude below actual results.

^{410.} Id. at 15. For friendly bids, 80% of the targets' forecast errors fell within 10%, while 77% of the forecasts by targets in a hostile takeover had a similar error rate.

have a greater incentive to manipulate a forecast, their projections are also subject to greater scrutiny by investors. Indeed, the integrity of target management is a very important issue in takeover contests and issuance of an unreasonable forecast generally would be counter-productive. These findings indicate that the potential for misleading forecasts in takeover situations is not as great as one would initially expect.

The British experience demonstrates that disclosure of financial forecasts in takeovers is feasible, but the English approach does not go far enough. Critics argue that differences in the legal systems of the United States and England, such as the absence of class actions, derivative suits, contingency fees for attorneys, and the assessing of costs against losing plaintiffs, weaken reliance on the British experience for analysis of United States public disclosure policy.411 Despite these factors and the Panel's policy of not impeding disclosure, dissemination of this important information occurs in less than half of the takeovers in England. Rather than showing the inadvisability of mandatory disclosure, these differences illustrate that the existence of a liberal voluntary disclosure climate still is unlikely to produce sufficient publication of financial forecasts. Unlike the largely private regulatory system in England, the SEC has an affirmative obligation to promote the distribution of relevant financial information. The failure of the various voluntary policy approaches to produce full disclosure indicates that the investing public needs a mandatory disclosure policy.

VI. CONCLUSION

A major objective of federal securities laws is to provide investors with relevant information upon which to base investment decisions. Future-oriented financial information is among the most important information because it deals with the essence of the investment process, expected return. Despite this fact, the SEC has abandoned its obligations by failing to produce a coherent, satisfactory policy toward disclosure of financial projections. The current voluntary disclosure policy has not created enough incentive for companies to provide forecasts, thereby depriving shareholders of a valuable source of information.

In the absence of SEC guidance, the courts have generally refused to require public disclosure of forecasts, focusing on perceived unreliability. The present case law is confused and conflicting, with several different standards applying to the duty of companies to provide "soft information." Only the Third Circuit has suitably dealt with the relevance of forecasts by adopting a balancing approach, while the Sixth Circuit has rejected this approach. The recent Supreme Court decision in *Basic, Inc. v. Levinson* ⁴¹² appears to support utilization of a balancing approach, but this standard is still difficult to apply and involves a case-by-case analysis.

^{411.} See, e.g., Dean, supra note 160, at 520; Van Arsdell, Forecasting: A View from England, CPA J., Jan. 1974, at 20, 21.

^{412. 108} S. Ct. 978, 99 L. Ed. 2d 194 (1988). For a discussion of *Levinson*, see *supra* notes 148-156 and accompanying text.

The TSC Industries materiality standard requires a substantial likelihood that a reasonable investor would consider the information important. The theoretical foundation for the relevance of forecast information is manifest. Stock price valuation depends on the expected financial performance of the firm. Investors naturally concern themselves more with the future prospects of companies than with past events. The empirical evidence clearly demonstrates that management forecasts represent important information. The market impact studies reveal that forecasts have information content, conveying new and valuable information to investors. These studies show that the market readjusts stock prices in reaction to the information contained in company forecasts about future performance. This research provides strong evidence of the materiality of company forecasts because information content studies involve a broad range of investors, and represent a stricter standard of proof than the TSC Industries test since stock price movements indicate that investors took affirmative action in response to the information.

The objections to mandatory disclosure are insufficient to support the continuation of current practice. Claims of inaccuracy fail to take into account the relevancy of forecasts. Management forecasts tend to be more accurate than those of the two alternative sources for this information, analysts and statistical models. Management has an informational advantage over both of these sources, which enhances the accuracy of their projections. Providing additional disclosure on the uncertainty of forecasts can diminish the overstated threat of misleading shareholders. Additional public disclosure should force management to provide more reliable forecasts.

In addition, cost considerations militate in favor of mandatory disclosure of forecasts. Companies can generate projections much more efficiently than individual shareholders. Most companies already produce internal projections for on-going business purposes. Also, companies have greater access to firm-specific information. The availability of advanced computers and forecasting software reduces costs. Additionally, mandatory disclosure would benefit all shareholders by creating a clear policy that should induce investors not to duplicate the company's efforts or attempt individually to obtain this information.

Financial forecasts are especially relevant in corporate control contests. Target shareholders face an immediate decision whether they should give up their right to future profits of the firm. Takeovers involve long-term consequences, yet shareholders are often ill-equipped because of the lack of future-oriented information. Many target firms are not large enough to have an analyst following: without management forecasts, shareholders are left with little or no forecast information. The prevalence of mergers and tender offers requires the SEC to address the problem of providing target shareholders with relevant information. The British experience demonstrates that companies confronted with takeover situations may provide reliable company forecasts, but that a voluntary approach is unlikely to create a sufficient amount of disclosure. The SEC should reassess its position and adopt a mandatory disclosure policy for corporate control acquisitions.