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Finance Theory and Accounting Fraud: Fantastic Futures versus Conservative Histories

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A secret at many leading business schools in the United States is that there is a certain set of intellectual tensions between the accounting and finance departments. The secret should be shared, however, because the underlying reasons for these tensions may help to explain the explosion of public company frauds in the late 1990s and early 2000s. This possibility is important because policymakers responded to those frauds without awareness of the tensions. By ignoring how tools developed in the finance department retard those developed in the accounting department, the value of Congress's reforms is diminished.

Finance theory's rise to intellectual and policy influence began in the 1970s. It threatened accounting's relevance. In essence, it denied that accounting forms matter, holding that markets pierce those forms to determine value independent of accounting presentation. Numerous side effects manifest this theory's dominance. Prominent among them are two practical accounting developments (a movement toward fair value measures and discounted cash flow analysis) and two widespread market practices (pro forma financial reporting and analyst earnings forecasts). These and other side effects reside under

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the broad chapeau of the forward-looking disclosure regime inaugurated in the 1970s and expanded ever since.

Reforms responding to financial fraud addressed the two pervasive market practices—targeting symptoms of pro forma reporting and analyst forecasting—but failed to address the disease and have, quite possibly, made financial reporting worse. To correct this oversight, this essay recommends two steps: (1) the forward-looking disclosure regime should include delineation of probable variability in financial data and (2) financial data should be presented in ranges rather than discrete numerals.

I. TENSIONS

The most powerful theory affecting modern accounting arose outside the discipline, in the competing department of finance. Dubbed modern finance theory, its key concept is the efficient market hypothesis. Under the efficient market hypothesis, all historical information, including accounting data, is rapidly impounded into a company's stock price. Moreover, under this hypothesis, all publicly-available information is accurately interpreted no matter how or where it is presented. Therefore, modern finance theory, which is widely believed, implies that any effort to improve accounting theory or practice is meaningless. Finance theory's contribution to accounting is thus its retardation, for three specific reasons.

First, efficiency theory holds that the form of presenting accounting information does not matter. If so, there is no point searching for an optimal form. If identical data can be placed anywhere in a set of financial statements (the balance sheet, income statement, cash flow statement, footnotes, or MD&A) and generate the same interpretation and result on price, promoting accounting quality is

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wasteful. The disincentives to develop superior accounting are enormous.\(^3\)

Second, efficiency theory holds that accounting information is instantly useless. Struggles that are central to accounting, such as allocating economic events to discrete time periods, become moot. Irrelevant are traditionally critical—and basic—matters such as rates of depreciation for long-lived assets and whether to measure inventory using the first-in-first-out method or the last-in-first-out method. It even removes questions about whether and how to account for stock options. Associated costs often are high and related values fluctuate over multiple periods.\(^4\)

Third, efficiency theory holds that market price responds to cash flow effects of managerial decisions and policy, not to the effect on reported earnings per share. Companies should, therefore, never seek to manage earnings because investors will see through it. If so, accounting does not have to develop tools to discourage or detect such massage because it won’t happen.\(^5\) This implies, in turn, a relatively modest utility for elaborate systems of internal control over financial reporting (which are the heart of reforms adopted in the wake of financial frauds of the late 1990s and early 2000s).

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4. A leading columnist for the *Wall Street Journal* argues that it doesn’t matter whether one accounts for stock options or not, for the market will figure out their significance without regard to accounting.

   In the real world, any information, as long as it’s deemed relevant, will be processed into the mill for pricing securities. It doesn’t matter whether the data is computed into the income statement or appears in a footnote or is shouted up and down Wall Street by a man in a tutu.


In short, efficiency theory invokes presentation. To presentiate is "[t]o make or render present in place or time; to cause to be perceived or realized as present." In efficiency theory, all numerical history is absorbed into the current stock price and becomes instantly irrelevant; all that matters is the future and even this gets "discounted" into the price. This model of presentation pretends to make time disappear. Yet, its enormous power retarded accounting as numerical history and reoriented financial reporting to a forward-looking, less reliable, fraud-tempting emphasis on prognosis.

Consider two leading examples of finance theory's force in driving accounting developments: the fair value movement and cash-flow elevation. Accounting traditionally measures most assets using historical cost. Recording assets at historical cost is appealing because cost usually is observable and thus provides objectivity. It is reliable. Advocates of more ambitious goals for accounting seek a fair value approach. This fair value movement favors

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6. The chief contribution of this concept to legal literature was made in respect of criticism of the classical theory of contracts which appeared to hold a conceit that contract formation achieved the reduction of future events to present control. See generally Ian R. Macneil, Restatement (Second) of Contracts and Presentation, 60 VA. L. REV. 589 (1974). Professor Macneil explained the concept:

Presentation is a way of looking at things in which a person perceives the effect of the future on the present. It is a recognition that the course of the future is so unalterably bound by present conditions that the future has been brought effectively into the present so that it may be dealt with just as if it were in fact the present. Thus, the presentation of a transaction involves restricting its expected future effects to those defined in the present, i.e., at the inception of the transaction.


