# Value Destruction and Financial Reporting Decisions

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We recently conducted a comprehensive survey that analyzes how senior financial executives make decisions related to performance measurement and voluntary disclosure. In particular, we ask CFOs what earnings benchmarks they care about and which factors motivate executives to exercise discretion, and even sacrifice economic value, to deliver earnings. These issues are crucially linked to stock market performance. Much of the media attention is focused on a small number of high profile firms that have engaged in earnings fraud. Our results show that the destruction of shareholder value through legal means is pervasive, if not a routine way of doing business. Indeed, we assert that the amount of value destroyed by firms striving to hit earnings targets exceeds the value lost in these high profile fraud cases.

Keywords: Earnings management, earnings smoothing, consensus earnings, meeting benchmarks, value destruction, agency problems, real earnings management, unexpected earnings, earnings surprise, net present value

JEL classification: G14, G30, G32, M41, M42, G38

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[1] September 6, 2006. This paper is an augmented version of "The Economic Implications of Corporate Financial Reporting" in the *Journal of Accounting and Economics* (2005). We have added additional interviews of CFOs and present results that are not contained in our earlier work.

## INTRODUCTION

Based on a survey of 401 senior financial executives and in-depth interviews with an additional 22 executives, we document a willingness to routinely sacrifice shareholder value to meet earnings expectations or to smooth reported earnings. While much previous research has focused on the use of accounting for earnings management, such as accrual decisions, we provide new evidence of the widespread use of 'real' earnings management. Real earnings management, which might include deferring a valuable project or slashing research and development expenditures, is almost always value decreasing.

The survey, administered in the fall of 2003, contained 10 questions, most with subsections, and explored both earnings management and voluntary disclosures in some depth. In addition, from the fall of 2003 to early 2005, we interviewed 22 CFOs, which added depth to our understanding of corporate decision-making. Our results indicate that CFOs believe that earnings, not cash flows, are the key metric watched by investors and other outsiders. The two most important earnings benchmarks are quarterly earnings for the same quarter last year and the analyst consensus estimate. CFOs believe that hitting earnings benchmarks is very important because such actions build credibility with the market and help to maintain or increase their firm's stock price in the short run. To avoid the severe market reaction for under-delivering, CFOs are willing to sacrifice long-term economic value (such as delaying a valuable project) to meet the earnings expectations of analysts and investors. In contrast, executives say that they are hesitant to employ legal, within-GAAP (General Accepted Accounting Practices) accounting adjustments to hit earnings targets, perhaps as a consequence of the stigma attached to accounting fraud in the post-Enron environment.

Not surprisingly, almost all CFOs prefer smooth earnings (versus volatile earnings), holding cash flows constant. The executives believe that less predictable earnings – as reflected in a missed earnings target or volatile earnings – command a risk premium in the market. A surprising 78% of the surveyed executives would destroy economic value in exchange for smooth earnings. CFOs argue that the system (that is, financial market pressures and overreactions) encourages decisions that at times destroy long-term value to meet earnings targets.

We also explore how the malaise of excessive short-termism can be fixed. We argue that a greater emphasis on principles versus rules based accounting standards, reduction in quarterly earnings guidance, disclosure of how accrual estimates are settled ex post, focus on integrity in financial reporting process, a proactive Board of Directors which changes the balance of between short-term and long-term goals, and a more active role for institutional investors can mitigate the myopic emphasis on quarterly earnings measures.

In the next section, we briefly discuss the design of the survey (with more details provided in the Appendix). Then, we review our findings, first on earnings management and then on voluntary disclosure decisions.

## SURVEY TECHNIQUES AND SAMPLE CHARACTERISTICS

The most important aspect of survey research is designing a survey instrument that asks clear and relevant questions. We took several steps to achieve this goal. We developed an initial survey instrument and solicited feedback from academic researchers, CFOs, and marketing research experts to minimize biases induced by the questionnaire and to maximize the response rate. After extensively beta-testing the survey, we made several changes to the wording of some questions on the draft survey. The final survey contained 12 questions, and the paper version was five pages long.[2]

We e-mailed the survey to 3,174 members of an organization of financial executives. We also contacted executives attending CFO forums at two universities and administered a paper version of the survey at a conference of financial executives conducted on November 17 and 18, 2003 in New York City. Our overall response rate of 10.4% falls close to those reported by several recent surveys of financial executives.[3] The companies from which we receive responses range from small (15.1% of the sample firms have sales of less than $100 million) to very large (25.6% have sales of at least $5 billion). Approximately 8% of the firms did not have any analyst coverage, while 16.7% are covered by at least 16 analysts. We also collect information about CEOs (implicitly assuming that the executives that we survey act as agents for the CEOs). Relative to the average public firm in the U.S. (proxied by firms on the Compustat database), the firms in our sample are fairly large and profitable.

Before we discuss the results, we would like to point out that like all other survey research, our results represent CFO beliefs not actions. The two may not coincide. It is also possible that executives make (close to) optimal decisions without knowing it or articulating it in language used by economists designing survey questions. We, of course, worked to minimize these concerns when designing the survey.

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[2] The survey is posted at http://faculty.fuqua.duke.edu/~jgraham/finrep/survey.htm.

[3] Examples include 12% response rate by Trahan and Gitman (1995) and 9% by Graham and Harvey (2001).

## SHORT TERM FOCUS ON REPORTED EARNINGS

### The Importance of Earnings

Financial professionals and some equity analysts emphasize cash flows as driving value, while many accountants argue that earnings are a better measure of firm value. We asked CFOs to rank order the perceived importance to outside stakeholders of several competing metrics: earnings, pro-forma earnings, revenues, operating cash flows, free cash flows and EVA. Earnings are king. CFOs picked earnings as the overwhelming favorite (Fig. 1). Nearly two-thirds of the respondents rank earnings as the number one metric, relative to fewer than 22% choosing revenues and cash flows from operations. This finding could reflect superior informational content in earnings over the other metrics. Alternatively, it could reflect myopic managerial concern about earnings.

