Why do firms manage their earnings?

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The topic of corporate earnings management has not only generated a great deal of media attention but it also has become a source of serious concern to regulators and policymakers. In the wake of the events that shook investors' confidence in the American financial reporting system in late 2001 and early 2002, the earnings management practices of firms have come under fire by shareholders groups, institutional investors and the financial press alike. To some extent, regulators have responded by proposing and enacting new rules and regulations. Likewise, accounting and financial researchers are increasingly probing into this topic.

Prior studies identify several such incentives, which can be broadly classified as: capital market incentives, contracting incentives, and regulation-related incentives. This article covers a brief explanation of the sources and nature of these incentives along with summary of related research findings. But before we begin on incentives, we briefly present definition and nature of earnings management.

**Definition of Earnings Management**

Below are some of the widely quoted definitions of earnings management found in the literature:

“… a purposeful intervention in the external reporting process, with the intent of obtaining some private gain (as opposed to, say, merely facilitating the neutral operation of the process).” … “A minor extension of this definition would encompass “real” earnings management, accomplished by timing investment or financing decisions to alter reported earnings or some subset of it.” (Schipper, K., 1989)

“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.” (Healy and Whalen, 1999)

Although earnings management is generally considered to occur within the framework of financial reporting, the first definition also accommodates earnings management through “real activities” such as timing asset sales, delaying maintenance, altering...
R&D expenditure. While earnings can be managed through real activities, it is usually relatively more costly and less convenient for managers to do that. Also, it is methodologically difficult for the researchers to spot such manipulation. Researchers do not have a reliable mechanism to distinguish the real decisions undertaken to modify reported earnings from the ones undertaken solely for rational value maximization. For instance, if a firm sells assets near the end of an accounting year, it is difficult for the researcher to ascertain or demonstrate whether the primary motivation behind such a sale is to achieve an earnings target or operational efficiency. Therefore, most of the research in this area focuses on earnings management through pure accrual manipulation. In order to understand the true nature of earnings management, one needs to first appreciate the fine line between ‘earnings management’ and the legitimate application of accrual accounting.

**Earnings Management and Accrual Accounting**

The primary objective of accrual accounting is to provide a better and more meaningful measure of a firm’s current economic income and to be a better predictor of the firm’s future performance than is available by examining cash flows. The idea is that the earnings number should be reflective of the economic substance underlying financial transactions rather than merely representing the cash receipts and payments for the period. But the analysis shows that the accrual process inherently produces a consistently smoother income number than cash flows. Expressed differently, earnings smoothing is an inherent property of Generally Accepted Accounting Principles (GAAP) based accrual accounting. Therefore, in practice, it is quite difficult to separate income smoothing arising from the implementation of GAAP based accrual accounting and that resulting from management of earnings. The definitions given above rely on managerial intent (as manifested in the words "with the intent of obtaining private gain..." or “…mislead…or to influence contractual outcomes...”) to distinguish earnings management from faithful implementation of accrual accounting.

Both the definitions quoted above correspond to the opportunistic perspective of earnings management. The accounting literature takes two perspectives on earnings management: (1) an information perspective and (2) an opportunistic perspective. Under the opportunistic perspective, which has its roots in agency theory (see Jensen and Meckling, 1976), managers are assumed to manipulate earnings to mislead stakeholders or to maximize their (managers’) personal benefit at the cost of other stakeholders’ interests. “Information perspective”, on the other hand, regards earnings management as a mechanism through which managers attempt to reveal their private information about future prospects of the company to the investors (see Holthausen and Leftwich, 1983). Most prior research in this area is based on the opportunistic perspective.

**Earnings Management versus Fraudulent Reporting**

While not all attempts to manage earnings are outright fraud, many accounting irregularities that are later classified as fraudulent reporting by the SEC emanate from
seemingly naïve efforts of the firm to smooth income by engaging in earnings management. The National Association of Certified Fraud Examiners defines financial fraud 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.” Academics and regulators seem to agree on the notion that while earnings management can be exercised within the limits of GAAP accounting, fraudulent reporting necessarily entails overt violation of GAAP.

Capital Market Incentives

Although earlier earnings management research focused heavily on contracting and regulatory incentives ignoring the capital market motivations for managing earnings, recent studies have found capital market incentives to be a strong driving force behind managers’ attempts to manage earnings. Dechow and Skinner (2000) argue that “academic research should focus more on capital market incentives for earnings management”. The growing importance of capital market incentives in earnings management is directly related to the increasing sensitivity of managers to stock price movements.