7. 8 THE OXFORD ENGLISH DICTIONARY 1306 (1933).

reporting all assets on the balance sheet at fair value. The key motivation for fair value accounting is its currency; it is more relevant.

Accounting struggles with the trade-off between reliability and relevance. The result is an accounting system split between these aspirations, usually resolved under accounting's conservatism principle in favor of reliability over relevance. The rising influence of finance caused a shift in accounting to favor relevance over reliability. True, fair value can be reported using appraisals or comparable transactions, but the remaining subjective element puts it in tension with the cardinal accounting tenet of conservatism.

The fair value movement also has implications for revenue determinations. Accounting holds that revenues are not to be recognized until the earnings process generating them is complete (or substantially complete). An exception arises for investments in marketable securities, where gains and losses are recognized according to periodic changes in related market values of the assets. This so-called mark-to-market accounting is quintessentially a quest to bring into accounting a component of the future: investment values are assumed to reflect the present value of the related asset's future cash flow.

Enron's pathologically fiendish managers delighted in the corrosive effects that modern finance theory has on contemporary accounting. Enron persuaded the SEC to approve using mark-to-market accounting in most of its businesses. The company entered into long-term contracts and used fair value measures to assess contract value. Enron's managers then recorded those values as revenue upon contract formation. This practice shredded basic principles of revenue recognition. It made Enron's income statement and balance sheet look ridiculous. Enron's specific escapades reflect widespread cultural obsession with cash flows, justified, in turn, by systematic diminishment of another long-standing principle of accounting, the accrual system.

Accounting's traditional accrual system allocates economic events to discrete fiscal periods based upon a link to underlying business activity. It contrasts with the cash-basis of accounting, which records events when cash is exchanged. The accrual system's key device—the matching
principle—pursues this aspiration by insisting that expenses burden the income statement of the period in which they contribute to revenue generation (or earlier if this cannot be determined). The focus is on the income statement. The accrual system's theoretical basis includes the stewardship function of accounting information, a fundamentally historical perspective reflecting how well managers have operated a business.

Spurred by finance theory in 1987, a separate statement of cash flows joined the balance sheet and income statement as an essential component of a set of general purpose financial statements. The accrual system obscures cash flows, and the cash flow statement makes them transparent. Financial statement analysts and finance theorists increasingly focus on cash flows, casting doubt upon the utility of the accrual basis of accounting and its focus on the income statement. Consider the following assertion made by a leading financial economist: cash flow is a fact, while earnings are an opinion.10

The cash flow statement's power opens up possibilities for accounting never plausible with the balance sheet and income statement alone. Some are desirable, but only when all three statements are used together. Thus, for example, the cash flow statement is often superior compared to the balance sheet for measuring accruals as a way to test for the presence of earnings management in the income


Historical cash flows are often better indicators of future cash flows than are earnings, although predictions can be improved by using the two together.

On the other hand, a leading use of the cash flow statement is to help make valuation determinations. In fact, discounted cash flow (DCF) valuation became, in the latter half of the twentieth century, the dominant valuation method, rendering to history's dustbins traditional valuation methods using assets or earnings. Despite resistance through the early 1980s, DCF is now routinely used to gauge fair value. Institutions ranging from U.S. courts to the World Bank endorse DCF valuation methods.

Two sets of assumptions are necessary to use DCF, both of which invoke finance rather than accounting concepts. First, on a cash flow statement amounts are usually specified—they are accounting facts—but when analyzing them a wide variety of possibilities appear. They all start with GAAP earnings but then exclude or include a host of discretionary items. Resulting expressions (like EBIT, EBIDTA, and so on) are not accounting concepts.

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13. Cf. Weinberger v. UOP, Inc., 457 A.2d 701 (Del. 1983) (abandoning previous business valuation framework reliant upon a weighted average of value estimated using assets, earnings and market price, in favor of framework permitting all generally recognized valuation methods, the ascendant one of which was DCF).


15. Common short-hands include earnings before interest and taxes (EBIT), earnings before interest, taxes and depreciation (EBITD), and earnings before interest, taxes, depreciation and amortization (EBITDA). In each case, adjustments are made by subtracting from resulting cash-flow figures estimates of future required reinvestments in the business for capital expenditures.

16. In fact, FASB-ordained GAAP prohibits providing cash flow per share figures in a set of general purpose financial statements. See Statement of Cash
Rather, they are recent inventions of investment bankers and other financiers.\textsuperscript{17} Second, DCF analysis projects cash flows into the distant future, at least five years, and often with estimates using growth rates extending into an infinite horizon period.\textsuperscript{18} The popularity of DCF thus underlines a shift in the balance of intellectual power towards finance and away from accounting.