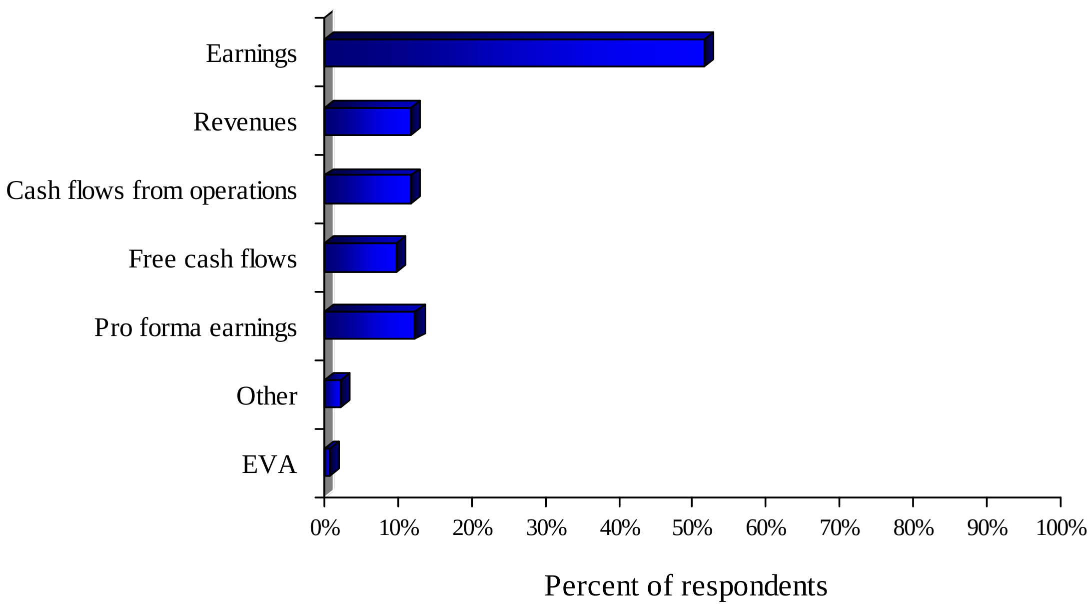



Fig. 1. Based on the responses to the question: “Rank the three most important measures reported to outsiders” based on a survey of 401 financial executives. We report the distribution of the #1 rating.

Additional analysis reveals that unprofitable and younger firms rank earnings as relatively less important. Cash flows are relatively more important in younger firms and when less earnings guidance is given. Interestingly, private firms place more emphasis on cash flow from operations than do public firms, suggesting perhaps that capital market motivations drive the focus on earnings. Unprofitable firms, firms with young CEOs, and firms with high earnings guidance and analyst coverage emphasize pro-forma earnings.

How do we explain the overwhelming importance of reported earnings? The world is complex and the number of available financial metrics is enormous. Investors need a simple metric that summarizes corporate performance, that is easy to understand, and is relatively comparable across companies. The market appears to believe that earnings per share (EPS) satisfies these criteria. Moreover, the EPS metric gets the broadest distribution and coverage by the media. Further, by focusing on one number, the analyst's task of predicting future value is made somewhat easier. The analyst assimilates all the available information and summarizes it in one number: EPS. Finally, ex post evaluation of a firm's progress is often based on whether a company hits the consensus EPS or beats the same quarter last year. Investment banks can also assess analysts' performance by evaluating how closely they predict the firm's reported EPS.

**Earnings benchmarks**

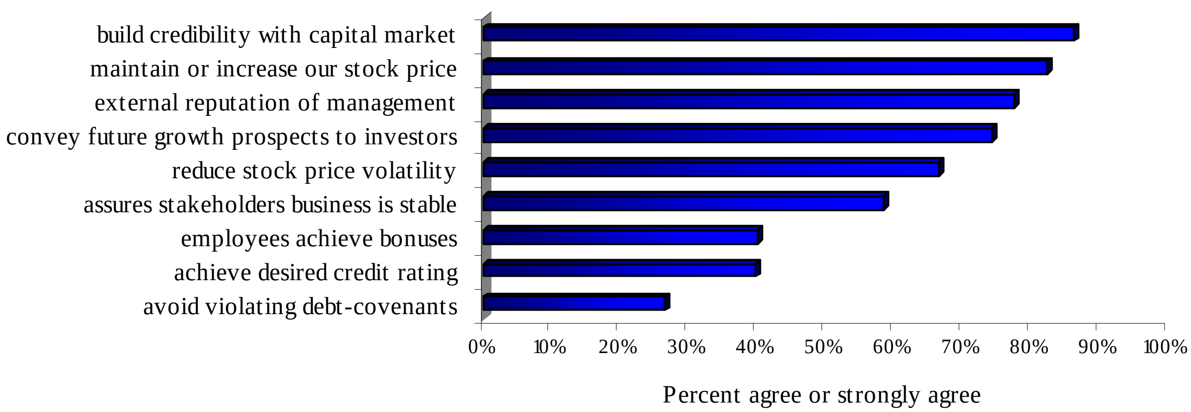
We dig deeper to determine which earnings benchmark is most important. Of the four benchmarks we proposed, 85.1% of CFOs viewed earnings same quarter last year as the most important benchmark, followed by analyst consensus estimate (73.5%), reporting a profit (65.2%), and previous quarter EPS.

We would have thought that analyst consensus estimate would come out to be more important; and in the interviews the CFOs told us that missing the consensus number leads to the largest stock price reaction. Moreover, conditional on firms having substantial analyst coverage, and among firms that provide substantial guidance, we find that the consensus earnings number is as important as the four quarters lagged number. Interviewed CFOs note that the first item in a press release is often a comparison of current quarter earnings with four quarters lagged quarterly earnings. The next item mentioned is often the analyst consensus estimate for the quarter. Interviewed CFOs also mention that while analysts' forecasts can be guided by management, last year's quarterly earnings number is a benchmark that is harder, if not impossible, to manage after the 10-Q has been filed with the SEC.

**Meeting earnings benchmarks**

The financial press is replete with cases in which a firm misses an earnings benchmark (such as the analysts consensus estimate) by a cent per share and gets its stock price hammered. Thus, CFOs are likely to have strong incentives to meet or beat earnings benchmarks. We asked CFOs specific questions about such incentives. The results, shown in Fig. 2, strongly suggest that the dominant reasons to meet or beat earnings benchmarks relate to stock prices. An overwhelming 86.3% of the survey participants believe that meeting benchmarks builds credibility with the capital market. More than 80% agree that meeting benchmarks helps maintain or increase the firm's stock price. Consistent with these results, managers believe that meeting benchmarks conveys future growth prospects to investors.

More than three-fourths of the survey respondents agree or strongly agree that a manager's concern about her external reputation, and external job prospects, helps explain the desire to hit the earnings benchmark. The interviews confirm that the desire to hit the earnings target appears to be driven less by short-run compensation motivations than by career concerns. Most CFOs feel that their inability to hit the earnings target is seen by the executive labor market as a "managerial failure." Repeatedly failing to meet earnings benchmarks can inhibit the upward or intra-industry mobility of the CFO or CEO because the manager is seen either as an incompetent executive or a poor forecaster. According to one executive, "I miss the target, I'm out of a job."




