Assessing the Materiality of Financial Misstatements

James J. Park*

I. INTRODUCTION................................................................. 514

II. GAAP AND MATERIALITY.................................................. 519
    A. Financial Statements and GAAP .................................... 519
    B. Materiality: The Shift from a Quantitative to Qualitative Standard ......... 524
    C. Mapping the Liability Framework .................................. 528
       1. Liability Under a Quantitative Standard............................... 530
       2. Liability Under a Qualitative Standard............................... 530
       3. Effect on Pre-Trial Motions ........................................ 530
       4. Summary ..................................................................... 531

III. VALUING FINANCIAL MISSTATEMENTS.................................... 531
    A. Valuation Methods ....................................................... 531
       1. Market Price ............................................................. 532
       2. Fundamental Analysis .................................................. 534
    B. The Case for Assessing Financial Misstatements Using Fundamental Analysis ... 537

IV. PERSISTENCE..................................................................... 539
    A. Illustration Using Fundamental Analysis .................................. 541
       1. Persistent Misstatements ............................................... 542
          a. Earnings Inflation .................................................... 542
          b. Hiding Earnings Decline ........................................... 543
          c. One-Time Charge to Earnings ................................... 544
       2. Isolated Misstatements .................................................. 545
          a. Earnings Smoothing ................................................... 545
          b. One-Time Misstatement ............................................. 546

* Assistant Professor of Law, Brooklyn Law School. Thanks to Kelli Alces, Lawrence Cunningham, James Fanto, Michael Guttentag, Joan Heminway, David Hoffman, Roberta Karmel, Donald Langevoort, Minor Myers, Elizabeth Nowicki, Arthur Pinto, Norman Poser, Adam Pritchard, Frederick Tung, William Wang, and Verity Winship for helpful comments. This Article benefited from comments made at the Fourth Annual Conglomerate Junior Scholars Workshop organized by Christine Hurt. Thanks go to the Brooklyn Law School Dean’s Summer Research Fund. Also thanks to Christina Tomaselli for excellent research assistance. All errors are my own.
I. INTRODUCTION

The regulation of financial reporting by public companies is principally shaped by two considerations: accuracy and cost. If financial reports are inaccurate, stock prices may not reflect the underlying economic value of companies. But because of the complexity of public companies, as well as the ambiguity of the generally accepted accounting principles (GAAP) with which financial statements must conform, it is expensive to ensure that the accounting for every transaction is appropriate. The law attempts to balance such concerns by making securities fraud liability contingent on a showing of materiality.1 A financial misstatement can only trigger

---

1. This is so with respect to liability for securities fraud. See Securities Act of 1933 § 11, 15 U.S.C. § 77k (2000); Basic Inc. v. Levinson, 485 U.S. 224, 224 (1988). Moreover, the rules implementing section 404 of the Sarbanes-Oxley Act, Sarbanes-Oxley Act of 2002 § 404, 15 U.S.C. § 7262 (2006), require assessment of whether internal controls have “material weaknesses” that would prevent detection of a “material misstatement.” See 17 C.F.R. § 210.1-02(a)(4) (2008) (defining “material weakness” as “a deficiency, or a combination of deficiencies, in internal control over financial reporting . . . such that there is a reasonable possibility that a material misstatement of the registrant’s annual or interim financial statements will not be prevented or detected on a timely basis”); see also Order Approving Proposed Auditing Standard No. 2, Exchange Act Release No. 49,864, 69 Fed. Reg. 35,083 (June 17, 2004) (approving AN AUDIT OF INTERNAL CONTROL OVER FINANCIAL REPORTING PERFORMED IN CONJUNCTION WITH AN AUDIT OF FINANCIAL
liability if it is material, or important to a reasonable investor. The materiality standard should thus play a crucial role in screening out trivial from substantial financial misstatements, making the potential liability companies face for inaccuracies in their financial statements manageable. But there is little consensus as to what a reasonable investor would consider important with respect to financial misstatements. The current approach, which has been described as qualitative, considers a wide range of factors and has been criticized as nebulous. On February 8, 2008, a Securities and Exchange Commission (SEC) Commissioner pointed out the need to “clear up [the issue of materiality] with the full input of the investor, legal, accounting, academic, and business communities.” While numerous proposals for reforming securities class actions have recently been made, none has focused on clarifying the materiality standard. This Article

---


3. And indeed materiality has served as a significant screen with respect to certain types of misstatements that are presumed to be immaterial, such as puffery. See David A. Hoffman, The “Duty” to Be a Rational Shareholder, 90 Minn. L. Rev. 537, 562-63 (2006). And there are other significant screens such as the requirement that a misstatement be made with scienter and that there be a stock price decline. See, e.g., Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 342 (2005); Basic, 485 U.S. at 240; TSC Industries, Inc. v. Northway, Inc., 426 U.S. 438, 445 (1976). In addition, a 2008 SEC Staff Accounting Bulletin No. 99: Another Ill-Directed Foray into the Murky World of Qualitative Materiality, 95 Nw. U. L. Rev. 361, 367 (2000) (“SAB No. 99 is substantively flawed, and its ambiguity makes for an unworkable standard that is likely to complicate and further distort the financial reporting process.”); Richard C. Sauer, The Erosion of the Materiality Standard in the Enforcement of the Federal Securities Laws, 62 Bus. Law. 317, 329 (2007) (“[T]he courts are left with little guidance as to how to weigh quantitative indicia of materiality, while unable to escape the importance of doing so.”). But see Caroline A. Antonacci, SAB 99: Combating Earnings Management with a Qualitative Standard of Materiality, 35 Suffolk U. L. Rev. 75, 94 (2001) (noting that SAB No. 99 combats earnings management).


The comment is similar to that of a leading expert in 1971: “We know very little about materiality.” Homer Kripke, Rule 10b-5 Liability and “Material” “Facts”, 46 N.Y.U. L. Rev. 1061, 1067 (1971) (emphasis omitted). The confusion about the law is illustrated by the brief discussion of materiality in a leading accounting textbook published in 2007, which asserts: “[T]here is no set criteria guiding either the preparer or user of information in distinguishing between material and nonmaterial items.” John J. Wild et al., FINANCIAL STATEMENT ANALYSIS 70 (9th ed. 2007).

attempts to provide a clearer and more rational basis for assessing materiality with respect to financial misstatements.\(^7\)

At the outset, it is important to distinguish between financial misstatements, which are the focus of this Article, and nonfinancial misstatements. This Article’s analysis is limited to financial misstatements, or misstatements in a company’s financial reports. Though financial and nonfinancial misstatements are generally governed by the same reasonable investor standard, financial misstatements are more susceptible to scrutiny through quantitative benchmarks than nonfinancial misstatements.

For a time, materiality with respect to financial misstatements was arguably defined by a rule-like quantitative standard.\(^8\) If a financial misstatement had an impact on net income below a certain threshold—often five percent—it was presumed to be immaterial.\(^9\) The obvious problem with a quantitative standard is that it allowed for a significant amount of earnings manipulation. Aggressive companies could tweak their earnings at will to meet market expectations. As long as a financial misstatement was below the five percent quantitative threshold, the company would not be in violation of the securities laws.

In 1999, the SEC responded to such earnings manipulation by releasing Staff Accounting Bulletin No. 99 (SAB No. 99), which asserted that a principle-like qualitative standard governed financial statements.\(^10\) While SAB No. 99 used a term—qualitative

\(^7\) See e.g., Comm. on Capital Mkts. Regulation, Interim Report of the Committee on Capital Markets Regulation 128 (2006) [hereinafter Capital Markets Committee Report] (noting that “[f]or many years, the rule of thumb was that, in determining the scope of an audit, a potential error exceeding five percent of annual pre-tax income would be considered material,” and that “[i]n evaluating a misstatement, an error that exceeded ten percent of pre-tax income was considered material, while the materiality of an error between five percent and ten percent of pre-tax income was assessed, based on various qualitative factors”); Matthew J. Barrett, The SEC and Accounting, in Part Through the Eyes of Pacioli, 80 NOTRE DAME L. REV. 837, 874 (2005) (“As a general rule, accountants and auditors usually treat any amount which does not exceed five percent of income before taxes as immaterial.”); Grundfest & Bochner, supra note 7, at 1662 (noting the commonality of the five percent net income standard); Miller, supra note 4, at 363 (“A numerical rule of thumb has emerged: misstatements that impact disclosure by less than five percent are not material.”); Edward A. Weinstein, Materiality: Whose Business Is It?, CPA J., Aug. 1, 2007, at 24, 26 (“Although the professional literature never explicitly defined a ‘normal’ materiality limit, many auditors considered it to be 5% of net income.”).

\(^8\) See, e.g., Cinque D. Pregnini, Materiality: A Fifth of a Percent or a Fifth of a Century?, 6 WARWICK L. REV. 351, 353 (1990), proposed a quantitative rule of thumb for measuring materiality.


\(^10\) SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45,150, 45,151 (1999) [hereinafter SAB No. 99]. While staff accounting bulletins are not adopted by the Commission and do not have the force of law, they can be extremely influential. See Ganino v. Citizens Utils. Co., 228 F.3d 154, 163 (2d Cir. 2000) (describing SAB
materiality—that had earlier been used to describe controversial efforts to require disclosures relating to managerial ethics, it redefined that term to focus on financial misstatements. Under a qualitative standard, a financial misstatement under five percent can still be material if it meets certain qualitative criteria, such as allowing the company to meet earnings targets or affecting management compensation. The qualitative standard requires an assessment of a wide range of factors, including the subjective motivation for the misstatement, and is directed at the problem of manipulation that results from a rule-like quantitative standard.

This shift to a qualitative standard has been criticized. One SEC Commissioner asserted: “Anyone who has tried to apply SAB 99 is left with little certainty.” A 2006 report by the Committee on Capital Markets Regulation criticized SAB No. 99 as nebulous. Legal commentators have almost uniformly argued that the standard is vague and impossible to implement. Some practitioners have asserted that the standard has increased compliance costs, leading to a significant rise in unnecessary restatements by public companies.

These critics assume that the solution is to simply reinstate a quantitative standard. For example, the Committee on Capital Markets Regulation recommended that “the SEC revise its guidance on materiality for financial reporting so that scoping materiality is generally defined, as it was traditionally, in terms of a five percent pre-tax income threshold.” But the critics of the qualitative standard do little to acknowledge that a quantitative standard can be a blank check for earnings manipulation.

The current debate myopically focuses on the practicalities of the standard—whether

No. 99 as “persuasive guidance” for materiality analysis). SAB No. 99 purports to simply clarify existing law, but the strong response to its implementation indicates that it did more.

11. Atkins, supra note 5.
12. CAPITAL MARKETS COMMITTEE REPORT, supra note 9, at 89.
13. See supra note 4 (citing commentators criticizing SAB No. 99’s standard).
14. Rachel McTague, Attorneys Blame Increase in Restatements on Auditor Reporting, “Materiality” Definition, SEC. REG. & L. REP., Oct. 23, 2006, at 1795; see also ADVISORY COMMITTEE FINAL REPORT, supra note 2, at 76 (“Some have also asserted that the increase in restatements is the result of an overly broad application of the concept of materiality and misinterpretations of the existing guidance regarding materiality in SAB 99”); John J. Huber, Rules of the Road for Restatements, in ADVANCED SECURITIES LAW WORKSHOP 2007, at 163, 167 (2007). A report by the GAO found that the number of restatements by public companies has increased steadily over the last several years. See GOV’T ACCOUNTABILITY OFFICE, FINANCIAL RESTATEMENTS: UPDATE OF PUBLIC COMPANY TRENDS, MARKET IMPACTS, AND REGULATORY ENFORCEMENT ACTIVITIES 11–15 (2006). Earnings restatements can lead to litigation. One study found a greater correlation between securities class actions and earnings restatements after the passage of the Private Securities Litigation Reform Act of 1995. See Marilyn F. Johnson et al., Do the Merits Matter More? The Impact of the Private Securities Litigation Reform Act, 23 J. L. ECON. & ORG. 627, 640 (2007).
15. Cf. COMPETE Act, H.R. 5405, 109th Cong. (2d Sess. 2006) (proposing change to the quantitative five percent standard for internal control audits); Miller, supra note 4, at 393–94 (arguing that “courts should acknowledge the unworkable nature of the Staff’s materiality interpretation and render it unenforceable”). An exception is a proposal that materiality should be assessed from a zero-to-one scale, allowing auditors to better assess qualitative materiality factors. Rebecca L. Rosner et al., Assessing Materiality: A New “Fuzzy Logic” Approach, CPA J., June 1, 2006, at 26.
16. CAPITAL MARKETS COMMITTEE REPORT, supra note 9, at 19. The Committee noted that the issue of materiality has become even more significant since 1999 because the rules and standards implementing section 404 of the Sarbanes-Oxley Act require auditors to provide reasonable assurance that the company’s internal controls contain “no material weaknesses.” Id. at 116–35.
it is easy to apply (favoring the quantitative standard) or allows prevention of earnings manipulation (favoring the qualitative standard). But there has been little discussion about what types of misstatements are most likely to adversely affect the market’s ability to value a company. A deeper analysis of what misstatements are most likely to impact the market’s assessment of a company’s value and the circumstances in which companies should be liable for such financial misstatements is necessary. This Article makes two proposals that will provide a clearer basis for distinguishing between financial misstatements.

First, the law should mainly consider the persistence of a financial misstatement in determining its materiality. The Article comes to this conclusion by contrasting two valuation methods that can be used to assess whether a financial misstatement is material. The first—market price—simply looks at the market’s reaction to the financial misstatement. The second—fundamental analysis—analyzes the way in which the financial misstatement should affect the market’s assessment of the discounted cash flows of the company.

The current qualitative test, as set forth by SAB No. 99, rests on the assumption that even small misstatements can matter because they can prevent large fluctuations in market price. But market fluctuations can be an arbitrary way of assessing whether a misstatement has affected the market’s perception of the true value of a stock because such movements may also reflect irrational or noneconomic behavior. While the term reasonable investor can encompass both irrational and rational investors, the case for focusing on the perspective of the rational investor is strongest with respect to financial misstatements. Rational investors, who typically utilize fundamental analysis in assessing value, rely more on the integrity of financial statements than irrational investors.

An investor valuing a stock through fundamental analysis will be more concerned with persistent misstatements, which consistently inflate earnings or hide significant and lasting declines in a company’s earnings power over multiple periods, than isolated misstatements, which hide or smooth temporary earnings shortfalls. A persistent misstatement is more likely to cause the market to significantly overestimate the future cash flows of the company than an isolated misstatement.

Thus, in assessing the materiality of a misstatement, the law should consider not only the magnitude and motivation of the misstatement, but also its persistence. In securities fraud cases, evidence of a persistent misstatement might create a rebuttable presumption of materiality while evidence that the misstatement is isolated might create a rebuttable presumption of immateriality. While considering persistence may not simplify the materiality analysis in all cases, it will likely give judges a more meaningful basis for determining the materiality of a financial misstatement.

Second, the quantitative and qualitative standards should be seen as targeting two
different problems. The quantitative test prohibits large misstatements that may distort the fundamental value of a company. The qualitative test prohibits unjust enrichment by individuals who might benefit from market fluctuations caused by manipulations. Both standards might be deployed as a way of determining when a company should be vicariously liable for a financial misstatement. In fraud on the market cases, companies would only be vicariously liable for quantitatively large misstatements. Individuals, though, could still be liable for quantitatively small misstatements if they are unjustly enriched by the misstatement. This proposal would reduce the costs of complying with GAAP while allowing for the punishment of those who manipulate earnings for personal gain.

While on their face these proposals might be perceived as evidencing a distaste for securities fraud actions relating to financial misstatements, that is not so. The point is not that securities fraud actions are inherently wasteful and should be arbitrarily curtailed. Rather, given the increasing criticism of such actions and proposals to abandon vicarious liability in fraud on the market cases, in order to save the securities fraud action its reach should be limited. By setting forth reasonable standards enabling courts to screen out suits without merit at an early stage, and limiting vicarious liability to the worst situations, we might help preserve the securities fraud action as a mechanism to deter corporate fraud relating to financial misstatements.

Part II of this Article introduces the concept of materiality with respect to financial statements. It describes the recent shift from a quantitative to a qualitative standard and maps the liability standard as it exists today. Part III shows how the materiality standard can be assessed in light of two valuation methods—market price and fundamental analysis—and argues that the materiality of financial misstatements should mainly be assessed in light of fundamental analysis. Part IV argues that the materiality standard should focus on the persistence of a financial misstatement. Part V proposes that in fraud on the market cases, companies should only be vicariously liable for quantitatively large misstatements. Individuals could still be liable for quantitatively small misstatements, especially when they are unjustly enriched by such misstatements.

II. GAAP AND MATERIALITY

A. Financial Statements and GAAP

Public companies must file yearly and quarterly financial statements with the SEC. These financial statements must be prepared in accordance with GAAP, a set of

19. See, e.g., Grundfest, supra note 6, at 728 (“[T]he appropriate policy response is to search for strategies that can filter out weaker claims earlier in the process while allowing more meritorious complaints to proceed.”).