Despite finance theory's predictions, managers manipulate accounting forms and markets are fooled, as the late 1990s dramatically testify.\textsuperscript{19} Apart from such experience, a burgeoning theoretical and experimental literature draws upon behavioral psychology. Behavioral finance theory undercuts modern finance theory and explains realities that modern finance theory cannot.\textsuperscript{20} A key concept is frame dependence, which is a bias to comprehend information differently depending upon how it is presented. This literature's relation to accounting forms is clear. It can matter whether and how stock options are

\begin{quote}
\textsuperscript{17} See Erik Lie & Heidi J. Lie, Multiples Used to Estimate Corporate Value, \textit{FIN. ANALYSTS J.}, March/April 2002, at 44.


\textsuperscript{19} A dramatic large-scale example is the telecommunication industry's capitalizing of line costs that kept their stock prices high; they plummeted when it became clear these should have been expensed. See Lawrence A. Cunningham, \textit{The Sarbanes-Oxley Yawn: Heavy Rhetoric, Light Reform (And It Might Just Work)}, 35 \textit{CONN. L. REV.} 915 (2003) (providing a description of the largest frauds of the late 1990s and early 2000s, including those in the telecommunication industry). Another example is how investors responded to different accounting for acquisitions under the now-repealed purchase-pooling distinction. See Patrick E. Hopkins, Richard W. Houston & Michael F. Peters, \textit{Purchase, Pooling and Equity Analysts' Valuation Judgments}, 75 \textit{ACCT. REV.} 257 (2000).

\end{quote}
measured and reported on the income statement, even though no cash flows exchange hands.\textsuperscript{21}

A difficulty with behavioral challenges to efficiency theory is their inherent messiness, contrasted with the elegant beauty of efficient markets. Behavioral theories explain a wide range of often conflicting biases, whereas efficiency theory assumes a market behaving as if all actors were economically rational. Finance personifies the old economists’ joke about looking for one’s car keys under a light in a parking lot because the light is better—despite losing the keys in some other location. It takes too seriously Milton Friedman’s specification that the test of an economic theory is not its descriptive accuracy but its predictive efficacy.\textsuperscript{22} Even on these terms, moreover, efficiency theory’s failure to predict—even affirmatively to obscure—market deception of the late 1990s suggests that it does not pass Freidman’s test.

In fact, however, both efficiency and behavioral accounts of market behavior may be partially correct, producing a middle ground. Markets may be substantially efficient, but prone to periodic bouts of moodiness better captured by behavioral theories. Such bouts appear to have characterized the late 1990s and early 2000s and their

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\textsuperscript{21} Numerous other examples appear. Consider America Online’s (AOL) decision whether to capitalize or expense disbursements to build its Internet subscriber database. AOL capitalized these disbursements and the market price reflected this decision. And when AOL changed under pressure to expense these costs, the market price reflected this change. Consider the general practice in the telecommunication industry of treating capacity swaps as asset and revenue transactions rather than as liability and expense transactions. See \textit{In re America Online, Inc.}, Accounting and Auditing Enforcement Release No. 1258, Litigation No. 16522 (May 15, 2000).

\textsuperscript{22} The cardinal rule of economic forecasting... holds that a model’s predictive power is the only relevant test of its validity, not the assumptions underlying it. See Milton Friedman, \textit{The Methodology of Positive Economics}, in \textit{Essays in Positive Economics} 3, 23 (1953) (stating that a “theory cannot be tested by the ‘realism’ of its ‘assumptions’”); see also Mark Blaug, \textit{The Methodology of Economics: Or How Economists Explain} 104 (6th ed. 1985) (explaining Friedman’s thesis to be that the realism of the assumptions underlying a theory is irrelevant and that models are to be judged by their predictive power).

Cunningham, \textit{Random Walks}, supra note 20, at 559 n.60
associated frauds.\textsuperscript{23} If so, this experience suggests that accounting forms matter most when they are least likely to be obeyed. Accounting's traditional numerical history and its income statement are thus particularly important during innovative periods. The late 1990s and early 2000s were such a period, when market appetites grew for prognosis using forecasted cash flows.

In this middle ground, reliable accounting is a central piston in the efficient market engine. Finance and accounting must be melded into complements, not jealous opponents. Attention would center on blending income statements, balance sheets, and cash flow statements, balancing numerical history with prognosis. Alas, the symptoms manifest in the late 1990s showing finance theory's dominance over accounting continues unabated, despite reforms. This is because reforms addressed only the symptoms, not the disease.

II. SYMPTOMS

A simple illustration captures the difference between finance and accounting. If a company sold five widgets last year, it is clearly a lie for its management to report selling six. If management says it expects to sell six widgets next year, it is clearly not a lie to say that they hope to sell seven. Finance is most interested in expectations—focusing on six or seven; accounting is most interested in the facts—that five were sold.