Apart from stock price and career concern motivations, a statistically significant majority of the respondents want to meet or beat earnings benchmarks to enhance their reputation with stakeholders, such as customers, suppliers and creditors, and hence get better terms of trade. Somewhat surprisingly, maintaining employee bonuses and lowering the expected cost of debt are relatively unimportant motivations to meet or beat earnings benchmarks. This is in contrast to the disproportionate academic attention devoted to bonuses and debt as important motivations to manage accounting earnings (e.g., Watts and Zimmerman 1990).

**Failure to meet earnings benchmarks**

We explicitly ask CFOs about the consequences of failing to deliver expected earnings. Fig. 3 summarizes the results. The top two consequences of a failure to meet earnings benchmarks are an increase in the uncertainty about future prospects (80.7%) and a perception among outsiders that there are deep, previously unknown problems at the firm (60%). The importance of these concerns increases with the degree of earnings guidance.

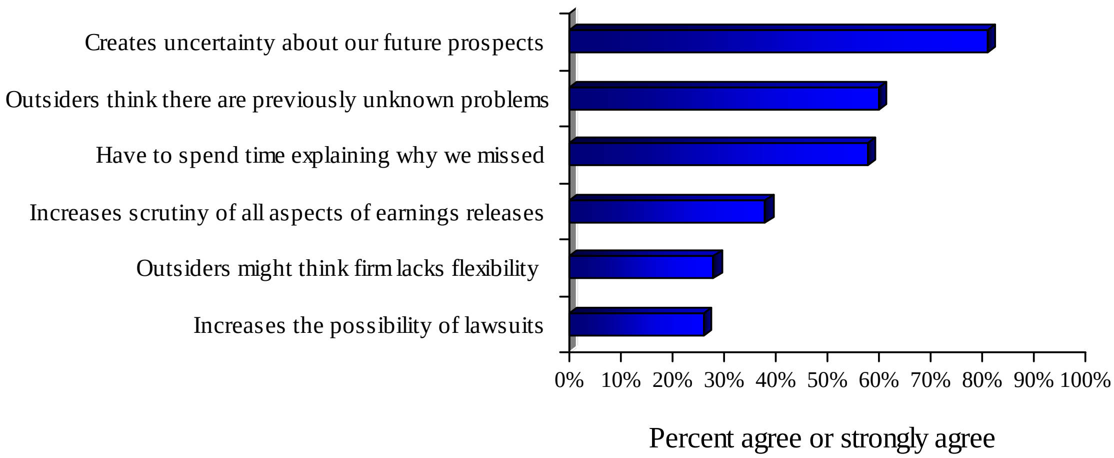



Fig. 3. Responses to the question: "Failing to meet benchmarks…" based on a survey of 401 financial executives.

In the interviews, one CFO stated that, "you have to start with the premise that every company manages earnings," and many more made similar statements. CFOs talk about "running the business" in a manner to produce smooth, attainable earnings every year. One CFO characterizes such decisions to meet earnings targets as the "screw-driver" effect: "you turn the screw just a little bit so that it fits." The common belief is that a well-run and stable firm should be able to "produce the dollars" necessary to hit the earnings target, even in a year that is otherwise somewhat down. Said differently, there is a common belief that everyone plays the earnings game, and missing earnings indicates that a firm has no available slack to deliver earnings. Therefore, the market assumes that missing the target means that there are potentially serious problems and the firm must have already used up its cushion. As one CFO put it, "if you see one cockroach, you immediately assume that there are hundreds behind the walls, even though you may have no proof that this is the case." Corporations therefore have great incentive to avoid the "cockroach" of missing an earnings benchmark.

The other significant factor motivating managers to avoid missing earnings benchmarks relates to the time spent in explaining, especially in conference calls to analysts, why the firm missed the target. Executives would rather use the time talking about the firm's long-run strategy.

## Sacrificing Value to Meet Earnings Benchmarks

Meeting and beating earnings benchmarks is clearly important to CFOs. But, what actions do CFOs take to hit such benchmarks? Do they take real economic actions to be able to report a higher earnings number? Or, do they use accounting adjustments? Results summarized in Fig. 4 reveal that 80% of survey participants report that they would decrease discretionary spending on R&D, advertising and maintenance to meet an earnings target. Many CFOs acknowledge that suboptimal maintenance and other spending can be value-destroying. More explicitly, more than half of the CFOs (55.3%) say that they would delay starting a new project to meet an earnings target, even if such a delay entailed a sacrifice in value. This evidence is interesting because CFOs appear to be willing to burn "real" cash flows for the sake of reporting desired accounting numbers. In contrast, CFOs do not appear to rely on accounting maneuvers to meet earnings benchmarks.

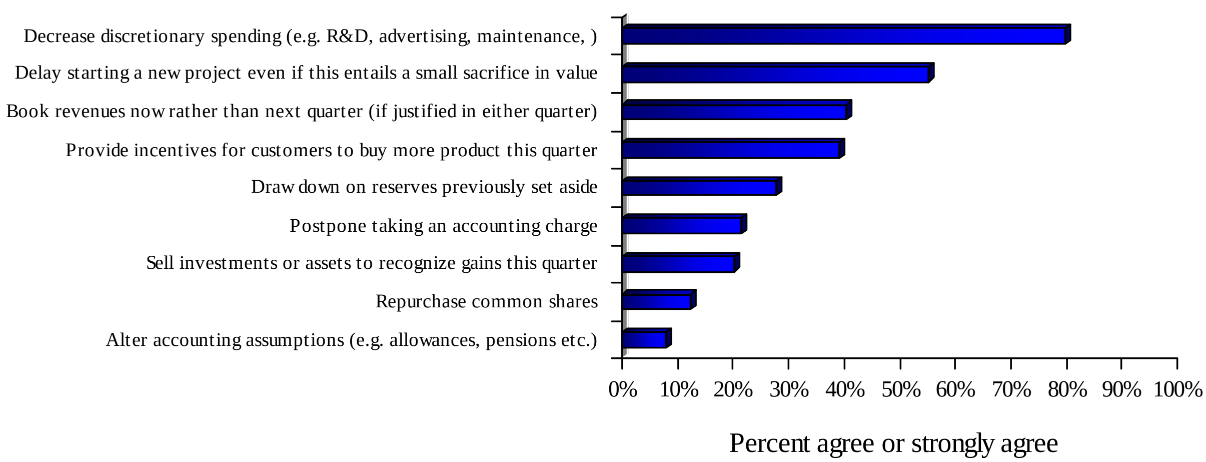



Fig. 4. Responses to the question: "Near the end of the quarter, it looks like your company might come in below the desired earnings target. Within what is permitted by GAAP, which of the following choices might your company make?" based on a survey of 401 financial executives.