Reported earnings are an important input for valuation decisions by investors, analysts, and other market participants. The fixation of market participants on earnings figures creates incentives for the managers to manipulate them in the direction which best serves their own interests. Several studies investigate whether or not firms manage earnings around various capital market transactions. These studies begin with analyzing managerial incentives to manage earnings in the context of such transactions. The analysis yields hypotheses about the direction of earnings management (income-increasing versus income-decreasing). Finally, parametric and/or non-parametric techniques are used to test the hypothesis about the presence, direction and extent of earnings management. The following paragraphs review selected studies falling in the aforementioned category.

DeAngelo (1988) and Perry and Williams (1994) analyze management buyouts and argue that in the presence of information asymmetries, managers acting in their own interest rather than in the interest of the shareholders would attempt to get a bargain price for the buyout. Accruals manipulation affords a convenient method for managers to understate earnings and thus the stock price. Although DeAngelo (1988) fails to find evidence in favor of her hypothesis, Perry and Williams (1994) document significantly negative discretionary accruals prior to a buyout.

Examples of fraudulent earnings management include recording fictitious sales, and related receivables, deferring expenses that should be recognized in current period. A specific example would be WorldCom’s misclassification of a staggering $3.8 billion of operating expenses as capital expenditures.
Likewise, Teoh, Welch and Wong (1998 a and b) make a case for income-increasing earnings management prior to initial public offers (IPO’s) and seasoned equity issues (SEOs). By engaging in income-increasing earnings management prior to these equity issues, managers can paint a favorable picture of a firm’s prospects, thereby obtaining an attractive price for the newly issued stocks. They find that equity issuing firms typically have higher earnings prior to stock issues most of which is attributable to high discretionary current accruals. They also show that the post-issue underperformance is strongly predicted by the extent of upward earnings management at the time of issue. Further, the evidence indicated reversal of abnormal accruals in years subsequent to the equity issue. Rangan (1998) and Shivakumar (2000) provide similar evidence using quarterly data. Shivakumar (2000) uses a rational expectations explanation to account for earnings management and subsequent investor reaction. He contends that investors recognize and undo earnings management at the time of the announcement.

Similar incentives exist in cases of stock-for-stock mergers. The acquiring firm in such transactions has inducements to inflate the stock price around the agreement date, so that the purchase can be made by issuing fewer stocks. Therefore, it is in the interest of an acquiring firm to resort to income-increasing earnings management in periods before the merger agreement. Erickson and Wang (1999) show that not only are the discretionary accruals significantly positive prior to mergers, but their size has a significant relationship with the size of the merger. Louis (2004) shows evidence of acquiring firms using income-increasing current accruals in the quarter preceding a stock swap announcement. He relates post-merger underperformance of acquiring firms to the reversal of pre-merger earnings overstatement.

Beneish (1999), studying a sample of firms subject to SEC accounting enforcement actions, documents that managers are likely to sell their shareholdings and exercise stock appreciation rights when the earnings are overstated and share prices are inflated. Park and Park (2004) find that managers engage in income-increasing earnings management prior to the sale of shares by insiders. The degree of discretionary accruals prior to the sale was also found to have predictive power for stock underperformance after the insider sales.

Vafeas, Vlittis, Katranis, and Ockree (2003) find some evidence of relatively low discretionary accruals prior to self-tender offers. However, Chou and Lin (2003) observe that managers resort to inflating the stock price through the upward management of discretionary accruals around the share repurchase announcements. The authors argue that managers, through income increasing earnings management, attempt to enhance the credibility of the undervaluation signal sent to the market by the repurchase announcement.

Bartov and Mohanram (2004) document that managers overstate earnings before abnormally large stock option exercises in order to increase their payout. The post-exercise underperformance of the stock of such firms is reflective of the subsequent reversal of overstated earnings. Anthony, Bettinghaus, and Farber (2004) show that firms appear to increase discretionary current accruals around convertible debt offerings,
but fail to relate the discretionary accruals to the subsequent long-term underperformance of such issues.