Finance theory thus feeds a common feature of accounting fraud, which is simply to paint rosy views of the future. A manager believes that certain targets can be reached—expecting six and hoping for seven. This belief supports the view that the future reporting of numerical history will be superior—better than five. This can create sufficient managerial optimism to doctor current pictures of numerical history (call it six this year); the tempted manager may believe that the rosier future will be capable of absorbing the difference between actual history and the imagined future. For example, if the company in fact sells

\textsuperscript{23} See ROBERT J. SHILLER, IRRATIONAL EXUBERANCE (2000); see also ANDREI SHLEIFER, INEFFECTIVE MARKETS (2000).
five this year but seven the year after, management can call it six apiece.\textsuperscript{24}

Two salient features of the late 1990s dramatize indulgence of finance theory over accounting practice. These were the proliferation of analyst earnings reports specifying expectations and corporate \textit{pro forma} figures expressing hopes. Wall Street analysts are steeped in the finance school, not the accounting school. Analysts may actually believe that they, as the market, know better than the results that appear from applying traditional accounting principles. While some undoubtedly take accounting standards seriously and insist on evaluating performance using accounting information, many—during the late 1990s at least—pressured managers into making elaborate forecasts of future performance. This was delicately called “guidance” and led analysts to define and disseminate “expectations.” Many of these analysts, moreover, worked for securities firms whose investment banking department sought underwriting business from the companies that analysts followed. The coziness of the relationship magnified the inclination to extract rosy predictions of the future from the past. For the analyst community, social proof set in: if everyone believes a forecast, it must be true.

These futuristic orientations pressured management to recast actual historical experience, to conform to and facilitate prognostications. The practice of \textit{pro forma} financial reporting became widespread in the late 1990s and early 2000s. This involved presenting financial data in forms that deliberately varied from GAAP. While managers defended these forms using various obfuscating arguments, including that GAAP just didn’t work well for their special business, underlying the practice was an impulse to show how the future would (hopefully) look. The practice was obnoxious, omitting items of ordinary expense and making other GAAP departures to display steadily growing sales,

\textsuperscript{24} \textit{Cf. In re} BT Securities Corporation, 58 S.E.C. Docket 1145 (Dec. 22, 1994), \textit{reprinted in} LAWRENCE E. MITCHELL ET AL., CORPORATE FINANCE AND GOVERNANCE 286-93 (2d ed. 1996). In this matter, tape recordings of a derivatives trader captured him describing how undisclosed losses on a client account would be made up when the market moved favorably, as follows: “I mean we told him $8.1 million when the real number was 14. So now if the real number is 16, we’ll tell him that it is 11. You know, just slowly chip away at that differential between what it really is and what we’re telling him.” MITCHELL, \textit{supra}, at 280.
net income, and—most importantly—cash flow. In an era of market bubbles such as the late 1990s, people wanted to believe these giddy pictures of the future. Efficiency theory reinforced the fantasies since participants were able to conclude that the market must be right—a whole new economy must have been born.

These symptomatic practices spawned respective sections of the Sarbanes-Oxley Act of 2002 cracking down on their proliferation. These reforms, however, fail to rectify underlying demand for prognosis rather than history. Greater emphasis on the future is most evident in the longer-term trend begun in the mid-1970s with the advent of the forward-looking disclosure regime, the disease that breeds finance's dominance over accounting.

III. DISEASE

Until the late 1970s, the SEC and federal securities law prohibited disclosure of forward-looking information. In that period, market appetite for forward-looking information intensified, and participants pressured the SEC to change its stance. After substantial resistance, the SEC relented, allowing forward-looking disclosure. Thereafter, the SEC went further, encouraging, and sometimes requiring, forward-looking information. The SEC


28. See SEC Regulation S-K, 17 C.F.R. § 229.10(b) (2005) ("The Commission encourages the use . . . of management's projections of future economic performance that have a reasonable basis and are presented in an appropriate
characterizes related disclosure as addressing “trends and uncertainties” in a business.29 This opens up accounting’s traditional conservatism towards finance theory’s obsession with estimations and discounting the future.

The movement for forward-looking disclosure blossomed in the early 1970s, as efficient market theory ascended.30 Opponents of forward-looking disclosure made three key arguments favoring the SEC’s traditional stance prohibiting prognostication.31 First, forward-looking statements are inherently unreliable and misleading per se.32 No one is clairvoyant; management can be no more clairvoyant than investors or other users of financial reports. Second, investors likely would assign undue credence to formal managerial disclosure of forward-looking information, despite this inherent unreliability. Third, forward-looking information is more susceptible to managerial manipulation than hard historical fact. All three objections have proven valid, underscored by the accounting frauds of the late 1990s and early 2000s.