To further gauge the degree to which managers are willing to alter investment decisions to meet earnings targets, we ask the following hypothetical question:

> Hypothetical scenario: Your company's cost of capital is 12%. Near the end of the quarter, a new opportunity arises that offers a 16% internal rate of return and the same risk as the firm. The analyst consensus EPS estimate is $1.90. What is the probability that your company will pursue this project in each of the following scenarios?

| Actual EPS if you do not pursue the project | Actual EPS if you pursue the project | The probability that the project will be pursued in this scenario is … (check one box per row) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 0% | 20% | 40% | 60% | 80% | 100% |
| $2.00 | $1.90 | | | | | | |
| $1.90 | $1.80 | | | | | | |
| $1.80 | $1.70 | | | | | | |
| $1.40 | $1.30 | | | | | | |

It is worth noting that (i) the project has positive NPV because the internal rate of return exceeds the cost of capital by 4%; (ii) undertaking the project in the first earnings scenario enables the firm to meet the consensus estimate; (iii) in the second scenario, the firm misses the consensus estimate by undertaking the positive NPV project; and (iv) in the third and fourth scenarios, the company is not projected to meet the consensus estimate and adopting the project will take the firm further below the consensus.

The survey responses are reported in Fig 5. Although adopting the positive NPV project will not cause the firm to miss the consensus estimate, the probability of accepting the project is only 80%. More significant is the finding that only 59% of the respondents would take the project in scenario two (see Fig. 6). Thus, many managers would reject a positive NPV project in order to meet the analyst consensus estimate! In scenario four, when EPS without taking the project at $1.40 is a full 50 cents below consensus, about 52% of the managers would take the project and its associated 10 cent earnings hit. The fourth scenario result is surprising because we expected more managers to accept the project, given that they are not on track to hit the consensus estimate anyway. Our results strongly suggest that managers are willing to alter investment decisions in an attempt to deliver expected earnings.

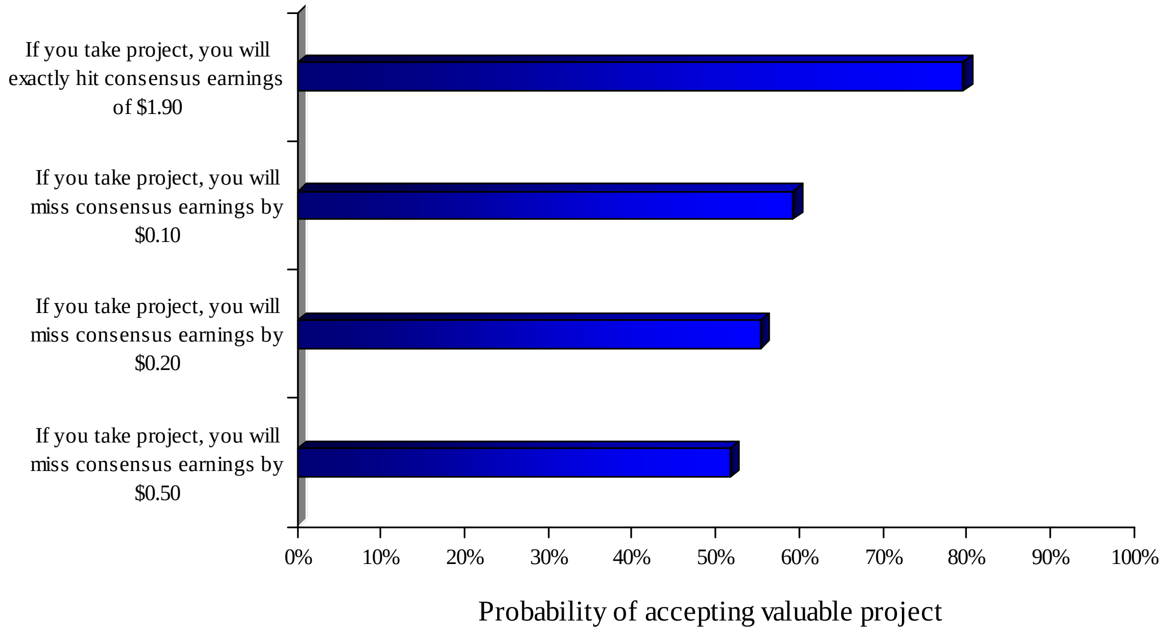



Fig. 5. Responses to the statement and question: "Your company's cost of capital is 12%. Near the end of the quarter, a new opportunity arises that offers a 16% internal rate of return and the same risk as the firm. The analyst consensus EPS estimate is $1.90. What is the probability that your company will pursue this project in each of the following scenarios?" based on a survey of 401 financial executives.

Our interviews with CFOs reveal that the aftermath of accounting scandals at Enron, and WorldCom and the certification requirements imposed by the Sarbanes-Oxley Act, may have changed managers' preferences for the mix between taking accounting versus real actions to manage earnings. Alternatively, it could simply be that managers are more willing to admit to taking real decisions than to making accounting adjustments. An interviewed CFO argues that while auditors can second-guess the firm's accounting policies, they cannot readily challenge real economic actions (to meet earnings targets) that are taken in the ordinary course of business. Another executive emphasizes that firms now go out of their way to assure stakeholders that there is no accounting based-earnings management in their books.

Several interviewed CFOs candidly acknowledge that they have made real economic sacrifices to hit an earnings target. For example, an executive of a very prominent firm acknowledged that his firm had the opportunity to pursue four very valuable long-term projects. While each project required substantial investment, there was no capital constraint. However, they chose to pursue only two of the projects because the CFO was worried about missing the next few quarters' targets. The opinion of 15 of 20 interviewed executives is that every company would/should take actions such as these to deliver earnings, as long as the actions are within GAAP and the real sacrifices are not too large.