21. See 17 C.F.R. § 210.4-01(a)(1) (2008) (“Financial statements filed with the Commission which are not prepared in accordance with generally accepted accounting principles will be presumed to be misleading or inaccurate.”).
accounting rules issued by private entities such as the Financial Accounting Standards Board (FASB) under the supervision of the SEC. The filing requirement is a cost of accessing the public markets. Financial disclosure is a pre-condition of a liquid market where investors buy and sell shares of a company, assuming that the shares reflect all publicly available information about the company.

Financial statements have three components. First, the balance sheet provides a summary of the entity’s net worth, listing the assets, liabilities, and shareholders’ equity of the company. Second, the income statement provides a summary of the net increase or decrease of the company’s net worth for a particular time period, listing the revenue, expenses, and net income (simply, revenues minus expenses, also referred to as earnings) of the company. Third, the cash flow statement provides a summary of the actual cash inflows and outflows for a particular time period.

According to FASB, “[t]he primary focus of financial reporting is information about


22. While the SEC has the power to promulgate accounting standards, it has generally deferred to private accounting bodies in defining those standards. See Barrett, supra note 9, at 865–69.

23. See, e.g., Frank H. Easterbrook & Daniel R. Fischel, Optimal Damages in Securities Cases, 52 U. CHI. L. REV. 611, 629 (1985) (“The Securities Act of 1933 (the 1933 Act) and the Securities Exchange Act of 1934 (the 1934 Act) stand for the proposition that disclosure of information is the basis of an efficient securities market and that whatever price the traffic will bear once the information is out is ‘right.’”); Note, Disclosure of Future-Oriented Information Under the Securities Laws, 88 YALE L.J. 338, 339 (1978) (“One goal of Congress in mandating full disclosure of material information to investors was to promote optimal allocation of capital by providing an efficient market for securities transactions.”). But see generally Roberta Romano, Empowering Investors: A Market Approach to Securities Regulation, 107 YALE L.J. 2359 (1998) (arguing that the mandatory disclosure regime should be replaced with a competitive federalism approach).


25. ZVI BODIE ET AL., INVESTMENTS 657–58 (6th ed. 2005) (“While the income statement provides a measure of profitability over a period of time, the balance sheet provides a ‘snapshot’ of the financial condition of the firm at a particular moment.”).

26. See, e.g., WILLIAM F. SHARPE ET AL., INVESTMENTS 570 (1999) (“In a broad sense, such earnings represent the difference between revenues and expenses . . . .”); CLYDE P. STICKNEY & ROMAN L. WEIL, FINANCIAL ACCOUNTING: AN INTRODUCTION TO CONCEPTS, METHODS, AND USES 99 (12th ed. 2007) (“Net income equals revenue minus expenses.”).

27. BODIE ET AL., supra note 25, at 656 (“The income statement is a summary of the profitability of the firm over a period of time, such as a year.”).

28. Id. at 658 (“The statement of cash flows details the cash flow generated by the firm’s operations, investments, and financial activities.”).

earnings and its components." GAAP is characterized by a system called accrual accounting, which requires companies to match revenues and expenses on the income statement in reporting financial results to better approximate earnings. In matching revenues and expenses, GAAP is distinguishable from a system that records actual cash inflows and outflows.

Accrual accounting seeks to provide a more accurate assessment of profitability than simply measuring cash flows. For example, suppose a wrench manufacturer makes wrenches costing $100 in the first quarter of its fiscal year, receives an order for those wrenches in the second quarter, delivers the wrenches in the third quarter, and receives $200 in cash for them in the fourth quarter. Under a system that only recorded cash flows, it would look like the company lost $100 in the first quarter and made $200 in the fourth quarter. Under an accrual system, the expense of $100 and revenue of $200 would be matched in the third quarter, when payment is reasonably assured, more accurately reflecting income of $100 in the third quarter:

<table>
<thead>
<tr>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flow</td>
<td>($100)</td>
<td></td>
<td>$200</td>
</tr>
<tr>
<td>GAAP</td>
<td></td>
<td>$100</td>
<td></td>
</tr>
</tbody>
</table>

As a general matter, GAAP “tolerate[s] a range of ‘reasonable’ treatments, leaving


30. See, e.g., STICKNEY & WEIL, supra note 26, at 104 (“[A]ccrual accounting attempts to match expenses with associated revenues.”). As Louis Lowenstein noted:

GAAP requires industry to use accrual basis accounting. Income is thus recognized when it is earned rather than when cash is received. The essence of the accrual basis is the matching of expenses with revenues, so as to produce a truer picture of a company’s profitability. The rub is that accrual-based accounting affords a great deal of flexibility and judgment in the timing of income and expense recognition.


31. PALEPU ET AL., supra note 24, at 1–5 (“Unlike cash accounting, accrual accounting distinguishes between the recording of costs and benefits associated with economic activities and the actual payment and receipt of cash.”); LAWRENCE REVSEINE ET AL., FINANCIAL REPORTING AND ANALYSIS 279 (3d ed. 2005) (“Cash flows are ‘lumpy’ . . . accrual accounting earnings measurement takes a long-horizon perspective that smooths out the ‘lumpiness’ in year-to-year cash flows.”).

32. As the FASB notes, “[i]nformation about enterprise earnings based on accrual accounting generally provides a better indication of an enterprise’s present and continuing ability to generate favorable cash flows than information limited to the financial effects of cash receipts and payments.” SFAS No. 1, supra note 29, at CON1–2; see also STICKNEY & WEIL, supra note 26, at 102–03 (discussing problems with the cash flow method).
the choice among alternatives to management.” In particular, GAAP allows companies a significant amount of discretion in reporting revenue, perhaps the most important item in a company’s financial statements. Revenue can be recognized when “the entity has substantially accomplished what it must do to be entitled to the benefits represented by the revenues.” While the meaning of the phrase “reasonably assured” may be straightforward in some circumstances, it might not be in others. An aggressive reading of the phrase “reasonably assured” will give management more leeway to make income for a particular time period appear higher by recognizing revenue from sales earlier. As a result, as Richard Breeden reports: “One of the common denominators of problematic accounting is the use of various GAAP techniques to roll forward accrual earnings or losses even though real cash flows may not yet have occurred.”

Because companies were exploiting the broad rules for recognizing revenue, in 1999, the SEC published Staff Accounting Bulletin No. 101 (SAB No. 101), Revenue Recognition in Financial Statements. SAB No. 101 clarified that “revenue is generally realized or realizable and earned” when: (1) “[p]ersuasive evidence of an arrangement exists”; (2) “[d]elivery has occurred or services have been rendered”; (3) “[t]he seller’s price to the buyer is fixed or determinable”; and (4) “[e]ollectibility is reasonably assured.” SAB No. 101 then applies these principles to ten hypothetical scenarios, inadvertently highlighting the problem of accounting standards, which is that they have little meaning until they are applied over time. Just as with the phrase “reasonably

34. See, e.g., Thor Power Tool Co. v. Comm’r, 439 U.S. 522, 544 (1979) (noting that GAAP is not “a canonical set of rules that will ensure identical accounting treatment of identical transactions,” but instead “tolerate[s] a range of ‘reasonable’ treatments, leaving the choice among alternatives to management.”); GOV’T ACCOUNTABILITY OFFICE, THE ACCOUNTING PROFESSION, MAJOR ISSUES: PROGRESS AND CONCERNS 67 (1996) (“Management abuse of accounting principles can be particularly difficult for the auditor to challenge as standards may be general, leaving leeway for judgment in determining their application to particular transactions.”); SHARPE ET AL., supra note 26, at 572 (noting that GAAP “allow[s] a large amount of discretion in how certain items are accounted for” and “[a]s a result, management may pressure accountants to use those principles that maximize the level of reported earnings, or that result in a high growth rate of reported earnings, or that ‘smooth’ earnings by reducing the year-to-year variability of earnings around a growth rate”); William H. Beaver, What Have We Learned from the Recent Corporate Scandals that We Did Not Already Know?, 8 STAN. J.L. BUS. & FIN. 155, 157–62 (2002) (noting that accrual system allows manipulation).
36. RECOGNITION AND MEASUREMENT IN FINANCIAL STATEMENTS OF BUSINESS ENTERPRISES, Statement of Financial Accounting Concepts No. 5, ¶ 83(b) (Fin. Accounting Standards Bd. 1984); see also Stevelman v. Alias Research Inc., 174 F.3d 79, 83 (2d Cir. 1999) (“Industry standards and generally accepted accounting principles (‘GAAP’) require that a company’s revenues not be recorded until such time as an exchange of merchandise has taken place and collection of the sales price on that merchandise is reasonably assured.”); STICKNEY & WEIL, supra note 26, at 280.
assured,” it is unclear *ex ante* what terms such as “persuasive evidence” or “rendered” or “fixed or determinable” mean. In contrast, a cash flow model is objective. Either the cash has been collected or it has not.

Returning to our earlier example, suppose the wrench manufacturer needs to boost its income in Quarter 2 to meet its earnings projections. Instead of recognizing the sale in Quarter 3, when delivery has been made, it takes the position that GAAP allows it to recognize the sale when the order has been received because it is dealing with a reputable customer, and recognizes the sale in Quarter 2 instead.

<table>
<thead>
<tr>
<th></th>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flow</td>
<td>($100)</td>
<td></td>
<td></td>
<td>$200</td>
</tr>
<tr>
<td>GAAP</td>
<td></td>
<td></td>
<td>$100</td>
<td></td>
</tr>
<tr>
<td>(recognize revenue upon delivery)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggressive GAAP</td>
<td></td>
<td>$100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(recognize delivery upon order)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

While the substance of the transaction has not changed, an aggressive interpretation of GAAP can lead to a different reporting result.\(^{40}\)

In addition to allowing companies more discretion, GAAP increases the possibility

---

40. While revenue recognition is a major issue, see Tom Baker & Sean Griffith, *Predicting Corporate Governance Risk: Evidence from the Directors’ & Officers’ Liability Insurance Market*, 74 U. Chi. L. Rev. 487, 518–19 (2007) (documenting the importance of revenue recognition internal controls in the assessment of companies by director and officer liability insurers), GAAP requires a significant amount of judgment in a number of other areas. On the cost side, there can be an issue as to whether a cost should be capitalized or expensed. When a cost is capitalized, it appears as an asset on the balance sheet, which declines in value from year to year. When a cost is expensed, it appears as an expense on the income statement, reducing income for that year. A company that is earnings conscious may attempt to capitalize costs that should be expensed. These methods allowed Worldcom to substantially inflate its earnings. See *Breeden*, supra note 37, at 20–21 (discussing Worldcom’s improper capitalization of expenses).

GAAP also results in significant amounts of management discretion because it relies significantly on estimates and projections in the recognition of costs. Such estimates have a subjective component and are not easily challenged. For example, companies take reserves in order to pay warranty claims. A company could take a larger reserve than necessary, a so-called cookie-jar reserve, and when needed, release those reserves to boost revenues in order to meet an earnings target. SAB No. 99, *supra* note 10, at 3. Companies can group periodic expenses into one-time charges, resulting in higher future earnings. See Lowenstein, *supra* note 30, at 1350 (explaining the use of restructuring charges to manage earnings). When challenged, the company can simply argue that it believed the reserves amount it chose was a reasonable estimate.
of good-faith errors. As one practitioner recently noted, “GAAP has become so complex that no one can get it right all the time and for certain issues there is no clearly right answer.”41 Thus, while GAAP arguably results in a more accurate assessment of a firm’s profitability, it is also costly to apply and subject to manipulation.42

B. Materiality: The Shift from a Quantitative to Qualitative Standard

There is an important exception to GAAP. Companies are not required to apply GAAP to items in financial statements that are not “material.”43 Such an exception is necessary because of the complexity of applying GAAP.44 At some threshold, the cost of ensuring that every transaction complies with GAAP is not worth the marginal benefit to investors.45 For decades, parties such as accountants and the SEC have struggled to define a workable standard of materiality.

Beginning in the 1970s, there were efforts to develop a materiality test more concrete than the “judgment of the accountant” standard that had previously been applied.46 One debate arising out of those efforts, which continues to this day, is whether materiality should be defined by a quantitative standard or whether it should also be defined by a qualitative standard.47

Under a quantitative standard, an item is not material if its impact on net income (defined as revenues minus expenses) falls below a certain numerical percentage, say five percent.48 For example, if a revenue recognition issue involves sales that impact income by only one percent, GAAP would not apply. Even if the company recorded the sale in a way that violates GAAP, it would not be liable under the securities laws because the

41. Huber, supra note 14, at 166.
42. That is not to say that a cash flow system leaves management without discretion to manipulate a company’s financial performance. See, e.g., Stickney & Weil, supra note 26, at 182–83. Companies can manipulate the timing of their cash expenditures to improve the appearance of their financial statements. See, e.g., Wild et al., supra note 5, at 82 (“[I]t is probably easier to manipulate cash flow than to manipulate income.”). Companies can toy with the classification of various cash flows in order to make it appear that their operations are more successful.
43. See SAB No. 99, supra note 10, at 2 (“Each Statement of Financial Accounting Standards adopted by the FASB states, ‘The provisions of this Statement need not be applied to immaterial items.’”).
45. See, e.g., Dan M. Gey et al., Auditing 137 (4th ed. 1996) (“[M]ateriality represents a cushion that the auditor allows for the necessary imprecision in applying auditing procedures to detect misstatements.”); QUALITATIVE CHARACTERISTICS OF ACCOUNTING INFORMATION, Statement of Financial Accounting Concepts No. 2, at CON2-2 (Fin. Accounting Standards Bd. 1980) (hereinafter SFAS No. 2) (“Information can be useful and yet be too costly to justify providing it. To be useful and worth providing, the benefits of information should exceed its cost.”).
48. SAB No. 99, supra note 10, at 2 (“One rule of thumb in particular suggests that the misstatement or omission of an item that falls under the 5% threshold is not material . . . .”).
misstatement would not be material. The benefit of a quantitative standard is that it makes it easier for companies to deal with GAAP. Because it sets forth a clear rule, companies who encounter difficult accounting issues can be sure they are not violating GAAP if those issues have a minimal numerical impact on their earnings. On the other hand, a quantitative standard gives companies discretion to manage their earnings so long as the earnings management is within a numerical threshold.

A qualitative materiality standard responds to the problem of earnings management by setting forth a principle-like standard that can be applied when the case warrants. Under a qualitative standard, even if an item falls under the quantitative threshold, it can still be material if it meets certain criteria. But without a bright line rule, companies will have difficulty knowing ex ante what will trigger liability for securities fraud, reducing their leeway in applying vague GAAP standards to numerous transactions. Companies might be liable for trivial financial misstatements that do not significantly affect earnings. As a result, companies that do not want to be lawbreakers might have to err on the side of overcautious reporting; otherwise they may be subject to liability under the securities laws.

For many years the SEC has pushed for broad standards of materiality with respect to nonfinancial misstatements, and this push impacted the interpretation of materiality with respect to financial statements. In particular, the SEC argued that companies should disclose ethical violations by management; an early form of qualitative materiality one commentator has referred to as “ethical materiality.” But soon after, the move to a

49. The quantitative standard may have originated as a rule of thumb for auditors. Sauer, supra note 4, at 328 (“[T]he imprecise existing legal standard defining what is ‘material’ makes it difficult for those issuers, directors and officers to understand their legal obligations.”).

50. See, e.g., WILD ET AL., supra note 5, at 70 (“One problem with materiality is a concern that some preparers of financial statements and their auditors use it to avoid unwanted disclosures.”); Sauer, supra note 4, at 328 (“[N]umeric thresholds may also be taken as permission slips to manage earnings within specified limits.”).

51. See, e.g., Evelyn R. Patterson & Reed Smith, Materiality Uncertainty and Earnings Misstatement, 78 ACCT. REV. 819 (2003) (finding that an increase in uncertainty relating to materiality standard can increase auditor conservatism if costs of noncompliance are high); Sauer, supra note 4, at 355 (“To address the increased risks attending materiality judgments, companies have incurred substantial costs for internal monitoring and professional services. Further, companies have become more prone to err on the side of over-disclosure.”).

52. The primary basis for the SEC’s argument was the decision In re Franchard Corp., 42 S.E.C. 163 (1964), which held that disclosures relating to managerial competence were material.

53. For example, in 1980, the FASB issued SFAS No. 2, which arguably rejected a quantitative standard, observing that “[m]agnitude by itself, without regard to the nature of the item and the circumstances in which the judgment has to be made, will not generally be a sufficient basis for a materiality judgment.” SFAS No. 2, supra note 45, at CON2-29; see also id. at CON2-28 (“Items too small to be thought material if they result from routine transactions may be considered material if they arise in abnormal circumstances.”). Mirroring language in Supreme Court cases, SFAS No. 2 defined materiality as information making “it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement.” Id. at CON2-6.