Supporters of forward-looking disclosure emphasized that all investment valuation and related decisions are about the future, a point opponents did not dispute. Disagreement concerned whether managers or investors are better positioned to conduct prognostication. While supporters did not believe either group was clairvoyant, they opined that managers were somehow better equipped than

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31. See Harry Heller, Disclosure Requirements Under Federal Securities Regulations, 16 Bus. Law. 300, 307 (1961) (despite reality that investment value is a function of future financial performance, managers are not clairvoyant and management attempts at forecasting are “almost invariably . . . misleading because they suggest to the investor a competence and authority which in fact does not exist.”).

investors to provide reasonable forecasts. This represented a subtle shift in roles: traditionally, managers applied accounting to report results of known events and transactions and investors applied finance tools to make related investment decisions.

Devotees of forward-looking disclosure also redefined the target audience for financial disclosure from the average ordinary investor to the sophisticated investor; this move sought to negate the claim that investors would give undue credence to managerial forecasts. Finally, manipulation risk could be neutralized by imposing on managers an obligation of good faith when providing forward-looking disclosure.

The debate's resolution led to a system requiring more and more forward-looking disclosure, with SEC releases in 1979, 1982, and 1989 increasing this orientation. Early proponents disagreed as to whether this regime should be voluntary or mandatory; the result was initially an experimental regime based on voluntary disclosure. It gradually moved to one mandating specific kinds of forward-looking disclosure.

As for whether forward-looking information should be targeted at the sophisticated investor or all investors, terms of debate shifted from the 1970s to the 1990s. Early on, supporters argued that managers should provide forecasts to sophisticated investors outside formal SEC filings. While this approach dominated for two decades, the SEC

33. See Kripke, supra note 30.
34. See generally Burton, supra note 30.
35. See Kripke, supra note 30, at 1198-99.
36. See SELIGMAN, supra note 32, at 611 (SEC's 1982 adoption of Item 303 of Regulation S-K concerning MD&A and forward-looking information "is the key part of the evolution of the Commission's approach to accounting from an emphasis on 'hard fact' to its present emphasis on 'soft' or predictive information. It is a comprehensive disclosure item.").
37. See id. at 559-61.
38. Compare Kripke, supra note 30 (objecting to extant practice that SEC position perpetuated of "differential disclosure," meaning professionals receiving projections in presentations, conference calls and press releases the public at large did not receive), with Burton, supra note 30 (urging reorientation of SEC target audience from "the stockholder without clout, if you will" and "sophisticated investors and professional analysts through whom information would be filtered down to less sophisticated investors and their brokers").
reversed course in the late 1990s by adopting Regulation FD to require that guidance provided to one investor must be provided simultaneously to the public at large. This step completed the circle that the forward-looking disclosure regime inaugurated: (1) managers were redirected from accounting to finance and (2) all investors were functionally brought inside the enterprise by mandates that managers supply finance-oriented information.

Regulatory efforts ensuing from the forward-looking disclosure debate thus resolved numerous contentious questions. The resulting regime is mostly mandatory; it requires good faith and reasonable grounds for predictions; and makes the same predictions available to all investors whether sophisticated or not. Never resolved in this debate on the merits, however, is the argument of opponents that forward-looking information is inherently unreliable. It remains true, after all, that no one is clairvoyant. The late 1990s and early 2000s also show that even so-called sophisticated investors are not immune from being fooled by managerial manipulations.

Accordingly, the SEC's early cautious regulatory response to market demand for futuristic information showed prudence. In fact, the reality that forward-looking information is inherently unreliable manifested immediately upon implementation of the forward-looking disclosure regime. Managers would forecast various business developments for market participants eager to clarify their own cloudy crystal balls. When these judgments turned out differently, plaintiffs' lawyers sued. This litigation showed symptoms of the underlying reality that forward-looking information is inherently unreliable. Rather than ever confronting this reality squarely, the regulatory regime focused on these symptoms by designing devices to address associated litigation abuses.

Safe harbor provisions are the leading device to address litigation abuses associated with forward-looking


40. See SELIGMAN, supra note 32, at 559-60 (quoting SEC official and leading securities lawyer of the period, A. A. Sommer, as saying that litigation aspects were the "biggest headache" associated with the new forward-looking disclosure regime).
information. These insulate issuers from liability in private actions when forward-looking statements are accompanied by cautionary language underscoring their basic unreliability. The SEC, Congress, and courts all participated in developing related doctrines. The judiciary used the so-called bespeaks caution doctrine. It provided a case-by-case evaluation of whether forward-looking information was accompanied by sufficient cautionary language to alert a reasonable investor to the information's tentative quality. The SEC and Congress essentially codified this doctrine.

