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Earnings Management: Reconciling the Views of Accounting Academics, Practitioners, and Regulators

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SYNOPSIS: We address the fact that accounting academics often have very different perceptions of earnings management than do practitioners and regulators. Practitioners and regulators often see earnings management as pervasive and problematic—and in need of immediate remedial action. Academics are more sanguine, unwilling to believe that earnings management is actively practiced by most firms or that the earnings management that does exist should necessarily concern investors. We explore the reasons for these different perceptions, and argue that each of these groups may benefit from some rethinking of their views about earnings management.

INTRODUCTION

Despite significant attention on earnings management from regulators[1] and the financial press,[2] academic research has shown limited evidence of earnings management. While practitioners and regulators seem to believe that earnings management is

[1] For example, SEC Chairman Levitt delivered a major speech on earnings management in the fall of 1998 in which he advocated a number of initiatives to improve the quality of financial reporting (Levitt 1998). As part of this effort, the Blue Ribbon Committee has proposed, among other things, that auditors report on "accounting quality," including the quality of reported earnings. See Recommendation 8 of the "Report and Recommendations" of the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees, 1999, available from the NYSE and NASD through their web sites, http://www.nyse.com/ and http://www.nasdaqnews.com/, respectively.

[2] Some examples include *Fortune* (1999, 1997), *CFO* (1998), *Wall Street Journal* (1999b, 1998, 1999a).

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both pervasive and problematic, academic research has not demonstrated that earnings management has a large effect on average on reported earnings, or that whatever earnings management does exist should concern investors. Our goal in this paper is to reconcile these different views—why does earnings management seem both prevalent and problematic in practice (to the extent it has become a focus of regulatory attention), but is not consistently documented in the academic literature? By reconciling the apparently disparate views of academics—based on statistical analyses of large samples—and practitioners—based on close examination of specific instances of financial reporting—we hope to generate some insights that will be useful to both groups.[3]

We argue that there are several reasons for the apparent disparity between practitioner and academic perceptions about earnings management. First, because academics usually wish to make general statements about earnings management, they often choose to examine large samples of firms, and so tend to use statistical definitions of earnings management that may not be very powerful in identifying earnings management. That is, the current research methodologies simply are not that good at identifying managers of firms that practice earnings management. In contrast, practitioners and (especially) regulators observe actual cases of earnings management on a regular basis, in part because their objectives are different from those of academic research. Second, academics have focused on particular samples and management incentives that: (1) are not of a great deal of interest to practitioners, and (2) *ex post*, have not been very fruitful in terms of identifying earnings management behavior. For example, academics tend to focus on earnings management incentives provided by contractual arrangements such as bonus plans, debt-covenants, etc., while practitioners (especially in recent years) tend to think more in terms of incentives provided by the capital markets, such as whether firms meet analysts' forecasts for the quarter. Third, academics and practitioners tend to have different views about the extent to which investor rationality mitigates financial reporting-problems such as earnings management—e.g., academics sometimes rely on market efficiency to argue that earnings management "doesn't matter" as long as it is fully disclosed to investors. Regulators and practitioners often have a different view.

In this paper, we argue that academics, regulators, and practitioners may all benefit from some rethinking of their views about earnings management. We discuss two main issues. The first is the extent to which earnings management can be defined and measured. This is particularly relevant given the SEC's recent goal to improve the quality of financial reporting, which includes reducing earnings management. Without a clear and implementable definition of earnings management, identifying firms that practice earnings management can occur only in an *ad hoc, ex post* manner. One of the lessons from accounting research is that measures of earnings management devised by academic researchers have not been very powerful in identifying the practice. We argue that a more fruitful way to identify firms whose managers practice earnings management is to focus on managerial incentives.

Second, with regard to this focus on incentives, we argue that academics' research efforts should focus more on capital market incentives for earnings management, as some recent research has begun to do. In particular, we argue that as stock market valuations (measured relative to accounting benchmarks such as earnings or book values) increased during the 1990s, especially in conjunction with the increased importance of stock-based

[3] Thus, our goal is different from that of papers that review the earnings management literature (such as Healy and Wahlen's [1999] paper prepared for the previous AAA/FASB conference).

compensation, managers have become increasingly sensitive to the level of their firms' stock prices and their relation to key accounting numbers such as earnings. Consequently, their incentives to manage earnings to maintain and improve those valuations have also increased, which arguably explains why earnings management has received so much recent attention. We describe some recent research in this area which we view as providing *prima facie* evidence that earnings management is pervasive, but argue that much remains to be done.