54. See Sauer, supra note 4, at 330 (discussing ethical materiality); see also Ralph C. Ferrara et al., Disclosure of Information Bearing on Management Integrity and Competency, 76 NW. U. L. REV. 555, 611–12
qualitative standard (at least in terms of requiring disclosure of ethical violations) lost momentum.\textsuperscript{56} Throughout the 1980s, both the courts and the SEC seemed to reject a qualitative conception of materiality.\textsuperscript{57} Indeed, by 1998, a former Director of the SEC’s Enforcement Division published an article proclaiming: \textit{Qualitative Materiality: The Birth, Struggles, and Demise of an Unworkable Standard.}\textsuperscript{58}

But that declaration was premature. That same year, Arthur Levitt, the SEC Chairman at the time, introduced a revised version of qualitative materiality in a speech at NYU, \textit{The Numbers Game}.\textsuperscript{59} Rather than focusing on nonfinancial ethical disclosures, Levitt’s version of qualitative materiality focused on earnings manipulation. Levitt argued that earnings manipulation was a common practice on Wall Street. He claimed that companies were abusing the materiality standard in order to boost earnings:

\begin{quote}
[S]ome companies misuse the concept of materiality. They intentionally record errors within a defined percentage ceiling. They then try to excuse that fib by arguing that the effect on the bottom line is too small to matter. If that’s the case, why do they work so hard to create these errors? Maybe because the effect can matter, especially if it picks up the last penny of the consensus estimate. When either management or the outside auditors are questioned about these clear violations of GAAP, they answer sheepishly . . . “It doesn’t matter. It’s immaterial.”\textsuperscript{60}
\end{quote}

Levitt proposed to combat earnings management by doing away with the quantitative standard and assessing materiality through “consideration of all relevant factors that could impact an investor’s decision.”\textsuperscript{61}

Soon after, the SEC issued SAB No. 99.\textsuperscript{62} SAB No. 99 responded to many of the concerns raised by Levitt’s speech and rejected a quantitative standard for financial misstatements as inconsistent with the SEC’s view of materiality. Citing the 1980 Statement of Financial Accounting Concepts No. 2, the SEC noted that a “matter is ‘material’ if there is a substantial likelihood that a reasonable person would consider it important,”\textsuperscript{63} and that qualitative factors should also be considered in assessing materiality.

SAB No. 99 then set forth a number of considerations the SEC would assess in determining whether a financial misstatement could be material even if it was not quantitatively large. Rather than setting forth general principles, SAB No. 99 lists a number of factors:\textsuperscript{64}

\begin{itemize}
\item For a summary of the evolution of the qualitative standard, see Miller, \textit{supra} note 4, at 369–78.
\item United States v. Matthews, 787 F.2d 38, 50 (1986) (reversing a conviction for failure to disclose alleged participation in bribery conspiracy).
\item \textit{Id.}
\item \textit{Id.}
\item SAB No. 99, \textit{supra} note 10.
\item \textit{Id.} at 45,151.
\item Some of these factors appear to be taken from SFAS No. 2, \textit{supra} note 45, at CON2-29.
\end{itemize}
Many of the factors relate to earnings management: “whether the misstatement masks a change in earnings or other trends”; “whether the misstatement hides a failure to meet analysts’ consensus expectations for the enterprise”; and “whether the misstatement changes a loss into income or vice versa.”

One factor relates to management compensation: “whether the misstatement has the effect of increasing management’s compensation—for example, by satisfying requirements for the award of bonuses or other forms of incentive compensation.”

A couple of factors relate to issues of estimation and the results of a part of the business with “a significant role in the registrant’s operations or profitability.”

A few of the factors seem to revive the “ethical materiality” standard, and consider whether a misstatement relates to regulatory compliance.

Finally, the SEC reiterated based on existing statutes that there was a per se ban on any intentional violation of GAAP.

From the start, SAB No. 99 has been met with significant criticism. A number of law review articles argued that SAB No. 99 is unworkable because of its vagueness. If a company happens to just make its earnings number, then any misstatement, no matter how small, is potentially material because it would make the difference between making the earnings target and not. More importantly, because it relies upon an eclectic list of factors, SAB No. 99 does not convey a clear rule that can be applied in assessing whether a misstatement is material.

In addition, there have been some questions as to whether auditors are following SAB No. 99. In 2006, one group of commentators “reviewed the materiality worksheets of three national public accounting firms and found no specific guidance regarding how to evaluate the qualitative factors in the materiality assessment process.”

However, it is undeniable that SAB No. 99 has had significant influence. The United States Court of Appeals for the Second Circuit has applied the qualitative materiality standard to securities actions involving financial misstatements. SAB No. 99 has been
applied in a federal criminal case.⁷³ The SEC has enforced the qualitative materiality standard in a number of cases.⁷⁴ It appears that the SEC Division of Corporation Finance has increasingly applied a qualitative standard in reviewing company filings.⁷⁵ Practitioners urge their clients to consider SAB No. 99 in assessing financial misstatements.⁷⁶

The result has been a general sentiment that companies are now required to apply the qualitative materiality standard, as the Committee on Capital Markets Regulation reported at the end of 2006:

Over the past few years, this [five percent] rule of thumb has eroded significantly, and preparers, audit committees, and auditors often focus on misstatements below the original five percent threshold. This trend is attributable in part to SEC guidance on materiality that calls for the consideration of qualitative as well as quantitative factors in assessing materiality in Staff Accounting Bulletin No. 99. In practice the application of qualitative factors has resulted in the determination that amounts less than five percent are material far more often than not.⁷⁷

Thus, we can now say that there has been a shift from a rule-like quantitative standard to a principle-like qualitative standard in assessing the materiality of financial misstatements.

C. Mapping the Liability Framework

While the SEC maintained that SAB No. 99 was “not intended to change current law or guidance in the accounting or auditing literature,”⁷⁸ relative to a quantitative standard, SAB No. 99 significantly increases the cost of defending private suits based on financial misstatements by making it clear that materiality will depend on an intensive factual inquiry. Unlike a quantitative standard, SAB No. 99 does not provide courts with a clear rule to decide the materiality of a financial misstatement as a matter of law. Judges do not typically have the expertise to assess what the market considers important,⁷⁹ and may

---


⁷⁵ Sauer, supra note 4, at 341.

⁷⁶ Huber, supra note 14, at 168 (“Be prepared to conduct a detailed SAB 99 materiality analysis and to provide a SAB 99 memo to the audit committee of the board of directors.”); Catherine T. Dixon & P.J. Himelfarb, Coping with the 11th Hour Discovery of a Financial Reporting Error, in 38TH ANNUAL INSTITUTE ON SECURITIES REGULATION 761, 770–72 (PLI Corp. Law and Practice, Course Handbook Series No. 9151, 2006).

⁷⁷ CAPITAL MARKETS COMMITTEE REPORT, supra note 9, at 128.

⁷⁸ SAB No. 99, supra note 10, at 45,154.

⁷⁹ See, e.g., Stephen M. Bainbridge & G. Mitu Gulati, How Do Judges Maximize? (The Same Way
simply delegate the inquiry to a jury, which likely has even less expertise. This Section briefly compares the liability schemes for companies and individuals under quantitative and qualitative standards.

In doing so, it is important to consider that the two primary securities fraud statutes impose different standards of liability. The liability standard is most stringent for misstatements made in connection with the offer and sale of securities. Section 11 of the Securities Act imposes strict liability on the issuer of securities for material misstatements in a registration statement. Any violation of GAAP, if found to be material, would likely be considered a misstatement that could make the issuer liable under section 11. Individual defendants, however, can assert a due diligence defense or argue they were relying on an expert, the so-called due diligence and reliance defenses.

In contrast, it is more difficult to establish liability when the misstatement does not occur in connection with the initial issuance of securities, so-called “fraud-on-the-market” cases. In contrast to liability under section 11, a violation of GAAP by itself will not trigger liability under section 10(b) of the Securities Exchange Act (implemented by Rule 10b-5), even if it were found to be material.

---


80. See, e.g., Escott v. BarChris Constr. Corp., 283 F. Supp. 643, 682 (S.D.N.Y. 1968) (“Since no one knows what moves or does not move the mythical ‘average prudent investor,’ it comes down to a question of judgment, to be exercised by the trier-of-fact as best he can in the light of all the circumstances.”).

81. That is not to say that courts applying SAB No. 99 never dismiss cases on the basis of materiality. See, e.g., SEC v. Cohen, No. 4:05CV371 (E.D. Mo. Apr. 19, 2007) (finding that the securities fraud complaint failed to describe misstatements material under SAB No. 99).

82. For the sake of simplicity, I do not consider the liability of third parties such as auditors. Such liability is reserved for the most egregious cases where the auditor essentially fails to do a meaningful audit. See, e.g., Cent. Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A., 511 U.S. 164, 177 (1994) (finding no cause of action for aiding or abetting under section 10(b)). For example, in In re Worlds of Wonder Securities Litigation, the Ninth Circuit held that in order to establish scienter by an auditor the plaintiff must prove that the accounting practices were so deficient that the audit amounted to no audit at all, or an egregious refusal to see the obvious, or to investigate the doubtful, or that the accounting judgments which were made were such that no reasonable accountant would have made the same decisions if confronted with the same facts.

83. Of course, there are other liability statutes, such as section 12(a)(2) of the Securities Act, 15 U.S.C. § 77s(2) (2000), which provides for a rescission remedy for a purchaser of a stock in a public offering when there are misleading material misstatements in the prospectus, and the books and records provisions contained at section 13(b)(2) of the Exchange Act, 15 U.S.C. § 78m(b)(2) (2000).


85. Of course, companies may be able to prove that there is no causation between the qualitative misstatement and any investor losses, in which case even with liability there would be no damages. See id. § 77k(e). But the company has the burden of proof on this issue and resolving the causation defense will likely require a trial. See id.

86. See id. §§ 77k(a)(2), (b)(3).


88. See, e.g., Chill v. Gen. Elec. Corp., 101 F.3d 263, 270 (2d Cir. 1996) (“[A]llegations of a violation of GAAP . . . without corresponding fraudulent intent, are not sufficient to state a securities fraud claim.”); In re
Section 10(b) only imposes liability on companies and management for material misstatements that are made with scienter, or an intention “to deceive, manipulate, or defraud.”\textsuperscript{89} Moreover, the plaintiff must allege “with particularity facts giving rise to a strong inference that the defendant acted with the required state of mind” in order for the complaint to survive a motion to dismiss.\textsuperscript{90}

1. Liability Under a Quantitative Standard

Under a quantitative standard, liability would be precluded under both section 11 and section 10(b) if the misstatement is less than five percent. When a misstatement is greater than five percent, the imposition of liability depends on whether the misstatement occurs with respect to a registration statement or non-registration statement. For a registration statement, the company would be strictly liable under section 11. However, individual defendants might have a due diligence or reliance defense under section 11. For a non-registration statement, where liability is assessed under section 10(b), liability depends on whether the individuals responsible for the misstatement acted with scienter.

2. Liability Under a Qualitative Standard

Under a qualitative standard, in addition to liability for misstatements greater than five percent, companies and management can be liable under section 11 and section 10(b) for misstatements that are less than five percent. Thus, it is obvious that a qualitative standard increases the scope of liability under the securities laws. While liability is virtually automatic for the issuer under section 11 for any qualitative misstatement, liability under section 10(b) will hinge on a showing of scienter. Some qualitative factors such as whether the misstatement results in management bonuses would almost automatically result in a finding of scienter.

3. Effect on Pre-Trial Motions

In addition to increasing potential liability, the qualitative materiality standard increases the probability that a securities fraud case will move beyond the motion to dismiss or summary judgment stage. When a quantitative standard governs, the issue is simple—either the misstatement violates the standard or it does not. But under a qualitative standard, there is no bright line and the inquiry focuses on the intent of the misstatement. Was it to meet earnings expectations? Was it meant to get a bonus? And, of course, intent issues are factual and generally should not be resolved before trial. Courts have fewer options for early dismissal without a clear materiality standard to apply.\textsuperscript{91} As a result, the pressure on companies to settle securities fraud cases regardless of their merit will increase under a qualitative standard.

---


\textsuperscript{91} See generally Coffee, supra note 18, at 539 (noting that courts generally have few mechanisms for dismissing securities class actions).
4. Summary

The following chart compares the prerequisites for a finding of materiality under the quantitative and qualitative standards:

<table>
<thead>
<tr>
<th></th>
<th>Quantitative Standard</th>
<th>Qualitative Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 11</td>
<td>GAAP violation greater than five percent</td>
<td>Any GAAP violation meeting “qualitative” test</td>
</tr>
<tr>
<td>Section 10(b)</td>
<td>GAAP violation greater than five percent made with scienter</td>
<td>Any GAAP violation meeting “qualitative” test made with scienter</td>
</tr>
</tbody>
</table>

In sum, a qualitative standard expands the potential cost of defending securities fraud actions relating to accounting misstatements, especially for companies when they are issuing securities.

III. VALUING FINANCIAL MISSTATEMENTS

The critics of SAB No. 99 have focused on the costs of expanded liability. The more important but unexamined question is whether the targeted misstatements that give rise to liability should affect a reasonable investor’s valuation of the stock. This is a difficult question because investors vary widely in their access to information and ability to analyze such information. Investors tend to be classified based on their use or non-use of a particular method. Investors who attempt to assess the market price of the stock against some calculated intrinsic value are labeled rational, while investors who rely upon instinct, emotion, or past stock price movements are labeled irrational. This Part argues that at least for financial misstatements, the law should assess such misstatements from the perspective of so-called rational investors who rely primarily on fundamental analysis in assessing the valuation of a stock.

A. Valuation Methods

Identifying the reasonable investor is difficult because there are at least two accepted ways of assessing the value of a company’s stock. The first is to simply look at the

---


93. This distinction, like many, oversimplifies. It is important to remember that there are many ways of categorizing investors: sophisticated/unsophisticated, professional/retail, long-term investors/speculators. None of these distinctions completely captures the diversity of investors.

market price of the stock. The market price method considers the reactions of all investors, including so-called irrational investors, who trade based on emotion or chase market trends. The second is to assess the stock’s intrinsic value by calculating the net present value of the company’s future cash flows, a process called fundamental analysis, which is more likely to be used by so-called rational investors. A rational investor buys stock when the market price is below the intrinsic value of a stock and sells when the market price is above the intrinsic value of a stock.

1. Market Price

It is perhaps self-evident that a stock can be valued by looking at its market price. The stock market is extremely effective at incorporating relevant and timely information about a company’s valuation. The market’s reaction to the discovery of a misstatement can be objective evidence as to whether a reasonable investor believes the misstatement is significant. As one commentator observes: “The market model of the investment decision, by focusing on whether the alleged misrepresentation or disclosure caused the security to trade at an artificially high or low price, eliminates the arbitrariness in the determination of materiality.” Analysis of securities law thus tends to focus on ex post markets; William K.S. Wang, Some Arguments That the Stock Market Is Not Efficient, 19 U.C. DAVIS L. REV. 341 (1986) (distinguishing between “information-arbitrage” efficiency and “fundamental valuation” efficiency). The finance literature refers to noise traders, who trade based on rumor, intuition, trends, and other information that is not based on any numerical assessment of the company’s worth. See Andrei Shleifer & Lawrence H. Summers, The Noise Trader Approach to Finance, J. ECON. PERSP., Spring 1990, at 19, 24, 28–30 (describing the strategy of noise traders); see also Fischer Black, Noise, 41 J. FIN. 529, 529–31 (1986) (describing the existence of market noise).

96. See, e.g., BODIE ET AL., supra note 25 (defining fundamental analysts as “those analysts who use information concerning the current and prospective profitability of a company to assess its fair market value”); REVSSINE ET AL., supra note 31, at 273 (“Although there are several approaches to valuation, equity investors and analysts often use fundamental analysis to estimate the value of a company.”).

97. See BENJAMIN GRAHAM, THE INTELLIGENT INVESTOR 189 (rev. ed. 2003) (“By pricing we mean the endeavor to buy stocks when they are quoted below their fair value and to sell them when they rise above such value.”).

98. The concept of market efficiency has been adopted by the U.S. Supreme Court, Basic Inc. v. Levinson, 485 U.S. 224, 247 (1988), but has been controversial. Compare Roberta S. Karmel, When Should Investor Reliance Be Presumed in Securities Class Actions?, 63 BUS. LAW. 25, 39–42 (2007) (arguing that reliance presumption should be revisited in light of doubts about market efficiency), with Jonathan R. Macey et al., Lessons from Financial Economics: Materiality, Reliance, and Extending the Reach of Basic v. Levinson, 77 VA. L. REV. 1017, 1026 (1991) (“Financial economists have shown repeatedly that stock prices react quickly to the release of important new information; though they may differ in their interpretations of this evidence, they do agree it exists.”). The premise of value investing, a method utilized by investors such as Warren Buffett, is that market price diverges from the fundamental value of the stock. Value investing implicitly rejects market efficiency in its conclusion that the market price may not accurately reflect the intrinsic value of the stock. See generally GRAHAM, supra note 97 at 197–99 (discussing the many factors that affect a stock’s market price).

99. See, e.g., Sauer, supra note 4, at 323 (“The most objective evidence of the materiality of information is the stock market’s reaction to its disclosure.”) (citing cases); Daniel R. Fischel, Market Evidence in Corporate Law, 69 U. CHI. L. REV. 941, 942 (2002) (arguing that market price is “superior to . . . other methods in terms of conceptual clarity, simplicity, and objectivity”); see also WILLIAM K.S. WANG & MARC I. STEINBERG, INSIDER TRADING § 4:2.2, at 131 (2d ed. 1996) (listing insider trading cases where the market reaction was indicia of materiality).