While some evidence indicates that the forward-looking disclosure system enhanced overall quality of information and its interpretation, drawbacks have appeared. Managers forecast future earnings and equip analysts to do so; analysts then widely disseminate


42. See, e.g., In re Donald J. Trump Casino Sec. Litig., 7 F.3d 357 (3d Cir. 1993); Mayer v. Mylod, 988 F.2d 635 (6th Cir. 1993); Rubenstein v. Collins, 20 F.3d 164, 167 (6th Cir. 1994); Harris v. Ivax Corp., 182 F.3d 799 (11th Cir. 1999) (also interpreting Congressional and SEC safe harbor provisions). See generally Donald C. Langevoort, Disclosures that "Bespeak Caution," 49 BUS. LAW. 481 (1994).


expectations across the marketplace; this creates pressure to meet these expectations. (When a company sold five widgets, it created a historical record; when managers say they expect to sell six and hope to sell seven, they create expectations and hopes.) Managers who fail to meet expectations and hopes are punished severely. This, in turn, increases pressure to enhance reports of numerical history to conform to the prognosis previously painted. The result is often escalating accounting pressure to repaint history to conform to increasingly out-of-reach prognosis.

These effects are not met by regulatory efforts to police litigation abuse arising from prognostication. More problematic than second-guessing by litigation is the first-order stage on which this information is demanded and supplied. But this problem, likewise, has never been addressed. Demand for forward-looking information is demand for what is inherently unreliable. Supplying the information sets markers that are bound to result in disappointment. Specifying the targets creates pressure to meet them, and when fundamental business strategies cannot do so, accounting massage becomes more tempting. In the extreme, finance destroys accounting.

45. In theory, \textit{ex ante} awareness of future punishment for disappointed expectations should constrain managerial optimism; in practice, however, this constraint is weak. See Joseph Fuller & Michael C. Jensen, \textit{Just Say No to Wall Street: Putting A Stop to the Earnings Game}, 14 J. APPLIED CORP. FIN. 41 (2002).


Forward-looking disclosure . . . must often be made with less-than-complete confidence of their accuracy, with the nagging sense that with more time, doubts about data quality might naturally diminish. From time to time, senior executives will discover, much too late, that the truth is indeed quite different from what they have been led to believe. To be sure, senior executives cannot explicitly acknowledge this. Part of the essential dramaturgical role of senior managers is to communicate confidence and control over their environment, and . . . many management theorists believe that effective corporate disclosure must reflect a comparable level of confidence in control, if not performance, by the senior management group. Thus, even putting aside the possibility that those top managers have their own selfish reasons to distort, there is a substantial risk of a mismatch between what they say and what, once a retrospective look at what all those in the organization actually knew or sensed is undertaken, was "known" by others in the firm.
Not only has inadequate attention been paid to this feature of the contemporary financial reporting environment, the safe-harbor mechanisms used to address the identified litigation problem appear equally inadequate to their task. What is needed is a policy to address both challenges. This must constrain undue second-guessing litigation and limit forecasting likely to pressure managers to report accounting figures in light of those estimates rather than based on subsequent business reality.

IV. METASTASIZING

Despite limitations of peering into the future using forward-looking disclosure, reforms push further in that direction. This shows not only potential misdiagnosis of the disease and questionable prescription, it manifests the depth and ubiquity of modern culture’s preoccupation with the future. Two reforms highlight this: movement towards a continuous disclosure system and development of an early warning system provided by auditors based on the quality of an entity’s internal control over financial reporting.

The apotheosis of modernity’s future obsession in securities markets and law is the pressure for a continuous disclosure system. This is a concept designed to require real-time display of various financial developments. Long sought by market participants and recently encouraged by the SEC, the Sarbanes-Oxley Act (SOX) adds force to this movement by directing the SEC to adopt rules to hasten the

*Id.* at 125. Mismatch risk poses two challenges: second-guessing litigation, which the securities law framework has addressed, and pressure to finesse a match, to which inadequate attention appears to be paid. See G. Mitu Gulati, Jeffrey J. Rachlinski & Donald C. Langevoort, *Fraud by Hindsight*, 98 NW. L. REV. 773 (2004) (examining judicial responses to disappointed expectations arising from prognosis).

47. Debate concerning the merits of a forward-looking disclosure system was intense in the 1970s, see *supra* note 46 and accompanying text, but thereafter cooled and the system’s role in the financial frauds of the late 1990s and early 2000s was neglected.

phenomenon. Under SOX, companies must disclose publicly, on a “rapid and current basis,” all material changes in their financial condition or operations, including trends providing qualitative information and graphic presentations.49

SOX uses the word “disclose,” disguising its more profound shift in market appetite and regulatory philosophy—likewise disguising latent dangers. The innovation of the original federal securities laws was a move towards disclosure. Mandatory disclosure, Louis Brandeis famously quipped, is the best disinfectant.50 Current pressures for real-time display go beyond disclosure. They move towards transparency. Again, this shift reflects finance-driven pressure towards real-time accounting, presenting enormous challenges to basic accounting concepts such as allocation of economic events to multiple fiscal periods. Accompanying these pressures, moreover, are appetites for systems and research designed to provide a continuous auditing function, despite numerous recognized obstacles to this undertaking.51

Contemporary calls for heightened transparency across society often appear as unbounded virtues.52 But


50. See LOUIS D. BRANDEIS, OTHER PEOPLE’S MONEY AND HOW THE BANKERS USE IT 92 (1914) (“Sunlight is said to be the best of disinfectants; electric light the most efficient policeman.”).