Many of the accounting actions mentioned above eventually unwind and affect earnings in future periods. Then, why do CFOs undertake such actions? Most interviewed CFOs argue that in a growing firm the hope is that future earnings growth will offset reversals from past earnings management decisions. One CFO explains that when the overall economy is down, the firm makes choices that boost earnings. The reversal or the catch-up to this action does not kick in until the economy recovers and earnings are increasing, so the firm can increase discretionary expenditures later without the catch-up being obvious to investors or being painful, because the firm is relatively flush in cash during recovery.

**Smooth Earnings Paths**

We ask CFOs whether they prefer smooth or bumpy earnings paths, keeping cash flows constant. An overwhelming 96.9% of the survey respondents indicate that they prefer a smooth earnings path. One interviewed CFO says, “businesses are much more volatile than what their earnings numbers would suggest.” A chief motivation for working towards a smooth earnings path is that survey respondents feel that smoother earnings are perceived by investors to be less risky (88.7%, in Fig. 6). CFOs believe that smooth earnings result in lower cost of equity and debt because investors demand a smaller risk premium for smooth earnings (57.1%). Smooth earnings paths are also thought to achieve and preserve a higher credit rating (42.2%). Another popular explanation is that smoother earnings make it easier for analysts and investors to predict future earnings (79.7%), and unpredictable earnings lead to a lower stock price (in the opinions of interviewed CFOs). Executives believe that the market rewards predictability.

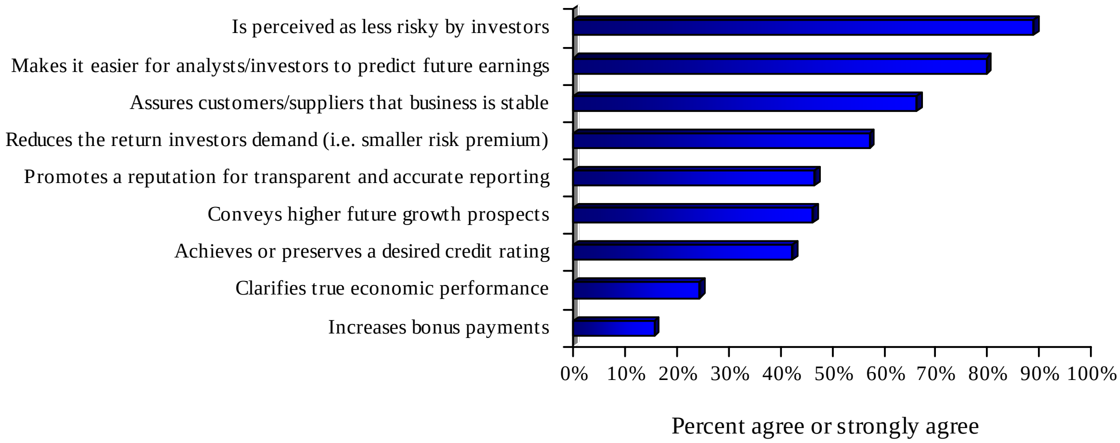



Fig. 6. Responses to the question: "Do the following factors contribute to your company preferring a smooth earnings path? A smooth earnings path …" based on a survey of 401 financial executives.

We directly ask executives how much they would sacrifice to avoid volatile earnings. An astonishing 78% admit that they would sacrifice a small, moderate or large amount of value to achieve a smoother earnings path (Fig. 7). This finding is consistent with earlier evidence that CFOs would give up economic value to meet an earnings target. Conditional analyses indicate modest cross-sectional variation in the responses. Technology firms are more prone to make small sacrifices than non-technology firms, while insider-dominated firms are willing to make moderate sacrifices. Firms that provide much guidance are associated with giving up value to report smoother earnings paths.

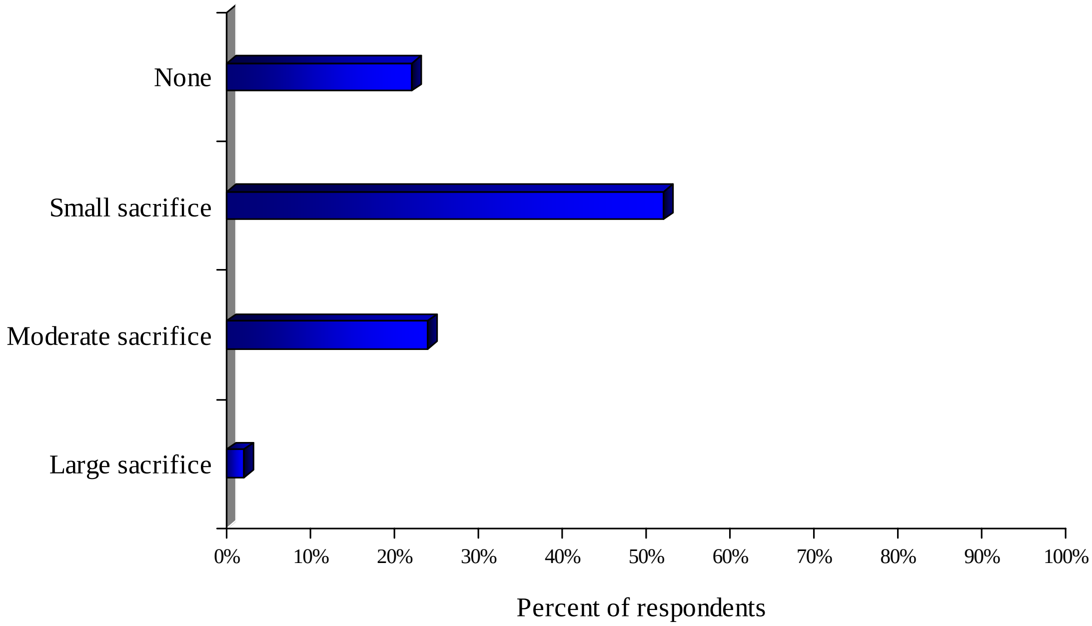



Fig. 7. Responses to the question: "How large a sacrifice in value would your firm make to avoid a bumpy earnings path?" based on a survey of 401 financial executives.

Interviewed CFOs cite a number of stock-price motivations for their desire to smooth earnings. First, they believe that the stock market values earnings predictability. Many CFOs fear that their P/E multiple would drop if their earnings path were to become more volatile (even if cash flow volatility stayed the same). They argue that investors demand a lower "risk premium" if the earnings path is steady (holding the cash flow path constant). Why should earnings volatility matter over and above cash flow volatility? A few CFOs state that the market becomes more skeptical of underlying cash flows when earnings are volatile. Even if two firms have the same underlying cash flow volatility, executives believe that the firm with the more volatile earnings is perceived as riskier.