Apart from the incentives spawned by the specific capital market transactions discussed above, strong incentives to manage earnings also arise in response to capital market pressures for meeting simple earnings benchmarks. Burgstahler and Dichev (1997) scrutinize the cross-sectional frequency distribution of earnings and changes in earnings and notice that the probability associated with observing small losses and small declines in earnings is lower than expected. Conversely, the incidences of small profits and small increases in earnings from the previous year are unusually high. In the absence of any purposeful managerial intervention in the financial reporting process, such statistical anomalies are highly unlikely. Therefore, the authors explain these distributional inconsistencies as arising from managerial motivation to avoid losses and earnings declines.

Degeorge, Patel, and Zeckhauser (1999) present a hierarchy of benchmarks for quarterly earnings that managers attempt to achieve. Once firms have avoided losses and earnings declines, meeting analysts’ forecasts becomes the next critical target. He provides evidence similar to Burgstahler and Dichev (1997) regarding distributional discontinuities around analysts’ earnings expectations. Brown (1999) finds that over time the disruption in frequency distribution around these benchmarks has become even more pronounced. Kasznik (1999) shows that managers use discretionary accruals to increase income in cases where earnings are likely to fall short of management’s forecast, and revise the forecast upward when earnings exceed their earlier forecast.

Myers and Skinner (1999), using a time-series approach, provide evidence that the firms manage earnings to show consistent earnings growth. In their sample, the number of firms reporting a continuous increase in earnings is unusually high. Further, they show that firms use special items and income tax provision for income smoothing.

Contracting Incentives

Early research in earnings management focused on managerial motivations to manage earnings arising from firms’ contracts with other stakeholders. Typically, terms of such contracts incorporated earnings figures as a key to certain payoffs to the parties involved (e.g., management bonuses) or as a mechanism for monitoring the compliance with contract terms (e.g., lending contracts). Managers enjoy a unique position in these contracts as they are, on one hand, a party to the contract (being affected by the outcome of earnings), and, on the other hand, perched at a vantage point to influence contractual outcomes by managing reported earnings. Under agency theory arguments, managers are expected to influence the earnings in a manner that would best serve their self-interest. Watts and Zimmerman (1978) identified managerial incentives to affect accounting choices in the context of bonus schemes, lending agreements, and taxes, as well as political costs. Below, we discuss major research works on earnings management related to two important contracts: earnings-based management compensation contracts and lending contracts.
Compensation Contracts:

Most companies tie managerial bonus awards to the reported earnings. Watts and Zimmerman (1986), using agency theory arguments, postulate that managers, acting to maximize the present value of their wealth, would attempt to choose those accounting procedures that would shift the reported earnings to the present period. Zmijewski and Hagerman (1981), in one of the earliest papers in this area, reported a significant association between management incentive contracts and income strategy (firm’s accounting choices to arrive at income). Healy (1985), in a seminal work in ‘bonus plan’ research, documented a strong association between accruals and earnings-related incentives under bonus plans. Healy (1985) treated the mean total accruals in the estimation period as a measure of non-discretionary accruals. Thus, discretionary accruals were defined as deviation from this mean. Specifically, the study found that managers tend to manage accruals downward when upper or lower bounds of their bonus plans are binding and upward when these limits are not binding. They also found evidence that adjustments in accounting methods are associated with modifications in the bonus schemes.

Gaver, Gaver and Austin (1995) extended Healy’s work by using the Jones (1991) model and detailed proprietary dataset to gauge the behavior of discretionary accruals with respect to bonus schemes. Unlike Healy, they found that firms engage in income-increasing earnings manipulation when un-managed earnings fall short of the lower bound. Likewise, Holthausen, Larcker and Sloan (1995) confirmed Healy’s findings of downward earnings management when the executive bonuses peak, but failed to find evidence for downward earnings management when earnings are below the lower bound. Guidry, Leone and Rock (1999) improved the methodology in this line of research by using business unit data rather than corporate level data. Consistent with Healy (1985), they find that business unit level managers for large conglomerate multinational firms are likely to resort to income decreasing accruals when the earnings target in their bonus plans will not be met and when they are entitled to the maximum bonuses allowed under the plans. Richardson and Waegelein (2002) showed that the firms having long-term performance plans engage in earnings management to a lesser extent than firms that have only short-term bonus plans.

Aside from bonus schemes, earnings management has also been linked to top executives’ job security and other implicit incentives. DeAngelo (1988) shows evidence of income-increasing earnings management during proxy fights (a potential threat to managers’ job security). Dempsey (1993) documents an inverse relationship between earnings management and managerial ownership. He attributed non-owner managers’ job insecurity as a possible reason for this result. Gao and Shrieves (2002) relate the degree of earnings management to the design of compensation contracts. They show that earnings management is likely to be relatively more intense for firms having

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higher degrees of stock options or bonuses and lower proportions of salaries in the pay structure. Some evidence related to stock options is covered in the section on capital market incentives.