The paper proceeds as follows. In the next section we ask the question: What is earnings management? Section three addresses the issue of whether earnings management "matters" if it is disclosed to investors. In Section four, we discuss research that investigates management's capital market incentives to meet or beat simple earnings benchmarks, to raise equity capital, and on whether capital market participants are "fooled" by simple earnings management practices. Section five provides a summary and conclusion.

WHAT IS EARNINGS MANAGEMENT?

Before defining earnings management, we consider the role of accrual accounting since we believe that certain forms of earnings management (such as "income smoothing") are hard to distinguish from appropriate accrual accounting choices.

What is the Objective of Accrual Accounting?

The following statements outline the objectives of financial reporting and how these relate to the definition of accrual accounting, as laid out by the FASB in various Statement of Financial Accounting Concepts:

> The primary focus of financial reporting is information about an enterprise's performance provided by measures of earnings and its components [FASB 1978, SFAC No. 1, para. 43].
>
> Accrual accounting attempts to record the financial effects on an entity of transactions and other events and circumstances that have cash consequences for the entity in the periods in which those transactions, events, and circumstances occur rather than only in the periods in which cash is received or paid by the entity [FASB 1985, SFAC No. 6, para. 139].
>
> Accrual accounting uses accrual, deferral, and allocation procedures whose goal is to relate revenues, expenses, gains, and losses to periods to reflect an entity's performance during a period instead of merely listing its cash receipts and outlays. Thus, recognition of revenues, expenses, gains, and losses and the related increments or decrements in assets and liabilities—including matching of costs and revenues, allocation, and amortization—is the essence of using accrual accounting to measure performance of entities [FASB 1985, SFAC No. 6, para. 145].

Thus, the principal goal of accrual accounting is to help investors assess the entity's economic performance during a period through the use of basic accounting principles such as revenue recognition and matching.[4] There is evidence that as a result of the accruals process, reported earnings tend to be smoother than underlying cash flows (accruals tend to be negatively related to cash flows) and that earnings provide better information about economic performance to investors than cash flows (e.g., see Dechow 1994). This raises the following key questions:

[4] One can also view accrual accounting from a "balance sheet" perspective, in the sense that accrual accounting involves the recognition of an entity's rights and obligations as they occur.

1. How far should management go in helping investors form "rational expectations" about the firm's performance through their accruals choices and when does this activity become earnings management?
2. Relatedly, to the extent that these accruals choices often operate to smooth reported earnings relative to the underlying cash flows, when does the appropriate exercise of managerial discretion become earnings management?

Our key point is that perhaps by its very nature, but certainly as an empirical matter, accrual accounting tends to dampen the fluctuations in an entity's underlying cash flows to generate a number that is more useful to investors (for assessing economic performance and predicting future cash flows) than current-period operating cash flows. Thus, to characterize income smoothing as earnings management, we need to define the point at which managers' accrual decisions result in "too much" smoothing and so become earnings management.

Definitions of Earnings Management

To think more generally about how earnings management is defined, consider the following representative definitions from the academic literature:

> Schipper (1989, 92): "...a *purposeful* intervention in the external financial reporting process, with the intent of obtaining some private gain (as opposed to, say, merely facilitating the neutral operation of the process)...." (emphasis added).
>
> Healy and Wahlen (1999, 368): "Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either *mislead some stakeholders* about the underlying economic performance of the company, or to *influence contractual outcomes* that depend on reported accounting numbers" (emphasis added).

Although widely accepted, these definitions are difficult to operationalize directly using attributes of reported accounting numbers since they center on managerial intent, which is unobservable.