51. See Vernon J. Richardson & Susan W. Scholz, Corporate Reporting and the Internet: Vision, Reality, and Intervening Obstacles, 11 PAC. ACCT. REV. (Dec. 1999/Jan. 2000). Numerous conferences on the concept of continuous auditing have been staged in recent years. See Rutgers Accounting Website, http://www.accounting.rutgers.edu (last visited Nov. 8, 2005) (listing the conferences that have been held on continuous auditing and reporting).


Transparency is an eleventh commandment of American life generally, not just of financial markets. We insist on open hearings all through government; we open up to public scrutiny under the Freedom of Information Act the records that elsewhere would be kept confidential; we relentlessly pursue the tax returns and business dealings of almost anyone seeking high public office. We do all this as part of the public’s unquestioned (if sometimes exaggerated) “right to know.” It comes as no surprise that what is so ubiquitous in our society should affect the financial reporting of the country's major businesses.
good reasons appear to doubt this proposition. Otto van Bismarck reportedly cautioned that, "if you like laws and sausages, you should never watch either one being made." The same is true for those who like financial reports. Consider how managers are to develop this continuous information-display.

On a daily basis, companies generate internal financial data, such as sales, accounts receivable balances and charge-offs, inventory levels and obsolescence. These financial data reveal trends. These trends can amount, on a temporary basis, to material changes in financial condition and operation. Mandatory display of these trends is functionally equivalent to mandatory transparency of business operations on a daily basis. It opens for view daily financial recording, not periodic financial reporting. This echoes the process associated with the dawn of forward-looking disclosure era of managers generating finance data and distributing it to investors.

Besides impairing the efficacy of accounting's fiscal-period assumption, daily changes are not indicative of quarterly or annual aggregates. This information is most useful to managers during an accounting/operating period. It equips them to make course corrections, taking such steps as strengthening sales efforts in lagging segments or improving collection practices when receivable charge-offs rise in certain customer bases. The information is useful to redirect trends and to manage the materiality and direction of financial condition and operation.

Id. at 1342. Professor Lowenstein's comments addressed the traditional disclosure system, not the kind of transparency digitization injects. Calls for transparency routinely are heard concerning business, government, international agencies, military operations, diplomatic corps, academia and other organization types. See generally SOMETHING TO BELIEVE IN: CREATING TRUST AND HOPE IN ORGANISATIONS (Rupesh A. Shah et al. eds., 2003); Cynthia A. Williams, The Securities and Exchange Commission and Corporate Social Transparency, 112 Harv. L. Rev. 1197 (1999).


Whether corrections succeed takes more than a few days of dashboard data to sort out. Premature disclosure of adverse trends may sustain them, disabling managerial corrections. If sales are seen flat in one region, customers in adjacent regions may switch to competitor products; if receivables collections are seen slowing among some customers, other customers may join the laggards. Investors and other corporate constituents are likely better served by giving management time and leeway to make improvements, not respond to them on a daily basis.\textsuperscript{55}

If the new rules under SOX only tinker with mandatory continuous display, consider a proposal for pure transparency made by a senior SEC official.\textsuperscript{56} It prescribes changing the existing financial reporting environment using two devices: (1) requiring companies to report real-time bookkeeping information on publicly-accessible websites (including real-time journal entries, ledger summaries, monthly aggregations and so on) and (2) requiring management to respond publicly to questions concerning this information.

The theory of this substantive transparency (not mere disclosure) is to equip investors having requisite interest and resources to perform their own financial statement audits of companies, or engage their own auditor to do so. Apart from numerous other practical problems,\textsuperscript{57} it is


\textsuperscript{56} See Peter K.M. Chan, \textit{Breaking the Market's Dependence on Independence: An Alternative to the 'Independent' Outside Auditor}, 9 FORDHAM J. CORP. & FIN. L. 347 (2004). When Peter Chan's article was published, he was Associate Regional Director, Enforcement, in the SEC's Midwest Regional Office. (His views, of course, do not necessarily represent those of the SEC.)

\textsuperscript{57} As examples: (1) supplied information is raw bookkeeping data and limited questionnaire access to management; neither investors nor their auditors have access to a company's system of internal control, audit committees, walk-through exercises, or other essential resources used in traditional auditing and (2) the result would require enormous investor coordination and/or result in numerous separate investor-audits, generating wasteful duplicative costs.
doubtful that such deep transparency is in the best interests of corporations or investors. But the proposal shows enduring reform-based emphasis on finance (transparency) not accounting (disclosure).