100. Daniel R. Fischel, Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities, 38 BUS. L. 1, 7 (1982). Moreover, a market decline is a prerequisite for recovery by a
Assessing the Materiality of Financial Misstatements

101 In securities class actions, litigants often rely upon event studies in arguing whether a misstatement is material. An event study measures the stock market’s reaction to a piece of news by comparing the change in a company’s stock price with its average return or the market’s average return over a time period. To the extent that the company’s stock price diverges from normal market movements in a statistically significant way, there is an abnormal return that can be attributed to the tested event. Plaintiffs seek to establish the existence of an abnormal return in response to the revelation that there was a misstatement, while defendants seek to establish the absence of an abnormal return.

The SEC’s promulgation of a qualitative materiality standard is premised partly on the idea that the impact of a misstatement can be assessed by the market’s reaction. A five percent standard is inadequate under this view, because even small misstatements can prevent significant market movements. If a misstatement allows the company to meet an earnings forecast, the company may avoid a significant decline in the stock price that would have resulted.

105 In discussing SAB No. 99, the SEC endorsed the market price method in assessing the materiality of financial misstatements, noting that “the demonstrated volatility of the price of a registrant’s securities in response to certain types of disclosures may provide guidance as to whether investors regard quantitatively small misstatements as material.”

106 plaintiff in a private class action suit. See Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 346–47 (2005) (holding that an allegation of inflated purchase price is insufficient to satisfy the loss causation requirement). However, it is important to note that a market decline is not a prerequisite to an SEC enforcement action. Thus, even if a material misrepresentation is offset by a positive development that prevents a stock decline, a company could still be subject to an enforcement action if there is a material misrepresentation.

101 See, e.g., Merritt B. Fox, Demystifying Causation in Fraud-on-the-Market Actions, 60 BUS. LAW. 507, 512 (2005) (“The rationale involves an ex post perspective rather than an ex ante perspective that is characteristic of modern, economics-based securities law analysis.”).

102 See, e.g., Oran v. Stafford, 226 F.3d 275, 282 (3d Cir. 2000) (“[W]hen a stock is traded in an efficient market, the materiality of disclosed information may be measured post hoc by looking to the movement, in the period immediately following disclosure, of the price of the firm’s stock.”); see generally Macey et al., supra note 98, at 1029–30 (describing event study methodology); Mark L. Mitchell & Jeffrey M. Netter, The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission, 49 BUS. LAW. 545, 556–72 (1994) (defining an event study and describing the event study methodology).

103 See Macey et al., supra note 98, at 1033–34; Mitchell & Netter, supra note 102, at 557 (“There are three basic steps in conducting an event study: (i) define the event window; (ii) calculate abnormal stock price performance around the event; and (iii) test for statistical significance of the abnormal stock price performance.”).

104 See Macey et al., supra note 98, at 1036–37 (“A common method of assessing the statistical significance of an abnormal stock return around an event is to compare the return during the event period to returns during a control period different from the event period.”).

105 Levitt, supra note 59.

106 SAB No. 99, supra note 10, at 45,152. Courts have evaluated materiality in a similar way. See supra note 102. Typically, market reaction to a disclosure is assessed through an event study, which tests for whether the disclosure resulted in abnormal returns. See generally Macey et al., supra note 98 (describing event study methodology).
2. Fundamental Analysis

The alternative to looking at market price is fundamental analysis. Fundamental analysis assumes that a stock has an intrinsic value that may not be reflected by its market price. While the market’s assessment of intrinsic value should be built into the stock price, the market price may fluctuate for reasons unrelated to that value. The advantage of fundamental analysis is that it allows for a simplified, ex ante assessment of the impact of a misstatement without the noise of irrational market reactions and other random events affecting the company’s stock price.

Fundamental analysis recognizes that a company’s stock price is not based on the company’s past performance reported in its financial statements, but the market’s predictions of its future performance, which are derived from the same financial statements. As with any asset, the value of the company’s stock should be the net present value of the company’s future cash flows. Cash flow measures the cash left...
assessing the materiality of financial misstatements

over after the company’s expenses and investments needed to maintain its present level of earnings. Such cash flow is essentially the “profit” owned by the shareholders of the company, which can be distributed to those shareholders as dividends or used for future investments that may increase the value of the firm. Fundamental analysis values stocks by estimating the present value of those cash flows.

While accounting earnings approximate cash flow, cash flow and earnings are not equivalent. Indeed, the leading finance textbook flatly states: “[I]t is not correct to say that the value of a share is equal to the sum of the discounted stream of earnings per share.” The reason is that earnings do not reflect the cost of investments needed to sustain the present level of the company’s earnings.

However, because most analysts derive their cash flow numbers from reported earnings, a misstatement in earnings should translate into a corresponding inaccurate


directly concerned with a particular business enterprise are generally interested in its ability to generate favorable cash flows because their decisions relate to amounts, timing, and uncertainties of expected cash flows.

Indeed, it is also common to equate the stock price with the net present value of the future dividends that an investor will receive by owning the stock. See, e.g., Bodie et al., supra note 25, at 608–13 (describing dividend discount models); Richard A. Brealey et al., Principles of Corporate Finance 85–91 (8th ed. 2006) (same); Sharpe et al., supra note 26, at 525–31 (same); John Burt Williams, The Theory of Investment Value 55 (1938) (“Let us define the investment value of a stock as the present worth of all the dividends to be paid upon it.”). There is dispute over which method is the best. Sharpe et al., supra note 26, at 559 (“A continual controversy in the investment community concerns the relevance of dividends versus earnings as the underlying source of value of a share of common stock.”); see generally Palepu et al., supra note 24, at 11-2 (noting that the dividend discount model “can also be framed by recasting dividends in terms of earnings and book values, or in terms of free cash flows to shareholders.”). Of course, there are additional methods that measure stock value, such as measuring market-to-book-value ratios. See Stickney & Weil, supra note 26, at 248–49 (discussing alternative valuation approaches).

Present Value is calculated using the following formula:

$$PV = \sum_{t=1}^{n} \frac{C}{(1+r)^t}$$

Where PV = present value; C = cash flow for a period n; r = discount rate. See, e.g., Revsine et al., supra note 31, at 274, 280 (example of discounted cash flow model); Sharpe et al., supra note 26, at 523–24, 525 (same).


Brealey et al., supra note 112, at 91.


There are two methods used in compiling the statement of cash flows. There is the direct method, which actually measures the cash flows. There is also the indirect method, which begins with net income and
assessment of cash flow. An inflated earnings figure would result in a similarly inflated cash flow figure. Thus, while they are not equivalent, cash flow estimates depend on the accuracy of reported earnings.\textsuperscript{118}

That is not to say that fundamental analysis is necessarily more accurate than the market price method. Any discounted cash flow model relies upon predictions about the company’s performance in future years as well as the level of the discount rate in future years.\textsuperscript{119} While these predictions are derived from historical figures such as earnings,\textsuperscript{120} there is no guarantee that the future will mimic the past.\textsuperscript{121} And while important, it is

then derives cash flow by making certain adjustments. According to a leading accounting text, “[t]he majority of firms report cash flow from operations using the indirect method because, before the FASB expressed a preference for the direct method in 1987, most firms used the indirect method, so both preparers and users had become familiar with it.” Stickney & Weil, supra note 26, at 159; see also id. at 161–69 (describing the indirect method); Wild et al., supra note 5, at 375 (noting that “[t]he indirect method is most commonly employed in practice.”). As a result, the cash flow statements of most companies rely upon the assumption that net income has been reported accurately.

\textsuperscript{118} See, e.g., Palepu et al., supra note 24, at 10-2 (“Even forecasts of cash flows tend to be grounded in practice on forecasts of accounting numbers, including sales and earnings.”); see also William W. Bratton, Shareholder Value and Auditor Independence, 53 Duke L.J. 439, 451 (2003) (“Equity valuation tends to rely on audited figures, assuming them to be both empirically verifiable and duly verified.”).

\textsuperscript{119} SFAS No. 2 compares the use of financial information to predict earnings with weather prediction. See SFAS No. 2, supra note 45, ¶ 53 (“It may be useful here to draw an analogy between the financial information that analysts and others use in predicting earnings or financial position and the information that meteorologists use in forecasting weather.”); see also McKinsey & Co. et al., supra note 116, at 281 (“Estimating a company’s performance ten to fifteen years out is not a precise process.”). If misused, extrapolation of future earnings can result in inflated stock prices. See Andrei Shleifer, Inefficient Markets 11 (2000) (“[I]nvestors may extrapolate short past histories of rapid earnings growth of some companies too far into the future and therefore overprice these glamorous companies without a recognition that, statistically speaking, trees do not grow to the sky.”).

\textsuperscript{120} See generally Palepu et al., supra note 24, at 10-4 (“[I]n beginning to contemplate future earnings possibilities, a useful number to start with is last year’s earnings . . . .”).

\textsuperscript{121} A number of studies find that earnings only account for a small percentage of stock price movements. See, e.g., Peter Chen & Guochang Zhang, How Do Accounting Variables Explain Stock Price Movements? Theory and Evidence, 43 J. Acct. & Econ. 219 (2007) (finding that earnings only account for twenty percent of stock price movements); Lev & de Villiers, supra note 108, at 7, 21 (finding that earnings only account for five to seven percent of stock price movements).

The reason may be that the market anticipates the information reported in earnings and so is rarely surprised by earnings results. See William H. Beaver, Perspectives on Recent Capital Market Research, 77 Acct. Rev. 453, 460 (2002) (“[E]arnings announcements are largely but not entirely preempted by the disclosure of other information.”). However, the costs of gathering such information ensure that earnings will have some relevance, as one commentator explains:

[S]uch preemption does not eliminate the importance of reported earnings. The primary barrier to the complete preemption of earnings is the cost of obtaining the prior information. This cost includes not only the out-of-pocket cost of the information search, but also indirect costs imposed by the legal liability for selectively disseminating or obtaining nonpublicly available information.

\textit{Id.} at 461. Moreover, the weak correlation between earnings and returns may be explained by earnings manipulation and low quality of earnings reports. As Baruch Lev noted:

Except for the most obvious experimentation, like the substitution of cash flows or components of earnings for earnings, no serious attempt is being made to question the quality of the reported earnings numbers prior to correlating them with returns. Indeed, there is a surprising imbalance between the level of effort and sophistication that goes into statistical methodology of the returns/earnings studies and the cavalier approach toward reported earnings.
unlikely that a rational investor would rely upon fundamental analysis alone in valuing a stock.122 Though the advantage of fundamental analysis is that it does not consider the behavior of so-called irrational investors, there are cases where such investors get the valuation right while so-called rational investors get the valuation wrong. As a result, any fundamental analysis calculation is highly contingent and the actual price of the stock will diverge from the model.123

B. The Case for Assessing Financial Misstatements Using Fundamental Analysis

In light of these different valuation methods, there are two possible conceptions of the reasonable investor that could be used in assessing the materiality of a misstatement. A materiality standard could consider all investors, including irrational investors, to be reasonable. Such a standard is more inclusive and reflects the reality that many investors are not informed, rational actors. To the extent that the securities laws seek to protect all investors, they should not privilege so-called rational investors. For example, Peter Huang has coined the phrase “moody investor,” and argues that the materiality standard should better account for developments that alter the moods of investors.124

Under a standard that considers the reactions of irrational investors, materiality would mainly be assessed through market price reaction. Because the irrational investor does not rely upon any scientific criteria in assessing the value of a stock, market price reaction is the only way in which the reaction of irrational investors can be determined. So long as there is an abnormal stock price movement associated with a misstatement, materiality would be presumed.

Or, a materiality standard could mainly consider the reactions of rational investors. Baruch Lev and Meiring de Villiers argue that investors should only be permitted to recover for the amount of a stock decline that can be attributed to misstatements affecting

---


123. See, e.g., Shleifer, supra note 119, at 16–17 (citing research that stock prices diverge greatly from prices predicted by fundamental analysis model); John Burt Williams, The Theory of Investment Value 58 (1938) (“How to estimate the future dividends for use in our formula is, of course, the difficulty.”); Bratton, supra note 118, at 448 (noting that present value calculations are “just a projection, a guesstimate”). But see McKinsey & Co. et al., supra note 116, at 71–72 (citing evidence that stock market valuations generally reflect fundamental value); G. Bennett Stewart III, The Quest for Value 82 (1991) (“[T]he risk-reward test demonstrates conclusively that share prices behave as if all investors employed a discounted cash flow approach.”).

124. Peter H. Huang, Moody Investing and the Supreme Court: Rethinking the Materiality of Information and the Reasonableness of Investors, 13 Sup. Ct. Econ. Rev. 99, 99 (2005); see also Hoffman, supra note 3, at 545–62 (questioning the assumption that shareholders are rational).
the market’s assessment of the intrinsic value of a company.\textsuperscript{125} Zohar Goshen and Gideon Parchomovsky argue that the “essential” role of securities regulation is to facilitate trading by rational investors.\textsuperscript{126} Some have argued that investors can protect themselves from securities fraud by diversifying, and so the law need not concern itself with compensating investors.\textsuperscript{127} To the extent that one views the securities laws as primarily deterring fraud that hinders the functioning of efficient markets, one might find such a focus on the rational investor attractive.

A materiality standard based on the perspective of the rational investor might not rely upon market price. Instead, it could focus on analyzing how the misstatement would affect the fundamental analysis models utilized by rational investors. Because rational investors are more likely to have a reasoned basis for their valuation decisions, a materiality standard could assess how the misstatement alters their analysis.

This Article does not attempt to resolve the general debate as to who is a reasonable investor. Indeed, there should be skepticism as to whether any investor or methodology is truly rational or irrational.\textsuperscript{128} But in the context of financial misstatements, the case for analyzing materiality through the perspective of the rational investor is especially strong.\textsuperscript{129} Financial misstatements can have a direct and quantifiable impact on the models rational investors use in calculating the value of future cash flow and earnings.

Of course, rational investors rely upon a wide range of information in valuing a stock, a significant portion of which is nonfinancial information.\textsuperscript{130} But to the extent that they are analyzing financial reports, they are likely to be relying upon models that use some variant of fundamental analysis. Irrational investors are less likely to focus carefully on financial statements and assess their implications for a stock’s valuation. While irrational investors may react to financial misstatements, their reaction might not be as informed as that of rational investors.\textsuperscript{131}

In addition, there are methodological advantages to looking at financial misstatements through the lens of fundamental analysis. Mainly, it is an alternative to the

\begin{footnotes}
\item[125] See Lev & de Villiers, supra note 108, at 10 (noting that share price following the release of negative information may not reflect a firm’s true value); see also Coffee, supra note 18, at 539 (noting the inefficiency of making companies liable for bubbles caused by “irrational exuberance”).
\item[127] See Easterbrook & Fischel, supra note 23, at 641 (“An investor with a diversified portfolio will be the hidden gainer in a transaction . . . as often as he will be the loser.”); see also Booth, supra note 6, at 7 (“A diversified investor is equally likely to be on the winning side of a given trade as the losing side.”). But see Alicia David Evans, The Investor Compensation Fund, 33 J. CORP. L. 223, 234 (2007) (arguing that undiversified investors can suffer substantial harm).
\item[128] Indeed, rational investors may find it necessary at times to mimic the strategies of irrational investors. See Goshen & Parchomovsky, supra note 126, at 729 (“Indeed, this is why some information traders try to profit by joining noise trades and adopting noise traders’ strategies.”).
\item[129] Use of a market price test might be more appropriate for nonfinancial misstatements. The impact of nonfinancial statements on fundamental valuation calculations is more difficult to discern than that of financial misstatements.
\item[130] See Guttentag, supra note 122, at 173 (citing a survey finding that sophisticated investors would find management information helpful in valuing securities).
\item[131] See Gilson & Kraakman, supra note 111, at 569 (“Many traders are too unsophisticated to make full use of the technical accounting information contained in mandated disclosure reports . . . .”).
\end{footnotes}
more widely used but flawed market price method. While there is a substantial body of empirical research on materiality, none has evaluated materiality through the lens of fundamental analysis. By using a method that has been largely neglected in the materiality context, the law may discern new principles that might be useful.

Fundamental analysis is especially appropriate for assessing financial misstatements because such misstatements have a quantifiable impact on the market’s assessment of the company’s projected stream of cash flows. In contrast, fundamental analysis may not be as helpful in assessing the impact of nonfinancial misstatements because the impact of such misstatements is less quantifiable. By assessing how various types of misstatements affect the market’s assessment of the intrinsic value of a stock, we can gain more insight into the types of financial misstatements that are material.

IV. PERSISTENCE

Fundamental analysis explains why markets tend to discount the importance of one-time charges to earnings. If market participants using fundamental analysis calculate

132. There are at least three practical problems with relying upon market price in assessing the materiality of financial misstatements. First, many financial misstatements are only uncovered after a significant amount of time during which the context of the misstatement has changed. See, e.g., James C. Spindler, Why Shareholders Want Their CEOs to Lie More After Dura Pharmaceuticals, 95 Geo. L.J. 653, 664 (2007) (noting that intervening events can prevent market tests from assessing the magnitude of fraud). Thus, the market reaction to the discovery of such misstatements may not reflect an assessment of the misstatement itself, but on other concerns such as the cost of defending an SEC investigation. See, e.g., Sauer, supra note 4, at 324 (noting that the timing of discovery limits the utility of looking at market price reaction).