Turning to the professional literature, clear definitions of "earnings management" are difficult to discern from pronouncements and/or statements and speeches by regulators, although an extreme form of earnings management—financial fraud—is well-defined (again in terms of managerial intent) as:

> the intentional, deliberate, misstatement or omission of material facts, or accounting data, which is misleading and, when considered with all the information made available, would cause the reader to change or alter his or her judgment or decision. (National Association of Certified Fraud Examiners, 1993, 12)

In recent speeches and writings, regulators at the SEC seem to have a broader concept in mind than financial fraud when they talk about "earnings management," although this has not (at least as far as we could tell) been made explicit. In particular, while financial-reporting choices that explicitly violate GAAP can clearly constitute both fraud and earnings management, it also seems that systematic choices made *within GAAP* can constitute earnings management according to recent SEC discussions. The notion that earnings management can occur within the bounds of GAAP is consistent

with the academic definitions described above but is somewhat startling if the idea is that this type of earnings management will lead to explicit adverse consequences for managers and firms (in the form of SEC enforcement activity) in the same way as financial fraud. This is an important point because of the question as to whether income smoothing constitutes earnings management and hence is to be treated in the same manner as fraud.

We offer our view of how different types of managerial choices can be characterized in Figure 1. Here we distinguish between choices that are fraudulent and those that comprise aggressive, but acceptable, ways in which managers can exercise their accounting discretion. Perhaps the main point to be made here is that there is a clear conceptual distinction between fraudulent accounting practices (that clearly demonstrate intent to deceive) and those judgments and estimates that fall within GAAP and which may comprise earnings management depending on managerial intent. However, in the case of the latter types of choice it would, in many cases seem difficult, absent some objective evidence of intent, to distinguish earnings management from the legitimate exercise of accounting discretion.

To ascertain the SEC's definition of earnings management, we analyzed several recent SEC sources—Chairman Levitt's speech from September 1998, a follow-up paper coauthored by the SEC's Chief Accountant (Turner and Godwin 1999), a letter from the Office of the Chief Accountant to the AICPA regarding the 1998–99 audit risk alerts,

FIGURE 1
The Distinction between Fraud and Earnings Management

	Accounting Choices	"Real" Cash Flow Choices
	Within GAAP	
"Conservative" Accounting	Overly aggressive recognition of provisions or reserves	Delaying sales
	Overvaluation of acquired in-process R&D in purchase acquisitions	Accelerating R&D or advertising expenditures
	Overstatement of restructuring charges and asset write-offs	
"Neutral" Earnings	Earnings that result from a neutral operation of the process	
"Aggressive" Accounting	Understatement of the provision for bad debts	Postponing R&D or advertising expenditures
	Drawing down provisions or reserves in an overly aggressive manner	Accelerating sales
	Violates GAAP	
"Fraudulent" Accounting	Recording sales before they are "realizable"	
	Recording fictitious sales	
	Backdating sales invoices	
	Overstating inventory by recording fictitious inventory	

and the recent SEC SAB #99 on Materiality. While these sources often refer to "earnings management," none of these sources explicitly defines earnings management, although Chairman Levitt (1998, 3) indicates that:

> (f)lexibility in accounting allows it to keep pace with business innovations. Abuses such as earnings management occur when people exploit this pliancy. Trickery is employed to obscure actual financial volatility. This in turn, masks the true consequences of management's decisions.

These statements imply that within-GAAP choices can be considered to be earnings management if they are used to "obscure" or "mask" true economic performance, bringing us again back to managerial intent. This idea is reinforced by our reading of SAB #99, which also points to the intent to deceive.

As accounting researchers have discovered, implementing this type of definition requires a reliable measure of "the true consequences of management's decisions"—that is, the earnings number that would have resulted from a "neutral operation of the process" (absent some form of managerial intent). An example makes this point clearer.

Smoothing example

Consider a company whose software product must be continuously upgraded and supported to maintain market share. Customers pay cash for the product up-front, and the company defers recognition of part of this revenue because management believes the revenue is not earned until customer support has been provided. The deferred revenue is recognized as support is provided and uncertainties about the costs of support are resolved, so that the proportion of revenue that is deferred may vary from quarter to quarter. As it turns out, the estimates managers make to implement this revenue recognition policy mean that when sales are unusually high relatively more is transferred into the unearned revenue reserves, and conversely when sales are unusually low (in periods, say, right before new versions of popular software are released). Thus, because of management's best judgments about when their firm's revenues from this product are earned, reported revenues and earnings are smoother than would otherwise occur were revenue to be recognized entirely at the point of sale.