Lending Contracts:

Debt contracts generally include accounting-based covenants for the protection of the lenders. Typically, these covenants require firms to maintain certain financial ratios (like leverage, working capital, fixed charge coverage, and related ratios), and impose restrictions on dividends as well as on borrowings. For those firms that are approaching the violation of accounting-based covenants, a tempting alternative to contravening the contract terms is to engage in income-increasing earnings management. Arguing along these lines, several accounting researchers investigated the earnings management behavior of firms facing covenant violation. For example, Press and Weintrop (1990) investigated the effects of accounting constraints of debt agreements on a firm’s accounting choices. They show that accounting choices are significantly affected by both leverage and a leverage constraint indicator (a measure of the closeness to violating a leverage ratio covenant). More specifically, they find that firms resort to income increasing strategies in the presence of leverage constraints. Bartov (1993) documents a significantly positive relationship between the gains from asset sales and a firm’s debt-to-equity ratio (which is a researcher’s proxy for closeness to a covenant violation). DeFond and Jiambalvo (1994) provided evidence that the firms that eventually end-up violating covenants resort to income-increasing earnings management in the year preceding the violation. DeAngelo, DeAngelo and Skinner (1994) scrutinized the accounting choices of troubled firms (i.e., those firms with persistent losses and dividend reductions). They reported that such firms had significant income-decreasing accruals in the dividend-reduction-year and in the following three years, a time period during which these firms engaged in contract renegotiations with lenders, unions, and the government. Similarly, Sweeney (1994) finds evidence for income increasing accounting changes for firms approaching default. Furthermore, the covenant violators also managed earnings after the technical default, possibly to avoid future violations.

Thus the overall evidence on earnings management in the context of ‘compensation’ and ‘lending contracts’ suggests that these contracts induce managers to manipulate earnings to increase bonus remuneration and job-security and decrease the likelihood of technical default.

Regulatory Motivations

Another potential source of earnings management incentives arises from government regulations. These incentives are more pronounced in cases where industries face heavier regulatory burden. Typically, regulators monitor certain accounting figures to ensure firms’ compliance with industry-specific and anti-trust regulations, which in turn, motivates managers to manipulate accruals in the desired direction. These incentives are strong, especially when the firms are on the verge of violating the regulation. For instance, banks must comply with capital adequacy requirements. If
they fail to do so, they risk regulatory intervention in the form of restrictions on dividends, mandatory asset reduction, and ultimately, management dismissal. Therefore, banks that are near the minimum required capital are found to manage earnings upward to ward-off regulatory crackdown. Scholes, Wilson and Wolfson (1990) find evidence of earnings management from income from investment security transactions. Moyer (1990) shows that banks manage loan loss reserves and securities gains to manipulate earnings. Clinch and Magliolo (1993) show that bank managers use income from discretionary transactions (like miscellaneous gains and losses) to manage earnings. Collins, Shackelford and Wahlen (1995) find that loan write-offs, security issuances, and dividend payments are used to manage capital and loan loss reserves to manage earnings. Beatty, Chamberlain and Magliolo (1995) find that loan loss reserves, loan-write offs, and security issue decisions are jointly determined to manage primary capital ratios.

Apart from industry-specific regulations, incentives to manage earnings also stem from a host of other regulations. Specifically, firms facing adverse political consequences like anti-trust or anti-dumping investigations, have incentives to appear less profitable (Watts and Zimmerman, 1978). Similarly, firms seeking government subsidies or protection from foreign competition may attempt to win government sympathy by appearing to be financially weak. Jones (1991) documents that the firms undergoing import relief investigation by the U.S. International Trade Commission engage in income-decreasing earnings management so that they can obtain a favorable verdicts. Likewise, Cahan (1992) documents that firms that are under investigation for antitrust violations by the Department of Justice and the Federal Trade Commission manage earnings downward during the investigation period. Cahan, Chavis, and Elemendorf (1997) show that at the time when Congress was debating a proposal to impose environmental clean-up costs on the chemical industry, the firms in that industry exhibited income decreasing accruals. Key (1997) shows similar behavior on the part of cable television companies during Congressional investigations regarding industry deregulation. Han and Wang (1998) show that petroleum refining firms managed earnings downward around Iraq’s invasion of Kuwait to hide excessive profits resulting from a steep surge in oil prices in order to avoid possible regulatory actions against them.