Second, event studies may not adequately separate out other news that might affect the company’s stock. See, e.g., ADVISORY COMMITTEE FINAL REPORT, supra note 2, at 78 n.134 (noting that “the disclosure at the time of the restatement of other information, such as an earnings release, that may have an offsetting positive market reaction” would make it difficult to assess materiality using an event study). Suppose a major financial misstatement is found on the same day that a company enters into a major new contract. The positive and negative news may cancel each other out, leaving the impression that the misstatement is not material. See, e.g., Sauer, supra note 4, at 324–35 (discussing background noise); Macey et al., supra note 98, at 1030 (noting that “long event windows ensure the inclusion of all dates on which new information about the event became available to traders,” but that “[o]n the other hand, long event windows raise the likelihood that the company’s stock return was affected by other events (confounding events); this makes it difficult to isolate the independent effect of the relevant event”). See generally Spindler, supra, at 653 (arguing that reliance on ex post market reactions underdeters because firms tend to bundle projects).

Third, looking at how the stock market reacts to a disclosure does nothing to guide companies ex ante about what items are material. A company will find it difficult to determine what misstatements its internal controls should prevent if its only guide is the possible reaction of the stock market. Linking the shape of a legal standard to the vagaries of the stock market can mean that legal counsel advising companies will caution that virtually every misstatement could be material. An ex post standard creates significant chilling costs in that companies may be over-cautious in their application of GAAP to avoid any possibility of a questionable item that might spur a stock market reaction. See Patterson & Smith, supra note 52, at 832 (finding that when materiality uncertainty is high, the auditor is relatively more cautious).

133. See, e.g., William F. Messier, Jr. et al., A Review and Integration of Empirical Research on Materiality: Two Decades Later, 24 AUDITING: J. PRAC. & THEORY 153, 153 (2005) (providing a literature review of materiality research). This research generally uses surveys, controlled experiments, and event studies. It mostly concludes that the industry and markets are most likely to react to quantitatively material misstatements.

134. See, e.g., Stephen R. Moehrle, Do Firms Use Restructuring Charge Reversals to Meet Earnings Targets?, 77 ACCT. REV. 397, 399 (2002) (summarizing studies indicating that markets do not penalize
the stock price based on a future stream of earnings, isolated charges to earnings that do not affect this future stream should have little relevance with respect to the stock price’s valuation. Thus, isolated misstatements that do not significantly affect the market’s assessment of future earnings should also be less relevant to a valuation using fundamental analysis. We thus have a basic distinction—persistent misstatements that affect the market’s assessment of future earnings and isolated misstatements that do not.

Fundamental analysis thus illustrates the flaw of relying solely upon the size of the misstatement as a measure of materiality, as the Committee on Capital Markets Regulation and others have recommended.135 Suppose there are two identical companies—Company A and Company B. Company A’s income is inflated by six percent for one year because of a misstatement. Company B’s income is inflated by three percent every year in perpetuity because of misstatements.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>6% inflation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company B</td>
<td>3% inflation</td>
<td>3% inflation</td>
<td>3% inflation</td>
<td>3% inflation</td>
<td>3% inflation</td>
</tr>
</tbody>
</table>

Of the two companies, Company A would be more likely to experience a significant inflation of its stock from its six percent misstatement than Company B would from its three percent inflation. The inflation, however, would be temporary and a rational market would resume valuing the stock correctly in Year 2, when there is no inflation. On the other hand, the market’s assessment of the intrinsic value of Company B’s stock would be more likely to be affected for an extended period of time by the persistent three percent misstatements. Yet under a purely quantitative standard of five percent, only Company A would face liability for securities fraud, while Company B would be shielded from liability.136

Fundamental analysis thus reveals a basic flaw in the current tests for assessing companies for one-time restructuring charges); see also ADVISORY COMMITTEE FINAL REPORT, supra note 2, at 81 (proposing that companies look at whether “[t]he error is a one time item and does not alter investors’ perceptions of key trends affecting the company”); Levitt, supra note 59 (“When earnings take a major hit, the theory goes Wall Street will look beyond a one-time loss and focus only on future earnings.”).

135. See supra note 15.

136. In contrast, under the current framework set forth by SAB No. 99, it is likely that a company would not escape liability for a persistent misstatement that is quantitatively small. In addition, the SEC’s Staff Accounting Bulletin No. 108 (SAB No. 108) makes it clear that misstatements in prior periods should be considered in assessing the materiality of a current misstatement. See SEC Staff Accounting Bulletin No. 108, 88 SEC Docket 2831 (Sept. 13, 2006) [hereinafter SAB No. 108], available at http://www.sec.gov/interps/account/sab108.htm. In other words, the SEC would not view misstatements of three percent in five periods as a three percent misstatement, but rather as a 15% misstatement, which would pass the five percent threshold. It is unclear whether SAB No. 108 would affect a court’s assessment of materiality for purposes of a securities fraud action. No court has considered the question. It is also unclear what the proponents of returning to a five percent quantitative standard would say about SAB No. 108. It is possible that the proponents of a quantitative standard would also advocate repealing SAB No. 108, because companies would still have to assess the materiality of misstatements under five percent, reducing the cost benefits of a brightline rule.
Assessing the Materiality of Financial Misstatements

The impact of a misstatement on the market’s assessment of the fundamental value of a company does not hinge solely on whether it is large or small, as the quantitative standard assumes, or largely on the motive of the misstatement, as the qualitative standard assumes. The market’s assessment of the fundamental value of a company hinges significantly on the persistence of the misstatement.  

A. Illustration Using Fundamental Analysis

The concept of persistence can be further demonstrated through simple arithmetic examples demonstrating how persistent misstatements can have a substantial impact on the market’s assessment of the company’s intrinsic value over a significant period of time, often requiring disruptive corrections to the stock price to fix, while isolated misstatements tend to prevent short term market fluctuations and cause less harm. The purpose of these examples is not to set forth a comprehensive set of the situations that may occur in the real world, but to give a sense of different categories of misstatements and their impact.

For the sake of simplicity, assume a model where accounting earnings are equivalent to cash flows. The example can be simplified even further by assuming we have a company that the market assumes will have constant earnings going forward. In other words, if the company earns $10.00 per share in a year, the market will assume that the company will earn $10.00 per share every year going forward. If earnings change to $9.50 per share, the market will assume that the company will earn $9.50 per share every year going forward. Also, assume that the market values companies based on yearly results.

If earnings are constant in such a way, the present value of the company’s stock is identical to that of a perpetuity, which is commonly calculated using the following simple formula:

$$P = \sum_{n=0}^{\infty} \frac{E_n}{(1 + r)^n}$$

Where \(P\) = stock price; \(E_n\) = earnings per share for a period \(n\); \(r\) = discount rate.
Where \( P = \text{stock price}; \ E = \text{earnings per share}; \ r = \text{discount rate}. \) \(^{139}\)

Suppose earnings per share are a constant $10.00 per period in perpetuity and the company correctly discloses these earnings to the market:

\[
\begin{array}{cccccc}
\text{Year 1} & \text{Year 2} & \text{Year 3} & \text{Year 4} & \text{Year 5} \\
\text{Disclosed Earnings} & $10.00 & $10.00 & $10.00 & $10.00 & $10.00 \\
\text{Actual Earnings} & $10.00 & $10.00 & $10.00 & $10.00 & $10.00 \\
\end{array}
\]

If the discount rate is 10%, the present value calculation for both the disclosed and actual earnings would be as follows: $10.00/0.10 = $100.00. The present value of each share of stock would be $100.00. Because disclosed and actual earnings are equal, the market price of the stock, $100.00, is equal to its fundamental value.

1. **Persistent Misstatements**

Consider three variants of persistent misstatements. The first seeks to inflate earnings through continuous misclassification of revenues or expenses. The second seeks to hide significant declines in earnings, perhaps through persistently moving revenue from one period to another. A third improperly allocates periodic costs to one period, taking a one-time charge and inflating future earnings.

a. **Earnings Inflation**

Suppose that the company persistently inflates earnings by $0.30 per share. It does so every year by consistently understating expenses. Thus, if revealed, earnings per share would be $9.70 instead of the disclosed amount, $10.00.

---

\(^{139}\) [Brealey ET AL., supra note 112, at 92–93.\) The leading corporate finance textbook uses the following formula to calculate the present value of a stock in a situation where dividends are assumed to grow at a constant rate:

\[
P = \frac{\text{DIV}}{r - g}
\]

Where \( P = \text{stock price}; \ \text{DIV} = \text{dividend payment}; \ r = \text{discount rate}; \ g = \text{constant rate of growth}. \) \( Id. \)

The formula above is a modified version of this formula that substitutes earnings per share for dividends and assumes that there is no growth in earnings, so \( g = 0. \)
While the market would value the stock at $100.00 per share, the actual fundamental value would be as follows: $9.70/10 = $97.00. The real value of the stock, $97.00, would be three percent lower than the $100.00 market price based on the company’s persistent misrepresentations. Investors who purchased the stock in Years 1 through 5 suffer because they purchased a $97.00 stock for $100.00. When the market discovers the fraud, the stock will not only decline to its proper value $97.00, but will likely be worth even less because it must account for the unaccounted expenses, depressing earnings in the future.

### b. Hiding Earnings Decline

Suppose that a company sees its earnings per share decline from $10.00 per year to $9.70 per year in Year 2. It can attempt to hide the decline by accelerating revenue from a future period in violation of GAAP. Such a solution is temporary because accelerating revenue from one period means that there will be a shortfall in the future that can only be remedied by improperly accelerating even more revenue.

Instead of disclosing actual earnings of $9.70 in Year 2, the company improperly accelerates $0.30 in revenue from Year 3 to cover the shortfall. As a result, there will be an additional shortfall of $0.30 in Year 3. In order to continue the charade, the company will have to improperly accelerate $0.60 from Year 4 to Year 3, and so forth. When management is forced to disclose the fraud in Year 5, the shortfall will have grown in size, requiring surprise disclosure of a significant decline in earnings.

---

140. Of course, investors who sell before the stock adjusts to its proper value will not suffer harm.
141. See, e.g., Jennifer H. Arlen & William J. Carney, *Vicarious Liability for Fraud on Securities Markets: Theory and Evidence*, 1992 U. ILL. L. REV. 691, 701 (“The credibility of false positive statements about a company’s sales or profits . . . can be sustained only so long as a firm remains financially viable and suffers no business reverses that will reveal the fraud.”).
The persistent movement of revenue from one period to the next allowed the company to fool the market into overvaluing the stock for an extended period. Investors who relied upon that price would be harmed by a sharp decline in the stock price when the fraud was revealed in Year 5. If the company had properly disclosed the decline in earnings in Year 2, investors would not have suffered the precipitous drop in Year 5.

c. One-Time Charge to Earnings

Suppose a company earns $10.00 per share, but wants to make it appear like it earns $10.50 per share. In Year 1 it takes a charge to earnings of $2.00 per share. It claims that the charge is a one-time “restructuring cost,” but in fact, the charge consists of costs that should be allocated to future periods. As a result, expenses for future years appear lower by $0.50 per share, inflating earnings in those years by $0.50 per share.

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosed Earnings</td>
<td>$8.00149</td>
<td>$10.50150</td>
<td>$10.50151</td>
<td>$10.50152</td>
<td>$10.50153</td>
</tr>
<tr>
<td>Actual Earnings</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
</tr>
</tbody>
</table>

While the market might react adversely to the charge in Year 1, it begins valuing the company at $10.50 per share in Years 2 through 5. The fraud can only last for so long, and in Year 6, the company reports earnings of $10.00 per share, resulting in a stock price decline. Investors who purchased stock in Years 2 through 5, which they thought

142. $9.70 + $0.30 = $10.00
143. $(9.70 - $0.30) + $0.60 = $10.00
144. $(9.70 - $0.60) + $0.90 = $10.00
145. $9.70 - $0.90 = $8.80
146. $9.70 - $0.30 = $9.40
147. $9.70 - $0.60 = $9.10
148. $9.70 - $0.90 = $8.80
149. $10.00 - $2.00 = $8.00
150. $10.00 + $0.50 = $10.50
151. $10.00 + $0.50 = $10.50
152. $10.00 + $0.50 = $10.50
153. $10.00 + $0.50 = $10.50
was worth $105.00, would suffer because they were really purchasing a stock worth $100.00.

2. Isolated Misstatements

In contrast to persistent misstatements, isolated misstatements are less likely to substantially affect the market’s assessment of the fundamental value of a stock. Instead, they prevent short lived fluctuations that are not necessarily an accurate reflection of the stock’s value. Consider two cases—one where management smoothes a temporary shortfall in earnings, the other where management engages in a one-time misstatement.

a. Earnings Smoothing

Let us return to our example of the company with $10.00 in earnings per share and a $100.00 stock price. Suppose in Year 2 there is a $0.50 shortfall in earnings per share because customers get their orders in late resulting in earnings of $9.50 per share. Those orders should be recorded in Year 3 resulting in higher than normal earnings that year, say earnings per share of $10.50. Instead, the company accelerates $0.50 of its earnings from Year 3 to make up for the $0.50 shortfall in Year 2.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosed</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>Earnings</td>
<td></td>
<td>$10.00</td>
<td>$10.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual</td>
<td>$10.00</td>
<td>$9.50</td>
<td>$10.50</td>
<td>$10.00</td>
<td>$10.00</td>
</tr>
<tr>
<td>Earnings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With the misstatement, the market would continue to value the stock at $100.00. This valuation would accurately reflect the intrinsic value of the stock because on average, the company earned $10.00 per share per year.

If the shortfall in earnings had been disclosed in Year 2, the market might have overreacted, believing that the shortfall would persist. If the market priced the stock on the assumption that the company would earn $9.50 per year going forward, the market might have reacted to the shortfall by pricing the stock at $95.00—a five percent reduction.

In Year 3, if earnings of $10.50 had been disclosed, the market might have overreacted the other way, believing that the company would earn $10.50 per year going forward, and pricing the stock at $105.00.

But in Year 4, the market would realize that the fluctuation in earnings was indeed

\[154. \frac{10.50}{0.10} = 105.00\]
\[155. \frac{10.00}{0.10} = 100.00\]
\[156. 9.50 + 0.50 = 10.00\]
\[157. \frac{10.50 - 0.50}{0.10} = 100.00\]
\[158. \frac{9.50}{0.10} = 95.00\]
\[159. \frac{10.50}{0.10} = 105.00\]
temporary and that in the long run, earnings on average will be $10.00 per year. The stock price would settle at its correct level of $100.00.

Thus, by smoothing earnings, the isolated misstatement in Year 2 might prevent a fluctuation in the stock price over time that might have resulted if the company had disclosed earnings per share of $9.50 in Year 2 or earnings per share of $10.50 in Year 3. Such a fluctuation would have given an arbitrary windfall to an investor who purchased the stock in Year 2 at $95.00, while creating an arbitrary loss to an investor who purchased the stock at $105.00.

b. One-Time Misstatement

A similar result would hold, even in a case where the earnings shortfall is not offset by higher earnings in a later year. Suppose the company has a bad year in Year 2, and earns $9.70 per share rather than $10.00. Nevertheless, its earnings recover to $10.00 per share in Year 3.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosed Earnings</td>
<td>$10.00</td>
<td>$10.00</td>
<td>$9.70</td>
<td>$10.00</td>
</tr>
<tr>
<td>Actual Earnings</td>
<td>$10.00</td>
<td>$9.70</td>
<td>$10.00</td>
<td>$10.00</td>
</tr>
</tbody>
</table>

Management cannot hide the shortfall forever. If it moves $0.30 in earnings from Year 3 to Year 2, there will be a shortfall in Year 3 that will need to be disclosed. Why might management accelerate revenue in such a way? It might do so if it earns some sort of bonus that is contingent on a stock price of $100.00 in Year 2. Management would then have an incentive to push $0.30 in revenue from Year 3 to Year 2. The accounting misstatement would not substantially affect the market’s assessment of the fundamental value of the stock. The misstatement only delays an inevitable fluctuation for one period and when earnings per share recover to a constant $10.00 per year, the market will resume valuing the stock based on earnings of $10.00 per share. But the delay of the fluctuation would allow management to receive bonuses or exercise stock options.

In contrast to persistent misstatements, isolated misstatements do not lead to significant mistakes by the market in determining the intrinsic value of the stock. Indeed, they may prevent short-term fluctuations. Isolated misstatements can be used to smooth earnings, or for more nefarious purposes, allowing management to enrich itself.\textsuperscript{162}

\begin{tabular}{|c|c|c|c|c|}
\hline
 & Year 1 & Year 2 & Year 3 & Year 4 & Year 5 \\
\hline
Disclosed Earnings & $10.00 & $10.00 & 9.70 & 160$10.00 & 161$10.00 \\
\hline
Actual Earnings & $10.00 & $9.70 & $10.00 & $10.00 & $10.00 \\
\hline
\end{tabular}

160. $9.70 + 0.30 = 10.00
161. $10.00 - 0.30 = 9.70
162. It is also important to contextualize the significance of financial misstatements with respect to any fundamental analysis model. The changes in valuation that occur because of misstatements are no more significant than changes in earnings forecasts or the interest rate. As one valuation guide explains:

Valuation can be highly sensitive to small changes in assumptions about the future. Take a look at the sensitivity of a typical company with a forward-looking P/E ratio of 15 to 16. Increasing the cost of capital for this company by 0.5 percentage points will decrease the value by approximately
B. Objections

A proponent of the market price method might object that the distinction between persistent and isolated misstatements is unmeaningful for two reasons. First, there is no way to tell ex ante whether a small earnings shortfall is temporary or a sign of future declining earnings. The market may want to know of isolated shortfalls because they may reflect information about future earnings declines or the character of management. In other words, financial misstatements are not only important because of their impact on fundamental analysis calculations, but because they convey significant qualitative information about the prospects of a company. Second, it might be harmful to allow management discretion to smooth earnings because it will make it more likely that persistent misstatements will occur in the future.