In light of the SEC's recent statements about earnings management, the following questions seem pertinent:

- Some would argue that this example illustrates earnings management, in particular income smoothing. On the other hand, company management can (it seems legitimately) argue that they are merely following generally accepted revenue recognition rules, which naturally allow managers some discretion in deciding when revenue has been "earned." How do we determine if this comprises earnings management rather than the legitimate exercise of judgment?
- Is it a matter of intent? For example, if we were able to show that this practice was intentional (for example, that management was utilizing its judgment over revenue recognition to meet explicit, pre-established growth targets in each quarter) would this practice then comprise earnings management?[5]

[5] This is apparently what happened in the W. R. Grace case, in which company executives stated that they wanted to keep growth (of a Grace unit) in the 20–25 percent range, and moved the excess into a reserve. See *Wall Street Journal* (1999a).

- If so, we could presumably then have identical companies making identical financial-reporting choices, but whose management face different growth targets. One company could then be construed as practicing earnings management (if it happened through good luck or good management to hit those targets) and the other would not.
- If financial reporting is transparent, is this practice less problematic? That is, if transfers to and from this reserve are clearly reported in the footnotes, so investors can undo any smoothing that takes place, should we then continue to be concerned about this practice?[6]

Thus, the crucial issue seems to us to be one of how to measure earnings management given that implementing GAAP requires management to make judgments and estimates. Requiring management to provide clear and detailed documentation of how they make estimates and judgments will make these choices transparent.[7] But once this is done, how can we expect managers to make any decisions independent of their underlying economic incentives? Can we even conduct the thought experiment about what managers' accounting choices would be absent economic incentives?

In light of these definitional issues, it is not too surprising that systematically identifying earnings management in large samples is difficult. As Healy and Wahlen (1999) and others document, academic research offers limited evidence of actual earnings management, in part because of these measurement issues. And in practice, the earnings management cases identified by the SEC are often cases in which managers clearly cross the line between earnings management and outright fraud. Thus, these tend to be cases where managers adopt overly-aggressive revenue recognition practices, overstate inventories, etc., in a way that clearly violates GAAP and so constitutes fraud *ex post*. Overall, these arguments and extant evidence both imply that it will be difficult in practice to identify managers and firms that practice "abusive" earnings management by smoothing earnings. This leads us naturally to consider managerial incentives for earnings management, which we discuss in Section four.

SHOULD WE CARE ABOUT EARNINGS MANAGEMENT IF IT'S "VISIBLE"?

Another area in which practitioners and regulators on the one hand, and academics on the other, have different views is on the extent to which we can rely on investor rationality to solve or mitigate financial reporting issues.[8] Academics are unlikely to

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[6] Certain financial executives apparently think not. For example, former Microsoft CFO Greg Maffei, in discussing Microsoft's revenue deferral practices, recently indicated "unearned revenue is not managed earnings in any way, shape, or form. It's quite the opposite. When people talk about managing earnings, they think you've got some hidden pocket here or there...[but Microsoft's deferred revenue is] entirely visible. It goes in under a set of rules we proclaim to analysts." As quoted in *CFO*, August 1999, 37. In contrast, the income smoothing practiced by W. R. Grace managers was not visible to those outside the firm.

[7] For example, the SEC is requiring more detailed disclosures about the management plans, assumptions, and estimates that underly restructuring reserves and loan loss provisions. More dramatically, increased SEC scrutiny of management and auditor judgments about in-process R&D valuations has apparently resulted in a substantial decline in the level of these valuations. For details on both points see Turner and Godwin (1999).

[8] See Bernard and Schipper (1994), prepared for the 1994 AAA/FASB Financial Reporting Issues Conference, for a similar and more detailed discussion.

view earnings management as problematic if it is observable at low cost to capital market participants. This is based on the view that, as long as market participants have low cost access to the requisite information and are reasonably sophisticated in their information processing abilities, they will observe that earnings management is occurring and make adjustments to arrive at what they see as the appropriate earnings numbers.

We suspect that SEC concerns about earnings management would remain even if financial statements and related disclosures included sufficient detail to allow investors to adjust for earnings management; that is, to undo the managers' accounting choices. Indeed, because of its mandate to provide a "level playing field" for all investors, the SEC cannot ignore the possibility that certain investors rely completely on earnings numbers reported on the face of the income statement because their ability to process more sophisticated (i.e., footnote) information is limited. More generally, perhaps based on their knowledge of how investors, managers, and others behave, practitioners and regulators tend to see these reported numbers as being important in their own right, regardless of the level of detail that is disclosed about them.[9]

WHAT DOES RESEARCH SAY ABOUT CAPITAL MARKET INCENTIVES FOR EARNINGS MANAGEMENT?