The second reform highlighting the urge for transparency concerns auditing. In traditional financial statement audits, auditors speak as of a moment in time about financial statements prepared as of a prior date and for a prior period, providing hard facts. These are attestations of numerical history. Auditors are financial archeologists. They provide three paragraphs of standardized text to express unqualified opinions, and offer a few additional sentences in other situations.

Reforms implemented in mid-2004 vastly expand the auditor's task, transforming it from financial archeologist of numerical history into a forecaster of financial reporting. The reform requires auditors to test and opine upon a company's internal control over financial reporting. Though based upon a current examination and providing an opinion about control maintenance during a past accounting period, it is quintessentially about the future—the auditing standard describes itself as creating an "early warning system."

The key trigger requiring auditor forward-looking disclosure is the existence of a material weakness in such control. The concept of material weakness is forward-looking, defined as risk that material misstatements will not be detected or prevented in the future. The auditing

58. See Udo C. Braendle & Juergen Noll, A Fig Leaf for the Naked Corporation? (2004), http://papers.ssrn.com/paper.taf?abstract_id=523102 (making the specific case against utter transparency in corporate financial reporting). See generally Troy A. Paredes, Blinded by the Light: Information Overload and its Consequences for Securities Regulation, 81 WASH. U. L.Q. 417 (2003) (expressing more general reservations); Elizabeth Boros, Corporations Online, 19 Comp. & Sec. L. 492 (2001) (survey of 100 large Australian companies documents grounds for skepticism as to using corporate Web sites to deliver "universal real-time free access to continuous disclosure information"). This concern is wholly apart from protecting proprietary information that would necessarily be covered by such a proposal. See Chan, supra note 56, at 391-92.


60. Id. ¶ 6.
standard requires auditors to describe material weaknesses along with their actual or potential future effects on the company's financial statements.

The early warning system's likely effectiveness must be evaluated by comparison to the kindred system of forward-looking disclosure in place for business substance since the 1970s. At a minimum, to make this system meaningful will likely require the same kinds of safe-harbor concepts developed for the forward-looking disclosure system.61 Even those, of course, produced imperfections in the relation between forward narrative and eventual reporting of numerical history. Analogous challenges appear in this control audit innovation.

Nevertheless, a virtue appears in this otherwise indulgent futurism. By insisting on auditor assessment of control, the reform rejects finance theory's implications that accounting controls are of limited utility. This rejection is a useful antidote to widespread preoccupation with the future creating demand for and supply of phony financial forecasting. On balance, however, the reform amounts to one step forward and one step backward.

V. CURES

Numerous policies might address the problem of forward-looking information. This essay identifies two such policies. One policy is legal: redefining the disclosure standards applied to managers. The other policy is business-related: redefining how financial figures are reported. Both address the inherent unreliability of forecasts, which the forward-looking disclosure regime never has.

The first policy cure operates within the existing forward-looking disclosure regime. Rather than require, permit, or encourage managers to provide forecasts of earnings (or other measures), the regime could simply require managers to disclose material risks of future

adversity. The purpose of this regime would be to provide a basis for investors to gauge the degree to which a company's numerical history is useful as a guide to probable future performance. Inherently unreliable estimates of future performance would not be required, permitted or encouraged.

The second policy cure prescription operates within an altered framework for accounting. It takes one lesson from finance. Accounting should not use a single figure for every financial statement item (aggregating underlying transactions). In many cases, only estimates are reasonably possible, even for events and circumstances that have occurred. The appropriate amount of reserves for doubtful accounts and the methods for measuring inventory and cost of inventory sold are not capable of definitive measurement. Yet accounting has always imposed this result. (Managers cited this as one reason for using pro forma figures—although these figures also often pinpointed single figures.)

The solution is straightforward. Accounting figures should be reported in ranges, not single amounts. Thus, accounting should abandon the conceit of computing a single number for earnings and a single number for owners' equity and instead report a range of reasonable figures for each. This would more fairly reflect the fundamental challenges and limits of accounting, a system tied to numbers and history yet still capable only of providing ranges with any reliability. After all, when used to aggregate large numbers of measurements, the reliability of single discrete measurements degrades. The need for such a change is increasingly important as contemporary events—both scandals and reform—increasingly push accounting towards the future.

CONCLUSION

Finance—and the digitized-information age—demand from accounting what it cannot reliably deliver. Reforms

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directed at enhancing the orientation toward the future not only miss the points but exacerbate what they miss. Feeding the beast of information-hungry finance culture must be accompanied with training the beast. Mankind has long dreamt of knowing tomorrow's news today and contemporary culture whets that appetite because it seems so much more within reach. In accounting and securities regulation, however, hunger for tomorrow's news today can be perilous. Finance and accounting must work together to overcome these tensions—and the limits of each discipline. Lawyers involved in formulating federal securities disclosure policy would benefit by reconsideration of market fascination with the future; this essay scratches the surface.