1. Market Psychology and Isolated Misstatements

A significant assumption of SAB No. 99 is that smaller misstatements can hide relevant information about future earnings trends. The market may rightly want to know about small shortfalls in earnings because it may then discount the stock in order to take into account that there is a risk of more significant declines in the future. It is well documented that firms manage earnings to avoid “surprises” that the market will penalize.163

Returning to the earlier hypothetical of a small misstatement that causes a company to miss its earnings forecasts, suppose the market punishes the revelation of a one percent misstatement of earnings by discounting future earnings by five percent, meaning that the stock price declines by five percent. The market’s reaction may seem irrational, but in fact it might simply reflect the uncertainty that results from the possibility that the company’s inability to follow through on its earnings forecasts could be a sign of larger earnings shortfalls in the future.164 Or, it might be that the market is discounting future earnings because it believes that management is not credible.

One response to this objection is that it is difficult to predict whether the failure to meet analyst expectations will lead to significant stock price declines. A study prompted by Levitt’s speech and published in the Journal of Accounting Research finds that the market’s reaction to minimal earnings shortfalls varies greatly depending on the context.165 More recently, the Committee on Capital Markets Regulation analyzed a 10 percent. Changing the growth rate for the next 15 years by 1 percentage point annually will change the value about 6 percent.

McKinsey & Co. et al., supra note 116, at 363; see also Cunningham, supra note 116, at 187 (“As our definition suggests, intrinsic value is an estimate rather than a precise figure, and it is additionally an estimate that must be changed if interest rates move or forecasts of future cash flows are revised.”).


165. See William Kinney et al., Earnings Surprise “Materiality” as Measured by Stock Returns, 40 J. ACCT. RES. 1297, 1310 (2002) (“[A] one-penny shortfall has widely varying consequences, apparently
Government Accountability Office (GAO) study that analyzed all company restatements from 2002 through 2005. While the GAO study found that on average, the market had a negative reaction to these misstatements of 1.9%., the Committee on Capital Markets Regulation’s analysis of the GAO’s data found that for more than 50% of the restatements, the reaction was either positive or negligible.

Over the long run, it should become clear whether initial short-falls in earnings will become more persistent shortfalls. If in fact earnings recover to prior levels, then the market’s overreaction was wrong, and one might argue that the isolated misstatement smoothing of that short-fall prevented an erroneous overreaction. If the market’s reaction was correct, and earnings do decline over time, it is questionable as to whether the misstatement, if it is truly a one-time misstatement, did anything more than result in a marginal delay in the market’s assessment of the company’s earnings. It would only be if the misstatements became persistent, continually inflating earnings to make up for the continuing short-falls, that the market’s assessment would be substantially warped.

While temporary smoothing can cause some harm to investors, it does not cause as much harm as persistent misstatements that fool investors over the long term. When accounting fraud persists over long periods, it is more likely that the company will have to make substantial adjustments that will destroy management’s credibility and require a significant correction in the stock price. To the extent that there are limited resources to combat accounting fraud, efforts should focus on deterring those misstatements that are likely to cause more harm.

Another objection to the findings from the fundamental analysis approach is that the market does not value stocks using a precise model, but relies more on feel. Indeed, even the fundamental analysis method relies on subjective assessments of future cash flows. Because of the uncertainty of estimating future earnings, it is common for analysts to rely upon a heuristic, the price-earnings ratio (P/E ratio), in calculating a stock price. A P/E ratio is a rough guess of the ratio of the company’s stock price to the company’s earnings. Analysts will typically value companies in a particular industry with similar P/E ratios, making rough adjustments based on their assessment of the individual company. To come up with a valuation based on this methodology, a research analyst will simply take the earnings per share of the company and multiply it by the adjusted industry P/E ratio.

Industry multiples are used often in practice, both to provide stand-alone “quick and dirty” valuations and to anchor more-complex discounted cash flow valuations. To obtain a company valuation, one simply multiplies a value driver (such as earnings) for the company by the corresponding multiple, which is based on a ratio of stock price to the value driver for a group of comparable companies. Choices for value drivers include various measures of cash flow, book value, earnings, and revenues, but earnings and cash flows are by far the most commonly used.

166. GAO, FINANCIAL RESTATEMENTS, supra note 29, at 24.
167. See CAPITAL MARKETS COMMITTEE REPORT, supra note 9, at 123.
168. See McKinsey & Co. et al., supra note 116, at 67 (“Multiples endure because a discounted cash flow valuation requires projections about ROIC, growth, and free cash flow.”); Palepu et al., supra note 24, at 11-2, 11-7 (“Multiples are a popular method of valuation because, unlike the discounted dividend, discounted abnormal earnings, and discounted cash flow methods, they do not require analysts to make multiyear forecasts.”).
169. As one article describes this methodology:

growth, while a low P/E ratio may mean that the market does not expect significant growth. These ratios fluctuate based on the analyst’s “feel” for the company.

While the P/E ratio inserts more subjectivity into the process of valuation, the distinction between isolated and persistent misstatements can also be drawn with respect to P/E ratios. A rational analyst will not base his or her assessment solely on a general feel, but will try to understand if the shortfall will be an isolated occurrence, or an indication of persistent shortfalls to come. If a misstatement is evidence of a persistent decline in earnings, an analyst may adjust the P/E multiplier downward to take into account the fact that earnings over time may decline. If a misstatement, however, is truly isolated, the analyst may not feel the need to adjust the P/E multiplier, meaning that if earnings recover, the stock price will not be affected.

2. Managerial Abuse

Another concern is that distinguishing between persistent and isolated misstatements will affect managerial incentives to use isolated misstatements to smooth earnings, increasing the likelihood of conduct that will lead to persistent misstatements. Evidence of a misstatement, no matter how small, may indicate that management will falsify earnings in the future. One study finds that accounting scandals are more likely to occur in firms that are already pressing the envelope through questionable accounting practices. One might argue that preventing isolated misstatements serves as a prophylactic, preventing a culture that leads to persistent misstatements.

But the fact that an isolated misstatement will not affect the fundamental value of a company does not mean that management can lie with impunity. First, one lie may necessitate another, leading to persistent misstatements that do cause substantial distortions. Second, the market will inevitably discover some isolated misstatements and will punish the stock by discounting it. It may be more effective to rely in part on nonlegal mechanisms to deter isolated misstatements.

Furthermore, as will be argued more extensively below, part of this problem might be contained by making it clear that a financial misstatement is material even if isolated when there is evidence that management enriches itself from the isolated misstatement. This would prevent the case where management uses an isolated misstatement for personal gain. This would deter management from using isolated misstatements at will

Jing Liu et al., Is Cash Flow King in Valuations?, 63 FIN. ANALYSTS J. 56, 56 (2007), available at http://www.som.yale.edu/faculty/jkt7/papers/global%20multiples.pdf; see also SHARPE ET AL., supra note 26, at 534 (“First, a stock’s earnings per share over the forthcoming year . . . are estimated, and then the analyst (or someone else) specifies a ‘normal’ price-earnings ratio for the stock. The product of these two numbers gives the estimated future price . . . .”); Lev & de Villiers, supra note 108, at 36 (“Multiplying . . . expected earnings by an appropriate price/earnings ratio can produce a plausible estimate of the stock’s fundamental value.”). Despite its back of the envelope feel, a recent study finds that valuations based on this methodology closely tracked stock prices. See Liu et al., supra.

170. BODIE ET AL., supra note 25, at 627–31 (discussing the vulnerability of the P/E ratio method to earnings manipulation).

171. One study finds that the market reaction to restatements involving management fraud is especially adverse. Palmose et al., Determinants, supra note 137.

172. Claire E. Crutchley et al., Climate for Scandal: Corporate Environments that Contribute to Accounting Fraud, 42 FIN. REV. 53, 55 (2007).
because there is a risk that if they happen to sell stock at that time, they could be personally liable for the misstatement.

In essence, the main objection to relying upon a distinction between persistent and isolated misstatements is that it is difficult to determine \textit{ex ante} whether an earnings shortfall will be isolated or persistent. Investors glean information from misstatements that are not quantifiable by any simple valuation model. At a minimum, though, it should be uncontroversial to agree that there is some distinction between persistent and isolated misstatements, though because of the subjectivity of market valuations, the difference can become obscured.

\textbf{C. Persistence as a Presumption in Assessing the Materiality of Financial Misstatements}

How could the concept of persistence translate into a legal standard for determining the materiality of a financial misstatement? If persistent misstatements are the most likely to distort the market’s assessment of a company’s fundamental value, causing substantial economic disruption, auditors and companies should focus on detecting and preventing such misstatements. The law should be structured to incentivize companies to focus on that goal by making it more likely that liability will be triggered by persistent as opposed to isolated financial misstatements.

If a financial misstatement is persistent, the presumption should be that the misstatement is material. If a financial misstatement is isolated, the presumption should be that the misstatement is not material. Such presumptions would be rebuttable. For example, a misstatement might be isolated but be so large that it must be material. A persistent misstatement might be so small that it has a negligible effect on the market’s valuation. Or, evidence of the use of isolated misstatements to manage earnings for personal gain might rebut the presumption of immateriality. A persistence standard would frame the materiality inquiry more clearly and fairly than either a quantitative or qualitative standard.

Broadly speaking, financial misstatements are persistent if they inflate earnings or hide declines in earnings over multiple reporting periods. Financial misstatements are isolated if they merely smooth earnings in one reporting period. Some financial misstatements will fall clearly into one category or the other, but some will not.

Classification will be a challenge in some cases. For example, would a series of independent financial misstatements be considered as a totality, resulting in a conclusion that the misstatements are persistent? Or would each misstatement be assessed independently, resulting in a conclusion that each misstatement is isolated? How many periods must be affected by a misstatement in order for it to be persistent? Are two relevant periods enough? Or should there be three, four, or even more? It may be difficult for nonexpert courts to resolve the close cases at the motion to dismiss or even the summary judgment stage.

However, there will also be many cases where the financial misstatement is clearly persistent or isolated. In such cases, the inquiry is more likely to be resolved by pre-trial motion. A plaintiff would have two choices in alleging the materiality of a financial misstatement. First, the plaintiff could allege the existence of a persistent financial misstatement, in which case there is a presumption that the financial misstatement is material. Second, the plaintiff could allege that while the misstatement may be isolated, there are factors that rebut the presumption of immateriality.
In the first situation, when the plaintiff alleges a persistent misstatement, the defendant could respond either by alleging that the misstatement is not persistent, or by alleging that even though the misstatement is persistent, there are other factors that rebut the presumption of materiality. At the summary judgment stage, if the allegation of persistence has been disputed by the defendant, the plaintiff will have to produce evidence in support of the allegation of persistence, or the case will be dismissed. In addition, a defendant seeking to rebut the presumption of materiality will have to submit such rebuttal evidence at the summary judgment stage, or the court can conclude that the misstatement is material.

In the second situation, where the plaintiff concedes the misstatement is isolated but argues there are other factors rebutting the presumption of immateriality, the plaintiff must produce evidence rebutting the presumption of immateriality at the summary judgment stage in order to survive a summary judgment motion. The court should scrutinize such evidence to assess whether a reasonable factfinder could conclude that it rebuts the presumption of immateriality.

And of course, to the extent that plaintiffs fail to allege either that the misstatement is persistent, or set forth allegations rebutting the presumption that an isolated misstatement is immaterial, the case could be dismissed on materiality grounds at the motion to dismiss stage.

A persistence standard would be more expansive than the quantitative standard in that misstatements below the five percent threshold could be material if persistent. But a persistence standard is also narrower than the quantitative standard in that a misstatement above the five percent standard might not be material if it is isolated. Rather than relying upon an arbitrary numerical threshold, courts would be focusing on what should matter more to markets—the persistence of the misstatement.

A persistence standard offers a clearer standard than the list of factors described in SAB No. 99. While SAB No. 99 requires courts to consider factors that could potentially encompass persistence, it does not provide courts with any guidance with respect to how those factors should be prioritized. As a result, materiality determinations are opaque and do little to communicate the relevant standard to potential litigants. The persistence standard would differ from SAB No. 99 in that it would prioritize persistence and center the materiality inquiry on a clear standard linked to a well-established valuation method.

Of course, persistence is also relevant in determining other elements of a securities fraud claim such as scienter. But considering persistence in assessing materiality would not be redundant with assessing persistence in determining scienter. First, scienter is not a requirement with respect to section 11 cases. If persistence is not considered with respect to materiality in section 11 cases, it would not be considered at all. Second, the materiality and scienter inquiries involve distinct issues. The materiality test assesses whether the misstatement should affect the valuation of a stock. The scienter test assesses whether the individual actor who caused the misstatement acted with a culpable state of mind. As a result, there are many instances where the inquiries will not overlap. For example, there might be evidence that management has been reckless by not implementing proper internal controls, but the resulting misstatement is not material because it is isolated. Such a case might be dismissed on materiality grounds even though there is scienter, showing that materiality can do independent work in screening cases.

A danger with using persistence as a criteria is that judges will use it as a heuristic,
arbitrarily screening out cases with misstatements that can be characterized as isolated. Judges must be especially wary of attempts to characterize persistent misstatements as isolated. For example, a company might argue that an unwarranted restructuring charge is isolated because such a charge occurs primarily in one quarter. But as shown above, such a charge is persistent to the extent that it affects multiple future periods. In addition, the fact that misstatements do not occur in non-consecutive periods would not necessarily mean that they are not persistent. A defendant cannot argue that a misstatement is isolated simply because there is an intervening period between multiple misstatements. While oversimplification is a risk, persistence is a less arbitrary standard than a five percent quantitative standard. Moreover, the possibility that the presumption of materiality or immateriality could be rebutted would also check the abuse of persistence as a way of determining materiality.

A persistence standard would be less arbitrary than the quantitative standard, but much clearer than the qualitative standard. A materiality standard that considers the persistence of financial misstatements might serve as a better screen of frivolous suits, reducing the costs of securities class actions. Parties would have additional criteria they could use in assessing the settlement value of cases. In some cases, persistence will provide a clearer basis for distinguishing between misstatements. In others, it may not. But even if it does not always provide an easier way of distinguishing between misstatements, it will provide a more meaningful way of assessing materiality than the quantitative or qualitative tests.

V. TARGETED VICARIOUS LIABILITY FOR FINANCIAL MISSTATEMENTS

The current choice between quantitative and qualitative materiality standards is also flawed because it fails to see how each standard is targeted at a particular type of wrongdoing. The quantitative standard is most relevant with respect to large scale accounting errors while the qualitative standard is most relevant with respect to individual wrongdoing. Choosing one standard over the other may mean that one priority is unduly privileged. A quantitative standard is less costly but fails to respond to individual wrongdoing. A qualitative standard addresses individual wrongdoing but at a significant cost to the entity that may be liable for virtually all misstatements.

Rather than choosing one approach over the other, the law should reconcile the two standards. The difference between quantitative and qualitative misstatements might be a useful way of determining whether a company is vicariously liable for a financial misstatement in fraud-on-the-market cases, while individuals would only be vicariously liable for a financial misstatement if it is above a quantitative threshold, while individuals would still be liable for misstatements that are below the quantitative

173. See generally Bainbridge & Gulati, supra note 79 (describing heuristics used by judges in securities cases); Hoffman, supra note 3 (finding significant use of presumed immateriality heuristics to dismiss cases); Sale, supra note 3 (describing the tendency of busy judges to use motive and opportunity heuristics to dismiss cases).

174. That is, securities fraud actions that do not involve misrepresentations relating to the initial offering of securities. Fraud-on-the-market cases are brought under Rule 10b-5 and section 10(b).

175. This Article does not take a position as to what percentage, whether five percent, or higher or lower, is appropriate.
threshold if they are unjustly enriched by the misstatement. This proposal would reduce the costs of complying with GAAP, allowing companies to focus on preventing significant accounting frauds, while still allowing for the punishment of individuals who enrich themselves by manipulating financial statements. The proposal could be adopted with, or independently from, the proposal that judges consider persistence in determining whether a misstatement is material.

A. Distinguishing Types of Accounting Fraud

The debate about materiality has focused on the relative merits of the quantitative and qualitative standards. But it may not be the case that either standard is better than the other. Instead, they address different problems. Not all accounting frauds are alike. Stock price inaccuracies vary greatly in significance and impact. Some frauds cause significant economic disruption because they substantially distort the fundamental value of a company. Others do not cause public harm but allow individuals to enrich themselves. The former variant of fraud can be described as Large Scale, while the latter variant can be called Small Scale.