We discuss four sets of papers that address capital-market incentives for earnings management: (1) analyses of incentives provided by stock market participants (including analysts and money managers) for managers to meet relatively simple earnings benchmarks, (2) analyses of earnings management around seasoned equity offerings, (3) tests of whether investors are "fooled" by earnings management, and (4) evidence on the capital market consequences of earnings management. Given the overall increase in stock-market valuations that occurred during the 1990s, along with related phenomenon such as the increased importance of "growth" and "high-tech" stocks in the market and the large increase (in both absolute and relative terms) in the value of stock-based wealth and compensation, it is likely that these capital market incentives have become stronger through time.

Incentives for Managers to Meet Simple Benchmarks

Are simple earnings benchmarks important?

Several recent papers document managers' incentives to meet simple earnings benchmarks, including: (1) avoiding losses; (2) reporting increases in seasonally adjusted quarterly earnings; and (3) meeting analysts' expectations for quarterly earnings.

Following Hayn (1995, Figure 1), several papers report that small reported losses are unusually rare, while small reported profits are unusually common, and that small declines in reported earnings are unusually rare, while small increases in reported earnings are unusually common (Burgstahler and Dichev 1997; Burgstahler 1997; and Degeorge et al.1999). The authors of these studies interpret their findings as evidence that managers manage earnings to avoid reporting losses and earnings declines.

Recent research by Brown (1998), Burgstahler and Eames (1998), Degeorge et al. (1999), and Richardson et al. (1999) documents that, at least in recent data, one sees an unusually large number of zero and small positive forecast errors (cases where analyst

[9] For example, we sometimes hear analysts praising management for meeting a quarter's consensus analysts' forecast, even when they know that managers exercised some accounting discretion to do so. Thus, even though analysts can completely "see through" the earnings management, they still believe that making the benchmark number is important.

forecasts are exactly met or just beaten) and an unusually small number of small negative forecast errors (near misses). Brown (1998) documents a time trend in these patterns—the proportion of the time that earnings exactly meet or just exceed analysts' forecasts has increased over time while the proportion of near misses has declined. He also documents that this trend is most pronounced for "growth" stocks which, as discussed below, seem more sensitive to negative earnings surprises.

Degeorge et al. (1999) provide evidence of a hierarchy among these three earnings thresholds—they find that it is most important to avoid losses, but that once profitability is achieved it is then important to report increases in quarterly earnings, and once increases have been achieved the goal becomes meeting analysts' earnings forecasts. The last goal is important since it is often the case that companies, especially "growth" companies, report earnings increases that still represent disappointments relative to analysts' forecasts. Of course, managers can, in various ways, influence the analyst forecast benchmark itself, as well as manage earnings to meet the forecast.

Myers and Skinner (2000) also address whether simple earnings benchmarks are important to managers but take a "time-series" approach. These authors investigate how many firms report at least 17 quarters of consecutive increases in quarterly EPS since 1987. They find that there are 399 such firms, and that many of these firms have earnings strings considerably exceeding 17 quarters and are ongoing (some firms have reported consecutive increases in quarterly earnings for over ten years). The authors report evidence consistent with managers of these firms smoothing reported earnings to help their firms achieve this consistent earnings growth.[10]

The papers listed above represent a departure from "traditional" earnings management research because they do not attempt to measure earnings management for individual companies (using, say, discretionary accruals models) and then aggregate results across firms in similar economic circumstances to reach overall conclusions. Rather, they point to attributes of the distribution of earnings for large samples (or even populations) of companies and then assert that these properties are consistent with earnings management. To the extent we find these assertions compelling, these papers help us to assess the overall extent of earnings management in the economy.[11] For example, Burgstahler and Dichev (1997, 101) state that "(a)n investigation of the prevalence of the avoidance of earnings decreases and losses suggests that *this is a pervasive phenomenon*: We estimate that 8–12% of firms with small pre-managed earnings decreases manipulate earnings to achieve earnings increases, and 30–44% of firms with small pre-managed losses manage earnings to create positive earnings" (emphasis added).