**Big Bath Accounting**

One earnings management approach that deserves special mention when investigating firms’ reporting behavior around adverse announcements (like product recall) is ‘big bath’ accounting. Under this approach, firms going through a particularly ‘bad’ year or quarter overstate their losses in an attempt to clean up their balance sheets and create a buffer which can be used to artificially inflate the earnings in future periods. Big bath accounting is manifested in sizeable asset write-offs as well as in income decreasing discretionary accruals.

Big bath behavior is encouraged by Wall Street’s tendency to overlook large write-offs as one-time events and focus on future earnings. Firms can afford to overstate
their losses (i.e., take a big bath) because of the fact that investor reaction to adverse earnings news does not exacerbate proportionally to its intensity. Stated differently, the market reaction to an earnings announcement for a 15% shortfall in earnings may be only slightly more negative than the reaction to a 10% shortfall. Therefore, when the firms find that their earnings are far too short of market expectations so that even the plausible manipulation of discretionary items would not help them achieve the target, they might resort to taking a big bath instead. Remaining paragraphs in this section present a brief summary of prior findings on big bath accounting.

A typical context in which the big bath hypothesis has been most frequently explored is management changes. Moore (1973) investigated the prevalence of discretionary accounting decisions subsequent to management changes. He found the incidences of income decreasing accounting choices to be significantly higher in firms with management changes relative to firms with no management change. In a similar vein, Pourciau (1993) investigated firms’ earnings management practices around non-routine executive changes. He found that incoming executives manage earnings downward and take large write-offs in the year of change and manage earnings upward in the subsequent year. Collins and DeAngelo (1990) provide similar evidence of income decreasing earnings management subsequent to management changes as a result of proxy contests.

Healy’s (1985) work regarding bonus payments also lends support to the big bath hypothesis. Langer and Lev (1993) found that firms are likely to take large asset write-offs when earnings fall below the lower bound for bonus calculations. Aharbanell and Lehavy (2002) demonstrate that firms that receive unfavorable ratings (i.e., “Sell” recommendations) from analysts have weak incentives to meet earnings expectations. Consequently, these firms resort to taking a ‘big bath’ during such periods and they create hidden reserves that enable them to manage earnings upward in the future. This is evidenced by the presence of frequent and extreme negative discretionary accruals for such firms in those periods. On the other hand, firms that receive favorable analyst ratings (i.e., “Buy” recommendations), tend to engage in income-increasing earnings management to meet the analysts’ expectations on a more frequent basis. Elliot and Shaw (1988) and Strong and Meyer (1987) provide evidence for association between large write-offs and firms’ underperformance.

Overall, the empirical evidence is consistent with the theoretical framework developed by Kirschenheiter and Melumad (2002) where they show that both smoothing and big bath can coexist. They show that “for sufficiently “bad” news, the manager under-reports earnings by the maximum, preferring to take a “big bath” in the current period in order to report higher future earnings. If the news is “good,” the manager smooths earnings, with the amount of smoothing depending on the level of cash flows observed. He either over-reports or partially under-reports for slightly good news, and gradually increases his under-reporting as the news gets better, until he is under-reporting the maximum amount for sufficiently good news. This result holds both when investors are “naive” and ignore management’s ability to manipulate earnings, and when they are “sophisticated” and correctly infer management’s disclosure strategy.”
REFERENCES


**TWELVE QUESTIONS FOR EXAMINING THE ETHICS OF A BUSINESS DECISION**

1. Have you defined the problem accurately?
2. How would you define the problem if you stood on the other side of the fence?
3. How did this situation occur in the first place?
4. To whom and to what do you give your loyalty as a person and as a member of the corporation?
5. What is your intention in making this decision?
6. How does this intention compare with the probable results?
7. Whom could your decision or action injure?
8. Can you discuss the problem with the affected parties before you make your decision?
9. Are you confident that your position will be as valid over a long period of time as it seems now?
10. Could you disclose without qualm your decision or action to your boss, your CEO, the board of directors, your family, society as a whole?
11. What is the symbolic potential of your action if understood? If misunderstood?
12. Under what conditions would you allow exceptions to your stand?

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Laura L. Nash, Vol. 59, No. 6 (November/December 1981)