Predictability of earnings makes it easier for investors to get a sense of the portion of earnings that will be paid out versus reinvested. Second, the firm has no obvious interest in increasing earnings volatility. CFOs feel that speculators, short-sellers and hedge funds are the only parties that benefit from more volatile earnings and, consequently, a volatile stock price. Related to the predictability point, CFOs believe that volatile earnings throw analysts' spreadsheets "out of gear," catch them off-guard, and undermine their trust in the company and its numbers. Executives point out that the culture of "predictability in earnings" goes deep down the organizational hierarchy. Divisional managers develop reputations as "no surprise guys" by creating cushions in their revenue and spending budgets. These dependable managers are rewarded in the firm for the "sleep well" factor because they delivered earnings.

CFOs equate the idea of smooth earnings with the desire to avoid negative earnings surprises (relative to earnings targets). In their mind, missing the consensus estimate and volatile earnings are commingled, and both increase uncertainty in investors' perceptions about the firm. Several CFOs indicate that they would work aggressively within the confines of GAAP to reduce the perception of uncertainty about their firm's prospects. One executive cited the example of realizing a $400 million unexpected gain on the sale of a company. Instead of reporting the gain in the quarter that it occurred, the firm purchased collars to smooth the gain into $40 million of income in each of the next 10 quarters. Since the collar costs money, this behavior indicates a willingness to pay real cash flows in order to report smooth accounting earnings over the next ten quarters.

**Who is the marginal investor?**

We ask CFOs about the perceived marginal price-setter for their stock. In other words, who should be a primary target when they set voluntary disclosure and earnings recognition policies? The survey evidence shows that CFOs view institutional investors, followed by analysts, as the most important marginal investors in their stock (Fig. 8). Individual investors are a distant third.

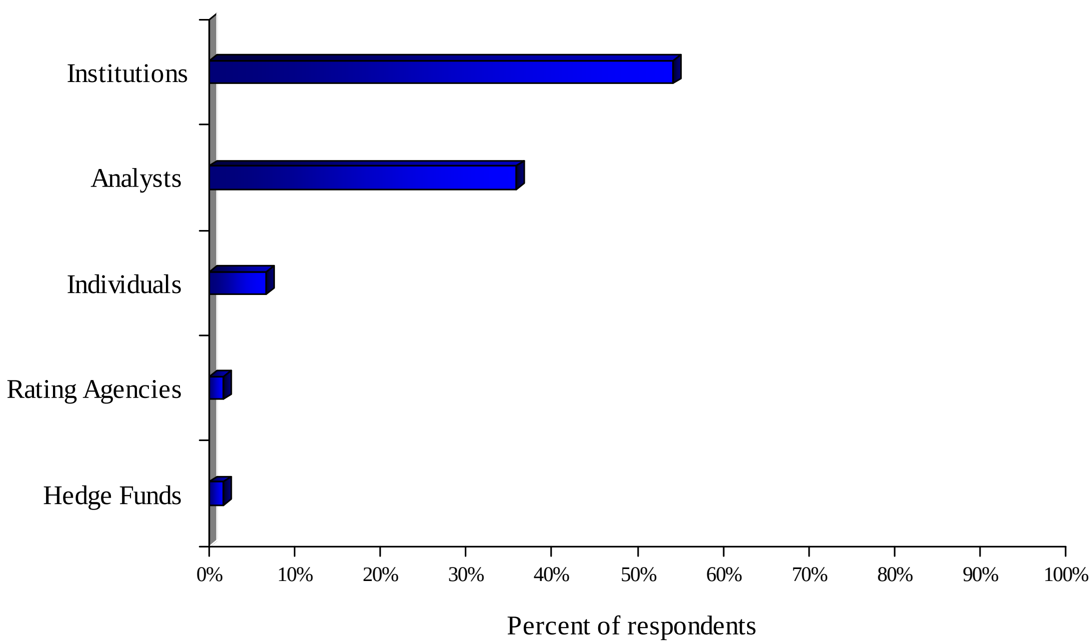



Fig. 8. Responses to the statement: "Rank the two most important groups in terms of setting the stock price for your company" based on a survey of 401 financial executives.

When asked why “sophisticated” investors, such as institutions and analysts, would not look beyond short-term earnings misses or a bump in the earnings path, assuming that long-run prospects are relatively unaffected, interviewed CFOs respond in three ways. First, some point out that many players in the market today, especially youthful equity analysts, do not have a sense of history, in that they may not have experienced a full business cycle. Referring to young equity analysts, one agitated CFO remarks, “I don’t see why we have to place these disclosures in the hands of children that do not understand the information.” Such an absence of history makes analysts more prone to overreactions when the firm misses an earnings target or when a new kink appears in the earnings path. Second, fund managers are compensated on the basis of how their funds have done relative to peer managers. If one fund starts selling the firm’s stock when the firm misses an earnings target, fund managers at peer firms have incentive to sell to protect their compensation. Thus, relative performance evaluation of fund managers is believed to promote “bandwagon” investing and less willingness to hold a stock for the long run. Third, the number of traders who try to profit from day-to-day movements in stock prices has increased in recent years (e.g., hedge funds). If a firm misses an earnings target, this might trigger automatic sell programs, which will drive the price lower. One CFO points out that many investors "sell first and ask questions later.” Finally, when we ask CFOs to explain why earnings misses and the related negative reactions of individual firms ought to matter to a diversified investor, they respond that “these investors diversify by holding less of our stock and more of someone else’s,” indicating again that CFOs believe that idiosyncratic risk matters.

## Proposals to fix short-termism

We provide new evidence that firms are willing to burn economic value, not just manage accounting accruals, to achieve desired reporting outcomes. In addition, real earnings management impacts the stock’s volatility as well as its long-term returns (see Wang (2006)). We propose two sets of measures to reduce the obsession with managing financial reporting outcomes: (i) accounting/financial disclosure related responses; and (ii) corporate governance responses.

*Principles versus rules based accounting standards*

Several accounting standards include precise rules or formulae that determine the reporting of particular transactions. In particular, these standards lay down explicit rules to determine whether the transaction should (i) involve a charge to earnings; or (ii) appear as an asset or a liability on the balance sheet; or (iii) be disclosed as a footnote to the financial statements. Examples include the 3% outside ownership rule for special purpose entities or FAS 13, the standard used to determine whether a lease is a capital lease (whereby the leased asset and the lease liability have to be reflected on the balance sheet) or an operating lease (where the balance sheet reflects neither a leased asset nor a lease liability). The SEC report released in June 2005 estimates that only about 22 percent of public companies use capital leases, while 63 percent use operating leases. Yet even more telling are the estimated total cash flows related to non-cancelable operating leases, which outweigh the cash flows related to capital leases by more than 25 to 1.