[10] Although, here again, the earnings management evidence is not strong because of the difficulty of separating earnings management from the legitimate exercise of accounting discretion for growth firms.

[11] This is the trade-off these papers make vis-à-vis more traditional earnings management research. To the extent other papers document earnings management using measures of discretionary accruals, we can usually be fairly confident that managers of these firms practice earnings management. The problem is that discretionary accruals models lack power and sample sizes are small (e.g., see Bernard and Skinner 1996). In contrast, studies such as Burgstahler and Dichev (1997) employ large samples and document strongly significant results, but we have to rely on the notion that the empirical regularities can only be explained as earnings management.

CONSEQUENCES OF MISSING A BENCHMARK

Studies documenting distributional properties of earnings consistent with earnings management do not address why meeting such simple benchmarks is important to market participants (and therefore to managers), and why these earnings patterns appear to have become more pronounced over the past decade. Two papers document that market prices are sensitive to these benchmarks. First, Barth et al. (1999) find that, other things equal, firms reporting continuous growth in annual earnings are priced at a premium to other firms, that this premium increases with the length of the string, and that the premium is reduced when the string disappears.[12] Second, Skinner and Sloan (2000) document that the stock price response to adverse earnings surprises is disproportionately large for growth stocks. Thus, when growth stocks report even small earnings disappointments (relative to analysts' forecasts) they suffer disproportionately large stock price declines.[13] Skinner and Sloan (2000) interpret their evidence as being consistent with the idea in Lakonishok et al. (1994) that investors are overly optimistic about the future earnings prospects of "growth" or "glamour" stocks, bid their prices up, and that these stocks' prices subsequently fall when investors correct their over-optimism.

If managers of growth firms know that stock prices respond strongly to adverse earnings news, we expect them to take steps to avoid reporting such earnings news, particularly if they have large amounts of personal wealth invested in the company, either in stock or in unexercised employee stock options. It could be argued that the extent to which top executives' personal wealth is tied to their firms' stock prices, coupled with the relative level of these stock prices, has increased dramatically over the past decade, providing a corresponding increase in managers' incentives to avoid earnings surprises. Thus, given the way the market currently responds to earnings news, it may not be too surprising that earnings management to avoid reporting adverse earnings news has increased.[14]

It is hard to understand extreme reactions to small deviations from simple benchmarks such as analysts' earnings forecasts, particularly when: (1) the difference between meeting and missing the benchmark is often just a few cents, and (2) managers can influence both the benchmark and the realization (analysts' forecasts and reported EPS are both "endogenous").[15] The reactions suggest a world in which investors use simple heuristics to measure economic performance, implying that information processing costs are somehow "high." This observation is hard to reconcile with the fact that technological advances have surely lowered the cost of public information dissemination to investors

[12] Myers and Skinner (2000) document similar evidence for firms with a large number of consecutive increases in quarterly EPS.

[13] Kinney et al. (1999) present related evidence but reach somewhat different conclusions, possibly because of different design choices.

[14] Another hypothesis is that earnings management has not actually become more prevalent, but is simply more visible today than ever before. For example, with the advent of conference calls with analysts, increased information dissemination through the Internet, etc., investors arguably have more information about firms than ever before, including information about their earnings management practices.

[15] Market participants also seem to respond to the pattern or path through which earnings expectations change during the quarter. Thus, as discussed by Matsumoto (1999), Skinner (1994), and Soffer et al. (1999), there is a belief that it is better to reduce analysts' and investors' earnings expectations during the quarter in order to beat them at the end of the quarter than simply to say nothing and announce disappointing earnings at the end of the quarter.

(for example, consider the wealth of information available at virtually zero cost through corporate web sites). Consequently, researchers frequently appeal to behavioral explanations such as prospect theory to explain why investors rely on heuristics.[16]

The fact that this behavior is hard to understand if investors are rational may explain why academics have been slow to examine capital market incentives for earnings management. Accounting researchers looked for other types of incentives, such as those provided by explicit contracts like bonus plans and debt covenants, because in these settings the contracting and information costs are arguably higher than in capital markets, making it more likely that earnings management would be effective (i.e., that someone would be "fooled").[17] Thus, as academics, our natural tendency to assume investor rationality has caused us to ignore capital market incentives for earnings management. In contrast, accounting regulators and practitioners are less inclined to view the world in this manner, and so are more inclined to admit the possibility that capital market incentives for earnings management are important. Our view is that, given recent evidence, we as academics should focus more attention on capital market incentives for earnings management.