1. Large Scale Accounting Fraud

Large Scale accounting fraud involves financial misstatements that significantly inflate earnings or hide a substantial decline in earnings. At some point, if the market discovers the fraud, it realizes that its assumptions about the discounted value of the company’s earnings are incorrect, and there is a significant decline in the stock price, harming shareholders and other stakeholders in the company. Such misstatements are almost always quantitatively large.

Misstatements that are quantitatively large can cause significant public harm. When a public company allows large misstatements to persist, there can be harm to shareholders—those who purchase stock at inflated prices and those who hold stock at inflated prices. In severe cases, discovery of quantitatively large misstatements can lead to the insolvency of the company because management has destroyed its credibility and the company cannot obtain needed funds from credit markets. Insolvency causes great disruption not only to shareholders but to other stakeholders of the company such as employees and communities. Moreover, quantitatively large misstatements that affect the value of a company harm the public markets, which may rely upon accurate valuations to value not only the company but also comparable companies. As a result, the cost of

176. This proposal would not cover the issue of vicarious liability for nonfinancial misstatements. Because nonfinancial misstatements are not subject to quantification, it is more difficult to articulate a standard distinguishing among such misstatements.


178. See, e.g., Donald C. Langevoort, The Social Construction of Sarbanes-Oxley, 105 MICH. L. REV. 1817, 1828 (2007) (“Subsequent discovery of fraud and misreporting then led quickly to loss of access to capital and then insolvency, which in turn hurt employees, investors, and the communities to which they were connected.”).


180. See, e.g., Fox et al., supra note 107, at 339 (“Greater disclosure and share price accuracy allocate
capital will increase, harming society as a whole.\footnote{181}

It is unlikely that Large Scale manipulations occur without some malfeasance. When misstatements are quantitatively large, it is more likely that management should be aware of such misstatements and know that their understanding of the economic value of the company has diverged from that of the market. Even if such knowledge does not exist, it is likely there is gross negligence or recklessness that allows quantitatively large misstatements.\footnote{182} As a result, it is much more likely that there will be scienter in such cases, triggering section 10(b) liability.

Many of the high profile business failures resulting from accounting fraud appear to involve quantitatively large misstatements:

- Enron’s abuse of Special Purpose Entities led to inflation of Enron’s income “by $28 million in 1997 (of $105 million total), by $133 million in 1998 (of $703 million total), by $248 million in 1999 (of $893 million total), and by $99 million in 2000 (of $979 million total).”\footnote{183}
- The WorldCom fraud involved “[t]he capitalization of ‘line costs’, misuse of reserves and other accounting tricks result[ing] in reported profits that were overstated . . . by at least $11 billion over a multiyear period.”\footnote{184}
- In the Adelphia fraud, the cable-television company “systematically and fraudulently excluded billions of dollars in liabilities from its consolidated financial statements [from at least 1998 through March 2002].”\footnote{185}
- The Tyco fraud involved operating income that was inflated by “$567 resources] by improving the quality of choice among proposed investment projects in the economy and by improving the operation of existing real assets.”); Kahan, supra note 177, at 1005 (“Inaccurate stock prices can result in an inefficient allocation of capital.”). But see Lynn A. Stout, The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Regulation, 87 Mich. L. Rev. 613, 651–56 (1988) (arguing that inaccurate stock prices have little effect on raising capital).

\footnote{181} See, e.g., Coffee, supra note 6, at 1565 (“The deeper problem in securities fraud is the impact of fraud on investor confidence and thus the cost of equity capital.”). As the FASB notes with respect to the purpose of GAAP:

The effectiveness of individuals, enterprises, markets, and government in allocating scarce resources among competing uses is enhanced if those who make economic decisions have information that reflects the relative standing and performance of business enterprises to assist them in evaluating alternative courses of action and the expected returns, costs, and risks of each.

SFAS No. 1, supra note 29, at 11.

\footnote{182} As one case explains:

Scienter may be established by recklessness, defined as a ‘highly unreasonable omission, involving not merely simple, or even inexcusable negligence, but an extreme departure from the standards of ordinary care, and which presents a danger of misleading buyers or sellers that is either known to the defendant or is so obvious that the actor must have been aware of it.’

SEC v. Rubera, 350 F.3d 1084, 1094 (9th Cir. 2005) (quoting Hollinger v. Titan Capital Corp., 914 F.2d 1564, 1569 (9th Cir. 1990)).

\footnote{183} \textbf{William C. Powers et al., \textit{Report of Investigation by the Special Investigative Committee of the Board of Directors of Enron Corp.}} 3 (2002).

\footnote{184} Breeden, supra note 37, at 21.

million” from 1998 through 2002.\textsuperscript{186} The Xerox fraud involved earnings inflation of $1.5 billion from 1997 through 2000.\textsuperscript{187} The Qwest fraud involved “$3.8 billion of spurious revenue” and the fraudulent exclusion of “$231 million in expenses” from 1999 through 2002.\textsuperscript{188}

Thus, virtually everyone would agree that it is important to prevent misstatements above a certain threshold. The quantitative standard is based on the assumption that certain misstatements are so large that they could cause significant disruption.

2. Small Scale Accounting Fraud

In contrast to Large Scale accounting fraud, Small Scale accounting fraud involves financial misstatements intended to fool the market for the short term, causing or preventing stock price fluctuations. Such misstatements need not be persistent or quantitatively large, so long as they are timed in a way that an individual can exploit. In contrast to Large Scale accounting fraud, Small Scale accounting fraud is less likely to implicate public concerns because it does not substantially affect the market’s ability to value a stock.

Nevertheless, Small Scale accounting fraud may raise concerns about individual wrongdoing.\textsuperscript{189} Management may manage earnings in order to meet bonus targets or sell their stock at just the right time.\textsuperscript{190} Even if the market adjusts quickly, it may be too late to prevent unjust enrichment by such insiders. SAB No. 99 and the qualitative materiality standard can be understood as ensuring that the law recognizes that earnings manipulation is wrong. While such behavior is reprehensible, it is less likely that such manipulation has a broader impact on the markets unless it leads to persistent misstatements.

Of course, not all such short term manipulations will be motivated by insider enrichment. Misstatements may occur because of good faith belief that accounting methods understated the true economic value of the firm.\textsuperscript{191} Misstatements also occur because of the ambiguity of GAAP. Thus, culpability is more difficult to determine with


\textsuperscript{189} See, e.g., Paul G. Mahoney, Mandatory Disclosure as a Solution to Agency Problems, 62 U. CHI. L. REV. 1047, 1048–51 (1995) (arguing that disclosure statutes address the problem of agency costs).

\textsuperscript{190} Coffee, supra note 6, at 1562 ("[T]he corporate manager usually has more self-interested reasons for inflating the firm’s earnings. Except in the case where the corporation is itself issuing shares, securities fraud appears to be primarily motivated by the manager’s own personal interests.").

\textsuperscript{191} Bratton, supra note 118, at 466 ("[M]anagement can argue that noise traders hype every piece of news about fundamental value to such a degree that some earnings management serves a higher shareholder interest."). But see Michael C. Jensen, Agency Costs of Overvalued Equity, 34 FIN. MGMT. 5, 8 (2005) ("But when managers smooth earnings to meet market projections, they are not creating value for the firm; they are both lying and making poor decisions that destroy value.").
respect to Small Scale accounting fraud than it is with respect to Large Scale accounting fraud. As a result, establishing liability for Small Scale accounting fraud can be costly.

B. The Vicarious Liability Debate

The distinction between the quantitative and qualitative standards might help resolve a debate concerning whether companies should be vicariously liable for misstatements.

1. Criticisms of Vicarious Liability

Under one view, companies do not cause financial misstatements; their agents do. For the most part, though, companies are vicariously liable for securities fraud committed by their agents. In one of the few SEC actions enforcing the qualitative materiality standard, the company was named as the defendant and vicariously liable for quantitatively small misstatements made by managers that led to management bonuses. Vicarious liability may play a large role because the SEC and plaintiffs find it easier to sue entities rather than individuals. Commentators have argued that companies should not be vicariously liable for fraud relating to periodic disclosures (as opposed to issuance of securities), and that such actions should primarily be focused on deterring the individual agents who commit such fraud. Vicarious liability for fraud on the market has been criticized, primarily on two

192. See, e.g., A.C. Pritchard, Markets as Monitors: A Proposal to Replace Class Actions with Exchanges as Securities Fraud Enforcers, 85 Va. L. Rev. 925, 930 (1999) ("Corporations are legal fictions—they do not make misstatements that affect stock prices on their own; rather, their agents, the officers of the corporation, make the misstatements that give rise to liability . . . .").

193. See Arlen & Carney, supra note 141, at 692 ("United States securities laws nearly always hold a corporation liable for fraudulent statements regarding its securities made to the market by its agents in the course of their employment."); see also id. at 696 (observing that most courts of appeal apply the common law doctrine of respondeat superior to securities fraud actions). See generally David A. Skeel, Jr., Shaming in Corporate Law, 149 U. Pa. L. Rev. 1811, 1829 (2001) (noting that vicarious liability for corporate crimes “enjoys widespread approval”). One exception is with respect to insider trading violations, where the entity can only be liable for civil penalties if it knew of the violation or contributed to the violation through inadequate policies. See Insider Trading and Securities Fraud Enforcement Act of 1988, Pub. L. No. 100-704, § 21A(6)(1)(2), 102 Stat. 4677 (1988). While there was a question as to whether vicarious liability survived the U.S. Supreme Court’s decision in Central Bank of Denver, N.A. v. First Interstate Bank of Denver, N.A., 511 U.S. 164 (1994), a number of courts have held that vicarious liability is still a viable theory. See WANG & STEINBERG, supra note 99, § 4.6.2.


195. Arlen & Carney, supra note 141, at 699 ("Plaintiffs in these cases generally utilize enterprise liability to sue the corporation; they sue the agents accused of the fraud significantly less frequently.").

196. See Coffee, supra note 6, at 1582 ("The SEC can and should exempt the non-trading corporate issuer from private liability for monetary damages under Rule 10b-5."). Arlen and Carney make a similar proposal. See Arlen & Carney, supra note 141, at 734 ("Courts could adopt in effect a rule of agent liability simply by rejecting the use of respondeat superior for Fraud on the Market and allowing corporate defendants to employ the good faith defense of the control person provisions of the securities acts.").

197. Coffee offers a number of other proposals to remedy the situation: (1) the SEC should make it clear that directors and officers cannot be indemnified for settlements of securities law violations, see Coffee, supra note 6, at 1571; and (2) when settling a securities case, directors should be required to determine the apportionment of the liability among involved parties and disclose that apportionment to the public. Id., at 1575–76, 1580–81.
First, agents rather than companies and their shareholders have the greatest motive to commit securities fraud because they capture the benefits of such fraud. Jennifer H. Arlen and William J. Carney argued in a 1992 article that managers are most likely to commit securities fraud when they perceive that they are in their last period of employment and will do anything to save their jobs. John Coffee argued in 2006 that “corporate managers, facing enhanced incentives to engage in fraudulent reporting, are the key actors who need to be deterred.” Shareholders are arguably the victims of such fraud yet ironically suffer the indignity of paying for it.

Second, vicarious liability does not effectively prevent agents from committing securities fraud. Companies and their shareholders are ill-suited to monitor the behavior of agents and may not be able to sanction them effectively. Moreover, under the current regime, when a company settles a Rule 10b-5 action, shareholders foot the bill even though they are uninvolved in the fraud and are in fact victims of the fraud. In contrast, individual managers are covered by insurance and indemnification provisions that pay the cost of any settlement. And when a case is settled, as usually happens, settlement agreements do not specify whether any individual parties were responsible for the fraud. The insurance company just writes a check. Thus, Coffee argues, blame is not apportioned in any meaningful way, reducing any deterrent effect with respect to the responsible individuals.

2. Defending Vicarious Liability for Financial Misstatements

Commentators have questioned the arguments against vicarious liability. The case for at least some vicarious liability is especially strong with respect to financial misstatements.

First, financial statements are official filings issued by the entity. As a result, liability for financial misstatements may be an issue of direct rather than vicarious liability. Courts have held that fraudulent misstatements can lead to direct liability to the extent they are “intrinsically corporate and bear the imprimatur of the corporation itself.” It is difficult to imagine a misstatement that could be more of an official

---

198. These criticisms have been limited to fraud on the market cases, though they could theoretically be applied to liability under section 11 for misstatements relating to securities offerings.

199. Arlen & Carney, supra note 141, at 727; see also Mitu Gulati, When Corporate Managers Fear a Good Thing is Coming to an End: The Case of Interim Nondisclosure, 46 UCLA L. REV. 675, 736 (1999) (noting that fraud associated with unripe information is more likely when corporate managers are facing final period of employment).

200. Coffee, supra note 6, at 1573; see also James Fanto, Paternalistic Regulation of Public Company Management: Lessons from Bank Regulation, 58 Fla. L. REV. 859, 904–07 (2006) (arguing that tendency for corrupt inner circles to form is a significant source of management fraud).

201. See Coffee, supra note 6, at 1562 (“But in the case of at least the ‘secondary market’ securities class action, the victims and the shareholders are largely the same . . . .”).

202. See Arlen & Carney, supra note 141, at 704–20 (setting forth the argument that shareholders are poor monitors).

203. Coffee, supra note 6, at 1570, 1575.

corporate statement than a misstatement occurring with respect to the financial statements of a company.

Second, shareholders can benefit from frauds involving financial misstatements. Companies with greater earnings prospects may be able to borrow at better rates, and may be more able to acquire other companies with their stock. A company faced with declining earnings may hope to hide that fact while engaging in acquisitions that it hopes will reverse that trend. While individual managers capture some of these benefits, shareholders who are given more time to sell the inflated stock or the chance to salvage their investment also benefit. While shareholders who purchased stock at an inflated price suffer when the fraud is discovered, the shareholders who sold stock at an inflated price benefit.

Moreover, managerial incentives have changed significantly since Arlen and Carney argued in 1992 that managers commit fraud to save their jobs when they think they are in their last period of employment. In 1993, Congress passed a statute preventing companies from deducting manager salaries above $1 million, causing more companies to compensate managers with stock options. As a result, the incentives of managers are in theory more aligned with those of shareholders. Rather than having an incentive to commit fraud only when their job is on the line, managers have incentives to inflate earnings at times when they want to exercise their stock options. Such inflation may benefit shareholders who want to cash out of their investment.

Third, entities have the ability and duty to detect and prevent at least some types of fraud. If entities are not responsible for their own financial statements, what could they directly liable for misstatements, observing that “[a]ny person or entity . . . may be liable as a primary violator of under 10b-5 . . .” Id. at 191.

205. See, e.g., Patricia M. Dechow et al., Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC, 13 CONTEMP. ACCT. RES. 1, 30 (1996) (“[I]n some cases, earnings management can be considered to be a form of fraud.”); Donald C. Langevoort, On Leaving Corporate Executives “Naked, Homeless and Without Wheels”: Corporate Fraud, Equitable Remedies, and the Debate over Entity Versus Individual Liability, 42 WAKE FOREST L. REV. 627, 632 (2007) (“There are many cases, such as when fraud permits the company to acquire another with overvalued assets, where shareholders are clear beneficiaries of the fraud.”).


207. Moreover, managerial incentives have changed significantly since Arlen and Carney argued in 1992 that managers commit fraud to save their jobs when they think they are in their last period of employment. In 1993, Congress passed a statute preventing companies from deducting manager salaries above $1 million, causing more companies to compensate managers with stock options. As a result, the incentives of managers are in theory more aligned with those of shareholders. Rather than having an incentive to commit fraud only when their job is on the line, managers have incentives to inflate earnings at times when they want to exercise their stock options. Such inflation may benefit shareholders who want to cash out of their investment.

Third, entities have the ability and duty to detect and prevent at least some types of fraud. If entities are not responsible for their own financial statements, what could they
be responsible for? Many financial frauds, while driven by management, are enabled by the entity’s failure to implement sufficient internal controls. For example, a report on the WorldCom collapse noted that “the Company’s internal controls over the preparation and publication of its financial results were dysfunctional at best, and in some areas controls were missing entirely.”

Making companies liable for the absence of such controls should create incentives for directors and shareholders to push for the implementation of such systems. Entity liability deters misconduct by inducing firms to sanction wrongdoers, implement preventive measures, and undertake policing.

Fourth, relying solely on individual liability can create significant costs. Securities law enforcers will have to expend a great deal of effort in identifying the individual managers involved in the fraud and establishing the proportion of the fraud for which they are liable. This may be especially difficult with fraud relating to financial statements, which are prepared by many individuals. Part of the reason for the current failure of the system to apportion blame may be economic—the costs of doing such an apportionment may outweigh the benefits. To the extent that some fraud is caused by systemic failure, it may not be possible to meaningfully assign blame to individuals. The result may be that securities class actions, which already take years to resolve, will drag on even longer, burdening the courts.

If the entity is not liable, securities fraud enforcers will have to go after the personal assets of the manager when in the past they might have been satisfied with a settlement within the limits of the manager’s insurance policy. Managers might deal with this risk by negotiating larger insurance policies. But there are costs associated with securities fraud cases that may exceed the limits of the insurance policy. For example, managers will have to spend significant amounts of time and resources defending against securities class actions that might settle more quickly when the entity is the target.