Interviewed executives opined that numerical rules and formulae for determining the accounting treatment of transactions let auditors off the hook. Instead of exercising professional judgment on whether the transaction is consistent with the economic flavor of the transaction ("principles"), the auditor evaluates whether the reporting of the transaction complies with the letter of the accounting standard ("rules"). Moreover, rules based standards provide incentives to investment bankers to market products to CFOs that obtain a desired accounting or a reporting outcome typically to satisfy short-term objectives even if the product is not cash flow positive for the firm. These interviewed executives believe that progress towards principle based accounting standards will (i) reduce the incentives of investment bankers to market products that produce accounting earnings without cash flows; and (ii) create incentives for auditors to insist on reporting the economic spirit of transactions regardless of the form that the transactions take.

### *Quarterly EPS guidance*

Several interviewed executives blame the demand for quarterly EPS guidance from analysts as a catalyst of short-term behavior by managers. Warren Buffet has asked firms to stop providing quarterly earnings guidance and change the focus of disclosure policy to long-term indicators of value. Indeed, Coca Cola, on whose board Buffet sits, stopped providing quarterly EPS guidance on December 13, 2002. Several prominent companies such as AT&T and McDonalds followed suit. However, one recent paper (Chen, Matsumoto and Rajgopal 2006) that investigates the antecedents and consequences of 76 companies that announced stoppage of quarterly EPS guidance concludes that poor past stock return and operating performance, rather than a desire to get the market to focus on the long term, is the driver behind the average firm's decision to stop guiding. It is also interesting to note that only 76 firms explicitly announced the stoppage of EPS guidance during the four-year period studied (post Regulation FD in October 2000 to December 2004) despite several calls to give up quarterly guidance (e.g., Jensen et al. 2004).

*Quarterly reporting*

Pressures to meet short-term goals will persist for as long as companies release and emphasize short-term numbers. Compensation schemes or market participants that reward consistent growth in short term numbers also contribute to managerial myopia. Firms could alter their disclosure policy to de-emphasize the importance of quarterly earnings numbers for valuation and concentrate instead on reporting on long-term trends and non-financial measures. Warren Buffett's annual notes on the state of Berkshire Hathaway are one example of such disclosures. Jensen (2006) recommends providing analysts with a strategy of the firm and a clear set of auditable metrics on the firm's progress in meeting them.

*Ex post settlement of accrual estimates*

Accounting accruals typically anticipate future cash flows from transactions entered into during an accounting period. Commentators often cite the reversing nature of accruals as a barrier to earnings management. That is, if management were to pump up earnings by understating its allowance for doubtful debts, such a shortfall will catch up later when more than the "allowed" for number of customers default.

We asked CFOs why they would take income-increasing accruals knowing fully well that (i) these accruals would reverse in the future; and (ii) they would then have to take even higher income-increasing accruals to offset the earlier reversals and still maintain their earnings growth rates. A few interviewed CFOs suggested that growth in the business makes it easier to mask accrual reversals. That is, if the actual (but unobserved by the market) growth rate in earnings is 15%, accrual reversals could eat up 4% and the firm can still report an 11% growth rate in earnings. Of course, market participants or analysts do not know how the firm arrived at the 11% growth rate.

The current financial reporting model does not report the accuracy of the estimates underlying the accruals. Rather, current accruals are mixed together with the reversals of prior accruals and that enables CFOs to comingle reversals of older accruals with new accruals, blurring the effect of each. Lundholm (1999) proposes that the financial reporting model be amended to report on the ex post accuracy of a firm's prior estimates. Doing so will identify firms that have abused their reporting discretion in the past and provide valuable information about the expected credibility of the firm's disclosures in the present. Firms will also have a greater incentive to make accurate estimates and accruals if they know that opportunistic estimates will be explicitly revealed in the future.

Rappaport (2005) discusses the obsession with short-term earnings and suggests potential solutions. With respect to accruals, he argues that corporate reporting should be improved by clearly separating accruals and cash flows and disclosing the extent of uncertainty with which accruals are likely to convert to future cash flows.

Kwag and Shrieves (2006) show that analyst forecast errors are persistently positive or negative for a long period of time. Persistently positive forecast errors (EPS > forecast) might motivate management to smooth earnings by "reserving" some of their EPS for later. Persistently negative forecast errors (EPS < forecast) might encourage CFOs to dampen analyst expectations and "talk" the forecasts down ("walkdowns"). Either way, CFOs attach undue importance to analyst forecasts of quarterly earnings and respond to pressure from such forecasts either via earnings management or via management of analysts' expectations.

*Integrity in reporting*

In our interviews, we asked each CFO a question on integrity. The preface to the questions was "suppose you were going to miss earnings consensus by a few cents and you make it clear in the conference call that there were five different accounting actions that you could have taken within GAAP to exactly hit the target and five different real actions that you could have taken to hit the target. But your firm chose not to take these actions because you believe the firm is better off avoiding such actions." Not a single CFO thought this was a credible idea. Some were worried about seeming too arrogant. Further, failure to meet or exceed targets to do so on a consistent basis usually means the CFO loses his/her job. On a related note, we found that several CFOs thought to "deliver earnings" is an important part of running a business. In addition, a number of CFOs mentioned that the failure to deliver earnings to market expectations could negatively impact their job mobility if they left their current firm.

Jensen (2006) suggests that the language of business has to be modified to reintroduce integrity in financial reporting. He argues that increasing corporate integrity will contribute to increasing firm value. Jensen argues that when we use terms other than lying to describe earnings management behavior, we effectively condone manipulation of financial reports because it never occurs to them that it is lying. Rather, it's just a regular part of doing business.

Jensen (2006) attributes the general lack of integrity in financial markets to the tendency of investors to reward and punish managers in ways very similar to those budget systems that pay people to lie. In particular, the stock price of the firm gets hammered when the reported EPS is off the analyst consensus forecasts by as little as a penny (Skinner and Sloan (2002)). However, the stock market's reception of earnings misses seems to have already changed. A recent study by Koh, Matsumoto and Rajgopal (2006) finds that the tendency of firms to exactly meet or just beat analyst set EPS targets has fallen in the post Enron world. Further, the stock market premium for exactly meeting analyst consensus EPS has disappeared in the post Enron period as well.