Do Managers Practice Earnings Management to Improve the Terms of Equity Offerings?

Share offerings provide a direct incentive to manage earnings. To the extent managers can undetectably increase reported earnings, they can improve the terms on which their firms' shares are sold to the public, providing direct monetary benefits to themselves and their firms.

Two recent studies provide evidence that managers manage earnings at the time of seasoned equity offerings (Rangan 1998; Teoh et al. 1998). It is well known that shares of firms that make seasoned equity offerings (SEOs) underperform the market in the years following the offering. These two papers show that: (1) reported earnings of firms that make SEOs are unusually high at the time of the SEO; (2) these high reported earnings are attributable to unusually high accruals (including "discretionary" accruals); (3) these firms' earnings performance is unusually poor in the years following the SEO; (4) there is a strong association between the extent of earnings management and subsequent stock price performance—shares of firms with the highest accruals at the time of the SEO tend to perform worse in the years after the SEO than shares of other firms. This evidence is consistent with the view that investors do not "see through" earnings management at the time of the SEO. Rather, as time passes after the SEO and the earnings management becomes apparent through subsequent earnings disappointments, the overpricing reverses and these stocks underperform the market.[18]

It appears that analysts play a role in this process. Stock prices of issuing firms can be boosted by producing favorable earnings reports and/or by having analysts "hype" the firm as having "great growth potential." Dechow et al. (2000) and Lin and McNichols (1998) show that analysts affiliated with investment banks underwriting

[16] Burgstahler and Dichev (1997) and Degeorge et al. (1999) both point to prospect theory to help explain their findings.

[17] See Watts and Zimmerman (1986). Abarbanell and Lehavy (1999) argue that capital market incentives actually help explain the mixed evidence from contracting studies.

[18] In a similar vein, Dechow et al. (1996) show that firms identified by the SEC as manipulating earnings tend to be issuing equity.

equity issues tend to make higher growth forecasts, and subsequently have larger forecast errors, than do unaffiliated analysts. Their results suggest that investors rely on these growth forecasts and are subsequently disappointed when these forecasts are not realized.

Do Market Participants Respond to Differences in the Quality of Reported Earnings?

Sloan (1996) investigates whether market participants use a relatively simple measure of the quality of reported earnings based on publicly available information. Specifically, Sloan (1996) defines "high-quality" earnings as earnings composed primarily of operating cash flows and "low-quality" earnings as earnings composed principally of accruals. Sloan (1996) finds that in firms where accruals are large and positive:

- earnings tend to decline over the next three years because of reversals of accounting accruals;
- the largest accrual reversals are attributable to current accruals; and
- the stock prices of these firms decline over the three-year period, and these stock price declines are related to the predictable decline in earnings.

Sloan (1996) concludes that market participants overestimate the persistence of low-quality current earnings and underestimate the persistence of high quality current period earnings. Xie (1998) links Sloan's (1996) findings to the earnings management literature by showing evidence of a relation between Sloan's (1996) measure of earnings quality and measures of earnings management. Together, these findings suggest that market participants are "fooled" by relatively simple (and transparent) earnings management practices.

Capital Market Consequences of Earnings Management

Since earnings management is, by construction, difficult to observe, it is hard to construct studies of how capital market participants respond to revelations of earnings management in general. Consequently, the studies that do exist focus on those extreme cases of earnings management that culminate in SEC enforcement actions. These studies find that there are significant adverse capital market reactions to SEC enforcement actions.

Feroz et al. (1991) report that in their sample period (1982–1989) cases of alleged inventory or receivables overstatements accounted for 70 percent of all enforcement cases, that many of these cases were associated with management firings and/or stockholder lawsuits, and that the average stock price reaction to announcements of these enforcement actions is –13 percent (–6 percent when the accounting problems were previously revealed). Consistent with the results in Feroz et al. (1991), Dechow et al. (1996) find that for their sample of SEC enforcement actions (drawn from 1982–1992) the stock price reaction is –9 percent. Dechow et al. (1996) also investigate whether there are other indicators that firms face higher costs of capital after being identified as having manipulated earnings. They find that a firm's identification as an earnings manipulator is associated with an increase in bid-ask spreads, a decline in analyst following, an increase in short interest, and an increase in the dispersion of analyst forecast errors. These findings are consistent with the idea that the revelation of earnings management (severe enough to subsequently result in SEC enforcement

actions) signals to investors that the firms' economic prospects are poorer than previously thought and reduces the credibility of the firms' management disclosures. The revelation of extreme forms of earnings management is punished by capital market participants.