Peter Schuck argues in the context of government torts that imposing liability on individuals for torts committed in the course of their duties may make them risk-averse, causing a chilling effect and discouraging vigorous decisionmaking. Schuck argues that governmental entities are the cheapest cost avoider for government torts because they can implement policies, procedures, and training that may prevent torts by government employees. Schuck thus provides support for the doctrine of qualified immunity, which shields government officials from tort liability if they do not act unreasonably.

While the contexts of government and corporate liability differ, it is far from apparent why the concerns of chilling identified by Schuck would not apply with respect

---

211. BREEDON, supra note 37, at 22.
212. See generally Financial Penalties Statement, supra note 206 (“The Senate Report also notes the importance of good compliance programs and observes that the availability of penalties may encourage development of such programs.”).
213. See Arlen & Kraakman, supra note 210, at 693.
214. See, e.g., Arlen & Carney, supra note 141, at 706 (“The Coase Theorem implies that if transaction costs are negligible, the assignment of liability between the enterprise and the agent should not affect the efficiency of the outcome (here, the amount of fraud).”); see also Alan O. Sykes, The Economics of Vicarious Liability, 93 YALE L.J. 1231, 1232 (1984) (noting that if transaction costs are low, agents and principles will negotiate to apportion liability).
to corporate decisionmaking. Vigorous decisionmaking is essential to effective businesses. Corporate managers need to signal within reasonable bounds their belief in the strength of their business. Without such optimism and risk-taking, the nation’s economy might suffer.

The answer may be that there is already a form of qualified immunity with respect to many securities fraud cases. In order to be liable under Rule 10b-5, the defendant must have acted with scienter. The scienter requirement shields defendants who make isolated mistakes in the course of their duties. Nevertheless, absent an entity defendant, plaintiffs and regulators may have an incentive to aggressively argue that individual managers acted with scienter, even if the problem had systemic causes. And courts may be more sympathetic to such arguments because there is no entity to blame. As a result, individual managers will have to spend more time and resources defending themselves in accounting fraud cases.

Given that entities have incentives to allow fraud, have the ability to check certain types of fraud, and individual liability can be problematic, there should be some vicarious liability for securities law violations. The challenge is distinguishing the circumstances when entity liability may be counter-productive and it would be better for only individuals to be liable. The materiality of financial misstatements is a promising area in which to explore this possibility.

C. A Refined Vicarious Liability Standard

The solution may not be to abandon vicarious liability but to refine it. The premise of doing away with vicarious liability is that individuals rather than entities need to be deterred. But that is not always the case. In considering whether vicarious liability is appropriate for financial misstatements, the law should distinguish between systemic and individual causes. Companies are more directly affected by quantitatively large misstatements. Companies are better able to monitor and prevent quantitatively large misstatements than individual managers. In contrast, companies have fewer incentives to use quantitatively small misstatements to manipulate their stock price. Companies are less able to monitor and prevent quantitatively small misstatements than individual managers. Thus, companies should only be vicariously liable for quantitatively large misstatements, while individual managers should be liable for quantitatively small financial misstatements, especially if they cause stock price fluctuations that they profit from. In doing so, the legal framework would focus more efforts on preventing Large Scale rather than Small Scale accounting fraud.

216. See Ernst & Ernst v. Hochfelder, 425 U.S. 185 (1976); supra text accompanying note 89.
217. Professor Coffee suggests that “a combined or hybrid system of agent and enterprise liability (with the agent’s liability being increased and the enterprise’s liability being decreased) seems likely to better deter securities fraud.” Coffee, supra note 6, at 1563 n.103; see also Blue Chip Stamps v. Manor Drug Stores, 421 U.S. 723, 746 n.10 (1975) (“[T]he SEC would limit the vicarious liability of corporate issuers to nonpurchasers and nonsellers to situations where the corporate issuer has been unjustly enriched by a violation.”).
1. Companies

a. Quantitatively Large Misstatements

The case for vicarious liability is strongest with respect to quantitatively large misstatements. The preventive measures that companies are incentivized to implement by vicarious liability are best suited to prevent such misstatements. If implemented properly, external audits, internal controls, and policies/procedures may detect and remedy major misstatements, especially if they occur over time.218

While the cost of audits, controls, and procedures are significant, corporations that access the public markets should have the resources to implement measures to assess the risk of quantitatively large misstatements in their financial statements. The cost of monitoring for quantitatively large misstatements is justified to prevent the significant public costs of Large Scale accounting fraud. Unless markets can adequately assess the intrinsic value of companies, capital will be misallocated, and shareholders and stakeholders will suffer harm.

The cost of ensuring the effectiveness of such policies and procedures can be too high for any one individual to bear. Because of the complexity of public corporations, no one person can entirely control the accuracy of financial reporting. The responsibility for ensuring there are adequate audits, controls, policies and procedures should rest with the company as a whole. When such procedures break down, it can be difficult to pinpoint the blame on any one person.219 High-level managers will point to mid-level managers who will point to low-level managers who will point to the auditors who signed off on the financial reports, while auditors will point back to management. Requiring the identification of the particular individual who was responsible for a quantitative misstatement can be extremely costly. Thus, there is a strong case for allowing vicarious liability for a breakdown of the procedures preventing quantitatively large misstatements because it reduces the costs of assigning blame.

Of course, that is not to say that there will not be cases where individuals are clearly responsible for quantitatively large misstatements. And when they are, such individuals should bear the costs along with the corporation. But such cases can be difficult to establish. In most cases, plaintiffs or the government will need to name a wide range of individuals whose cumulative actions or inactions caused the financial misstatement. It might be impossible to meaningfully determine the relative amount of responsibility of each of these individuals. Making the corporation liable for quantitatively large misstatements will ensure that some party will be liable for Large Scale accounting frauds and have an incentive to prevent such fraud.220

218. See generally Barrett, supra note 9, at 853 (noting the importance of internal controls in preventing accounting fraud); supra notes 206, 212.

219. See, e.g., Christopher D. Stone, The Place of Enterprise Liability in the Control of Corporate Conduct, 90 YALE L.J. 1, 31 (1980) (“[T]he bulk of harm-causing corporate conduct does not typically have, at its root, a particular agent so clearly ‘to blame’ that he or she merits either imprisonment or a monetary fine extracted in a public ceremony.”).

220. See, e.g., Lewis A. Kornhauser, An Economic Analysis of the Choice Between Enterprise and Personal Liability for Accidents, 70 CAL. L. REV. 1345, 1370 (1982) (“Under enterprise liability the plaintiff, however, might succeed in her suit because she can attribute the cause to the enterprise but not to any particular individual or division of it.”).
b. Quantitatively Small Misstatements

In contrast, it may not be effective to hold a company vicariously liable for quantitatively small misstatements. Companies have less incentive to allow managers to manipulate the short term fluctuations of their stock (although they might have an incentive if it allows them to pay their managers less). In the context of Small Scale manipulations, managers are more likely to be acting for their own enrichment, capturing benefits for themselves through earnings management, rather than acting within the scope of their agency. Preventive measures such as audits, controls, or procedures that are induced by vicarious liability may be less likely to stop quantitatively small misstatements. The arguments against vicarious liability are strongest in a situation where the company does not capture the benefits of the fraud and is less likely to detect it.

One response might be that if it is true that quantitatively small misstatements are unlikely to affect the fundamental value of a stock, there is little need to shield companies from such liability. If there is only a minimal impact on the stock price, it is unlikely that plaintiffs will be able to recover significant damages. But that does not mean that they will not try to link the misstatement to other stock price fluctuations.221 And some relatively small misstatements are associated with significant shareholder losses, at least in the short term. A recent study found that the revelation of stock-options backdating resulted in an immediate loss of $400 million in market value for $500,000 in benefits.222 And while quantitatively small misstatements may not significantly affect the market’s long term assessment of the fundamental value of a stock, they might lead to temporary market overreactions, resulting in price fluctuations for which plaintiffs will try to recover, imposing costs on companies.223

Another argument for holding companies vicariously liable for quantitatively small misstatements is that such a standard is prophylactic, preventing a culture that allows persistent and quantitatively large misstatements.224 But while some companies that allow quantitatively small misstatements become companies where long term fraud evolves, it is difficult to conclude that a culture that permits minor misstatements necessarily leads to more significant fraud. Moreover, some of the tendencies to allow a fraudulent culture might be checked by measures implemented by Sarbanes-Oxley, specifically section 302,225 which requires the company’s chief executive and financial officers to certify the company’s financial statements, and section 404,226 which requires a company’s management and auditors to attest to the company’s financial controls. Given these provisions, the marginal benefit of making companies vicariously liable for all misstatements may be small.

221. See, e.g., Coffee, supra note 18, at 537 (noting the tendency of plaintiffs to link misstatements to stock price declines).
223. See, e.g., Easterbrook & Fischel, supra note 23, at 617 (describing the costs of private securities actions).
224. See, e.g., SAB No. 99, supra note 10, at 3 (“The tone set by top management—the corporate environment or culture within which financial reporting occurs—is the most important factor contributing to the integrity of the financial reporting process.”).

2. Individual Managers

That is not to say that quantitatively small misstatements should always be allowed. While such misstatements may not have a significant impact on the market’s assessment of the firm’s intrinsic value, such misstatements are damaging when they cause temporary stock fluctuations that allow unjust enrichment by individual managers. The securities laws have focused on targeting such self-enrichment. Insider sales of securities around the time of a misstatement are often seen as a sign of scienter. Section 304 of Sarbanes-Oxley requires individuals to return bonuses or compensation they receive as a result of accounting misconduct.

In addition, totally removing liability for small financial misstatements would create a significant disparity where it is easier to be liable for a nonfinancial misstatement than for a financial misstatement. Such a system might under-deter fraud relating to financial misstatements.

Thus, even if a misstatement is not quantitatively large, courts should consider whether an individual personally benefited from any stock price manipulation in assessing whether the misstatement is material. In such cases, the misstatement could trigger liability solely with respect to the enriched individual.

Retaining individual liability for qualitative misstatements in circumstances of self-enrichment would help deter such behavior. If there is specific evidence of fraudulent enrichment by individual managers, and there is an adjudication, it may be that the fraud exclusions of their D&O policies will not apply, meaning that they will have to cover additional costs of liability under the securities laws. Moreover, the SEC can bring enforcement actions and impose sanctions that are not covered by insurance.

One objection to making individuals liable for quantitatively small misstatements is that it may result in a chilling effect similar to that identified by Schuck with respect to government officials. Because individuals could be responsible for even quantitatively small misstatements.

227. See, e.g., Messod D. Beneish, Incentives and Penalties Related to Earnings Overstatements That Violate GAAP, 71 ACCT. REV. 425, 454 (1999) (“[T]he results suggest that managers’ desire to sell their equity contingent wealth at higher prices is a motivation for earnings overstatement.”).

228. Donald Langevoort argues that unjust enrichment remedies should be emphasized even more, especially if the law evolves in a way that limits vicarious liability. See Donald C. Langevoort, Capping the Damages for Open-Market Securities Fraud, 38 ARIZ. L. REV. 639, 655 (1996) (noting that open market fraud may look more like insider trading); see also Booth, supra note 6, at 31–35 (arguing that only securities fraud actions alleging insider trading by directors, officers, or agents should be permitted to proceed); A.C. Pritchard, Who Cares?, 80 WASH. U. L.Q. 883, 887 (2002) (“Managers who distort stock prices in order to manipulate a stock price-based compensation scheme would be forced to disgorge the excess gains . . . .”).

229. See, e.g., PR Diamonds, Inc. v. Chandler, 364 F.3d 671, 691 (6th Cir. 2004) (noting that “the allegations of fraudulent motive which courts most often recognize as support for a strong inference of scienter are allegations that insiders sold stock”).


231. On the other hand, courts already have various tests they use to screen out nonfinancial misstatements. See Hoffman, supra note 3, at 573 (identifying four tests courts use to assess the materiality of qualitative misstatements). Thus, limiting liability for certain types of financial misstatements might actually narrow rather than expand a disparity.

232. The Supreme Court has recognized that such gain can be strong evidence of scienter. See Tellabs, Inc. v. Makor Issues & Rights, Ltd., 127 S. Ct. 2499, 2511 (2007) (noting that “personal financial gain may weigh heavily in favor of a scienter inference”).

233. Coffee, supra note 6, 1574 n.150.
small misstatements if they allow the company to meet earnings expectations, they will use the most conservative accounting possible, understating the value of the company to investors. The result, one might argue, is that the company would still be governed in substance by a qualitative standard.

One response to this argument is that the scienter requirement reduces some of those costs. Individuals will not be liable for accidental misstatements. Another response is to firmly link such cases to individual self-enrichment. A difference between corporate management and government officials is that government officials do not typically receive bonuses or stock options for meeting performance targets. By making liability contingent on whether the individual personally profits from the misstatement, either by receiving a bonus, or exercising stock options, a corporate manager who would want to avoid such liability could perhaps do so by not selling stock options around earnings announcements. Or, if it appears there were questionable accounting decisions that affected compensation, the individual could preemptively avoid liability by returning the bonus or compensation.

Another objection is that because of the relatively small assets of some individuals, investors may not be compensated for the harm caused by quantitatively small misstatements. One response might be that the goal of such actions is not necessarily compensation, but deterrence and remedying unjust self-enrichment. Moreover, because of the smaller pockets of individual managers, class action attorneys may be less likely to bring strike suits for temporary fluctuations, reducing the cost of defending class actions. Some might argue that fewer suits would result in under-deterrence. It is here where the SEC and other regulators should step in—aggressively enforcing the law in an area where private incentives may not be as strong.

3. Benefits

There would be a number of benefits to limiting vicarious liability for financial misstatements. First, the law could channel more resources towards preventing Large Scale accounting fraud by companies. Second, the cost of complying with GAAP will be significantly lowered. Companies can focus on implementing policies and procedures that will detect quantitatively large misstatements. Moreover, strike suits by plaintiffs based on minor misstatements will be less likely, saving litigation costs. Finally, individual managers will still be deterred because they can be liable for quantitatively small misstatements, especially if they result in self-enrichment. Enforcement cases involving such misstatements will look like insider trading cases, relatively few but involving significant sanctions. As a result, individual managers may be more incentivized to seek value creation over the long term rather than exploiting temporarily inflated stock prices to enrich themselves.

By limiting the reach of securities fraud suits, this proposal might blunt criticisms that such suits are abusive and too costly. Rather than punish companies for every fluctuation in their stock price caused by a financial misstatement, the law would target the worst forms of misconduct that are likely to cause public harm. Instead of arbitrarily restricting securities fraud suits because of their perceived costs, policymakers and judges should think of thoughtful limits that allow such suits to deter the worst forms of fraud.
VI. IMPLEMENTATION

These proposals could be implemented together or separately. The SEC might implement the proposals by rulemaking or by publishing guidelines. Joseph Grundfest has argued that the SEC has the power to take a more active role in defining broad concepts such as materiality. Courts could also refine the law relating to materiality and vicarious liability consistent with these recommendations. In the event that rulemaking or judicial action is not a viable option, the SEC could partially implement the proposal by altering its enforcement patterns. With respect to the persistence proposal, the SEC could assess whether it should focus enforcement resources on a case based on whether it involves a persistent financial misstatement. Or, with respect to the vicarious liability proposal, the SEC might only name companies as defendants for quantitatively large misstatements while naming only individuals for quantitatively small misstatements when there is evidence of unjust enrichment.

VII. CONCLUSION

For years, there has been a debate centered on whether a quantitative or qualitative standard of materiality should govern the accuracy of financial statements. This Article argues that the debate should be reframed. Rather than focusing on whether the standard is easy to apply or allows punishment of earnings manipulation, this Article provides a firmer basis for distinguishing the financial misstatements that matter.

In doing so, the Article provides an alternative to assessing materiality primarily by assessing the market’s reaction to the misstatement. At least in the context of financial misstatements, fundamental analysis can provide meaningful ex ante distinctions between misstatements. Fundamental analysis is especially appropriate with respect to financial misstatements because rational investors focus on such numbers in valuing companies. Viewed in the light of fundamental analysis, materiality does not hinge solely on whether a misstatement is large or small, or largely on the motivation for the misstatement. Instead, the materiality standard should focus on assessing the persistence of the misstatement.

This Article also seeks to resolve the tension between quantitative and qualitative standards by drawing upon, but modifying, recent proposals to abandon vicarious liability for fraud-on-the-market cases. The solution is not to get rid of vicarious liability, but to refine it so that the standard allocates liability in a rational way. Companies should not be vicariously responsible for every mistake in accounting, but should focus on ensuring that quantitatively large misstatements do not occur. In contrast, individuals should be liable for quantitatively small misstatements, especially when they make such misstatements to enrich themselves.

Assessing materiality, even of financial misstatements, will always be more of an art than a science. Nevertheless, careful analysis based on valuation and entity liability theory can provide insights into the misstatements that the law should regard as material. By doing so, perhaps the important role of securities fraud actions in deterring significant accounting fraud might be preserved.

234. See generally Grundfest, supra note 6.