*Changes in corporate governance*

Our research reveals a fundamental breakdown in corporate governance. Boards of Directors approve projects. They don't usually get to see the projects that were rejected by management – even though these projects might be valuable. We believe that many board members have no idea that the earnings game is going on behind their backs. Indeed, some CFOs said there was a second and a third level to the game. Divisional leaders take real actions to make sure they make the corporate-level target earnings. Board members might themselves consider the firm's track record in meeting and beating analyst consensus estimates while evaluating the performance of the CEO and the CFO.

While much progress has been made over the last decade in realigning manager's compensation away from short-term incentives to medium and long-term incentives, our research suggests that this realignment has failed to deflect the focus from the very short run. Rappaport (2005) has recently called for reform in managerial compensation to make management focus on long term performance targets by increasing the extent of relative performance evaluation and increasing vesting periods of stock options.

In our interviews, CFOs said that their board expects them to meet or beat analyst estimates. Board meetings often focus on the short-term performance (which is easily measured) rather than longer term measures (which are often more ambiguous).

The culture of the Board of Directors must change to mitigate excessive short-termism. Management must be convinced that board members are focused on long-term strategic goals for the firm. Boards must be proactive in balancing the long-term goals with short-term performance. Boards must, to some degree, shield management from the short-term pressures that might arise from capital market participants if targets are not achieved in a particular quarter.

But this is more than a change in culture. Boards must demand to know what large projects were turned down and why. Boards need to make sure that the budgeting process at the divisional level does not foster a next level down ‘divisional’ earnings management.

To be clear, we are not advocating a myopic focus on long-term performance. In the end, the long-term is the sum of many short-term events. The key is to change the balance between the short run and long run. Boards must have a deeper understanding as to whether a decrease in earnings is a deliberate result of a longer term strategy, a transitory phenomenon perhaps due to timing or exogenous events or an indication of more permanent problems. If the board could create such an atmosphere, it would reduce management incentives to engage in value destroying activities to manage earnings.

*A more active role for institutional investors*

Figure 8 suggests that, among our respondents, institutional investors play the dominant role in setting a firm’s stock price. Why can’t large investors like CalPERs make it clear to management that they do not want the firm to manage earnings? Part of the reason is the performance compensation of the institutional investors. They are evaluated based on the short-term performance of their portfolio. Hence, they reinforce rather than repel short-term actions. Rappaport (2005) suggests that compensation schemes of investment managers need to be fixed by extending performance measurement periods to three to five years and paying annual bonuses on rolling three to five year periods and requiring fund managers to hold meaningful investments in the fund. All of these steps help to shift the focus away from the very short term.

While it is unlikely that any one large investor can reduce the prevalence of real earnings management, we are in an equilibrium where the real earnings management is an accepted part of the corporate culture. As we mentioned previously, real earnings management occurs at various levels from head office to the divisional level to departments within the division. If a large institutional investor or a set of investors made it clear that these real actions were not acceptable, this might get people both inside and outside of the corporation to rethink the current culture.

*Empowering retail investors*

Retail investors are often long-term holders of a company’s stock. However, they are disparate and other than the odd question at an Annual Meeting, they are relatively inconsequential to management. Holton (2006) suggests setting up a proxy exchange through which investors can conveniently transfer aggregate voting rights to an organization of the investor’s choosing. This would address two problems: (i) individual holdings are too small to justify the effort required to vote the shares and most individuals lack the expertise to constructively vote on the shares anyway; and (ii) investors who own shares through institutions such as mutual funds or pension plans are often denied the right to vote on these shares.

## CONCLUSIONS

The findings of our survey on financial reporting practices are startling. Perhaps it is no surprise that participation in the earnings game is pervasive. However, it is shocking that the majority of firms are willing to sacrifice long-run economic value in order to deliver short-run earnings. Companies do this in response to intense pressure from the market to meet expectations, and to avoid the severe negative market reaction to not delivering.

How do the CFOs reconcile the negative reaction of not delivering and the destruction of long-term shareholder value? It is definitely not a wash. Our interviews reveal that managers are aware that the long-term value that is sacrificed goes beyond the negative returns associated with short-run stock volatility.

Our findings are ironic. Given that firms must play the earnings game, *shareholders should want their CFOs to manage earnings* through *accounting actions* that are within GAAP. That is, we believe that it is far better to recognize some revenue one month early, if allowed under GAAP than it is to delay or cancel the construction of a valuable plant. The real action cannot be reversed. By definition, it has a real effect on the firm’s prospects. The same is not necessarily true for an accounting accrual.

How do we break out of the current earnings game?

There is no simple answer. Ideally, a combination of actions is necessary to change the culture. Our paper proposes some ideas that shift the focus to the long term rather than the short term. However, culture is difficult to change. In our opinion, the main levers are boards of directors, which should have the long-term interest of the firm as the number one priority, and institutional investors who are negatively impacted by the loss in long-term shareholder value.

Even though many boards focus on long-term value creation, the incentive mechanisms and the board discussions set up a stark agency problem. Managers are smoothing earnings and directors have no idea what is being sacrificed to do this.

What does this all mean? We know that 78% of firms would sacrifice value to smooth earnings. We know that 56% would knowingly defer valuable long-term projects to meet targets. Suppose the level of value sacrifice is 1%. Given current equity market capitalization, that's about $120 billion. But that number is probably too low. Our survey also includes a sample of private corporations – and we find the same results. The private firms need to smooth and hit targets to reduce the anxiety of their bankers and to set up a future IPO. So, a 1% value haircut probably costs the economy more like $150 billion. That's like two Enrons. The numbers are even larger if the value sacrifice is larger than 1%. However, there is little discussion in the popular media about the fundamental problem detailed in our research.

The surprise in our paper is the way that value is destroyed. Most of the media attention has been on accounting fraud. Manipulation of earnings by real actions appears to be pervasive. What is worse is that these actions are not even considered to be a 'problem' by many CFOs. From a policy point of view, it is definitely a problem. Destroying value to hit some short-term earnings target hurts shareholders in the long-term. For the economy as a whole, our results suggest that the level of capital investment may not be at its optimal level because of pressures to play the earnings game. Less investment means less employment. Less investment also negatively impacts the ability of companies to compete in the global economic arena.

Our findings point to a very serious problem – that is not yet on the radar screen. Policy makers focus on only the most egregious cases of value destruction. Our evidence suggests that it is commonplace for firms to sacrifice some value to hit targets and smooth earnings. We have tried to make the case that the sum of many unspectacular actions is spectacular – and needs to be addressed.

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