Dechow et al. (1996) also provide evidence on the corporate governance structures most commonly associated with the earnings manipulations, a topic of interest given today's debate about audit committee reforms. They document that firms subject to SEC enforcement actions are more likely to have weaker governance structures. They find that these firms are less likely to have an audit committee, more likely to have an insider-dominated board, more likely to have a CEO who is a company founder, and more likely to have a CEO who is Chairman of the Board. Beasley (1996) reports similar results. Thus, the evidence suggests that given an incentive to manipulate, having a weak governance structure is more likely to lead to the firm actively engaging in earnings management.

To summarize, the evidence in this section suggests that: market participants respond to whether earnings meet fairly simple benchmarks; managers appear to practice earnings management to meet these simple earnings benchmarks; and market participants can be "fooled" by relatively simple earnings management practices. However, if earnings management is revealed to market participants, the firm can face relatively harsh penalties. These findings seem hard to reconcile with traditional academic views that markets are efficient and information processing costs are low. As a result, we believe that academics will continue to explore other types of explanations for these regularities.

IMPLICATIONS AND CONCLUSIONS

In this paper we discuss some of the reasons, as we see them, for the difference between academic and regulator/practitioner perceptions of earnings management. While regulators and practitioners view earnings management as both pervasive and problematic, academics tend to be less concerned. We see academics as understating the problem for two reasons:

- A prolonged focus on incentives that may be less important than capital market incentives for earnings management (e.g., bonus plans, debt covenants, political costs). This focus has been sustained by the assumption that markets are "efficient."
- A difficulty in modeling earnings management. Specifically, while definitions of earnings management are necessarily structured in terms of management "intent," to test hypotheses researchers must "operationalize" these definitions, identifying what accrual or account is being managed and how. This is difficult to do using only attributes of reported accounting numbers.

Conversely, regulators and practitioners are likely to be overstating the extent of the problem for the following reasons:

- "No earnings management" is clearly not an optimal solution. Some earnings management is expected and should exist in capital markets. This is necessary because of the fundamental need for judgments and estimates to implement accrual accounting—the first-order effect of allowing these judgments and estimates is to

produce an earnings number that provides a "better" measure of economic performance than cash flows. Eliminating all flexibility would in turn eliminate the usefulness of earnings as a measure of economic performance.

- If information is clearly disclosed in footnotes regarding a firm's particular accounting policy, then one should expect sophisticated market participants such as managers of mutual funds and analysts to understand the implications of these policies for stock prices. In addition, more small investors own mutual funds (not individual stocks) and so are unlikely to be hurt by one particular firm's misstatements. Therefore, how many resources should be spent trying to police and penalize "within-GAAP violations"?
- *Ex post* we see the innovations of creative accounting (e.g., the use of pooling accounting, write-offs of acquired R&D, restructuring charges, etc.). Are there really more innovations now than there used to be (e.g., debt-equity swaps, marketable securities, pensions, etc.)? As firms engage in new and varied transactions we will also continue to see new and varied ways of accounting. (This is why there is a continuing need for the FASB and rules on generally accepted accounting principles.) Perhaps earnings management is as prevalent as it ever was, just in new guises.

In addition to discussing these differences, we also discuss ways that regulators can detect firms that are engaging in earnings management. Existing research indicates that the following characteristics are likely to be useful:

- Firms with large accruals and hence large difference between earnings and cash flows.
- Firms with weak governance structures.

Based on extant research, we came to the conclusion that understanding management's incentives is key to understanding the desire to engage in earnings management. In particular:

- Managers have strong incentives to "beat benchmarks," implying that firms just beating benchmarks are potentially more likely to be engaging in earnings management.
- Managers of firms desiring to issue equity have strong incentives to boost stock price and hence engage in earnings management.

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