Why Good Accountants Do Bad Audits

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ON JULY 30, at a ceremony in the East Room of the White House attended by congressional leaders of both parties, President George W. Bush signed into law the Sarbanes-Oxley Act of 2002 addressing corporate accountability. A response to recent financial scandals that had begun to undermine citizens' confidence in U.S. business, the wide-ranging act flew through the House of Representatives and Senate in record time and passed in both chambers by overwhelming majorities. The act places new legal constraints on executives and gives expanded protections to whistle-blowers. Perhaps most important, though, it puts the accounting industry under tightened federal oversight. It creates a regulatory board-with broad powers to punish corruption-to monitor accounting firms, and it establishes stiff criminal penalties, including long jail terms, for accounting fraud. "The era of low standards and false profits is over," Bush proclaimed.

If only it were that easy.

Given the vast scale of recent accounting scandals and their devastating effects on workers and investors, it's not surprising that the government and the public assume that the underlying problems are corruption and criminality-unethical accountants falsifying numbers to protect equally unethical clients. But that's only a small part of the story. Serious accounting problems have long plagued corporate audits, routinely leading to substantial fines for accounting firms. Some of the errors, no doubt, are the result of fraud. But to attribute most errors to deliberate corruption would be to believe that the accounting profession is rife with crooks-a conclusion that anyone who has worked with accountants knows is untrue. The deeper, more pernicious problem with corporate auditing, as it's currently practiced, is its vulnerability to unconscious bias. Because of the often subjective nature of accounting and the tight relationships between accounting firms and their clients, even the most honest and meticulous of auditors can unintentionally distort the numbers in ways that mask a company's true financial status, thereby misleading investors, regulators, and sometimes management. Indeed, even seemingly egregious accounting scandals, such as Andersen's audits of Enron, may have at their core a series of unconsciously biased judgments rather than a deliberate program of criminality.

Unlike conscious corruption, unconscious bias cannot be deterred by threats of jail time. Rooting out bias, or at least tempering its effects, will require more fundamental changes to the way accounting firms and their clients operate. If we are really going to restore trust in the U.S. system of auditing, we will need to go well beyond the provisions of the Sarbanes-Oxley Act. We will need to embrace

practices and regulations that recognize the existence of bias and moderate its ill effects. Only then can we be assured of the reliability of the financial reports issued by public companies and ratified by professional accountants.

The Roots of Bias

Psychological research shows that our desires powerfully influence the way we interpret information, even when we're trying to be objective and impartial. When we are motivated to reach a particular conclusion, we usually do. That's why most of us think we are better than average drivers, have smarter than average children, and choose stocks or funds that will outperform the market-even if there's clear evidence to the contrary. Without knowing it, we tend to critically scrutinize and then discount facts that contradict the conclusions we want to reach, and we uncritically embrace evidence that supports our positions. Unaware of our skewed information processing, we erroneously conclude that our judgments are free of bias.

Many experiments have demonstrated the power of self-serving bias and shown, for example, how bias can distort legal negotiations.[1] In one series of experiments, which we describe in a 1997 Sloan Management Review article, pairs of participants were given police and medical reports, depositions, and other materials from a lawsuit involving a collision between a motorcycle and a car and were assigned to the role of either the motorcyclist plaintiff or the car-driving defendant. They were given the task of negotiating a settlement and were told that if they couldn't reach one, a judge would decide the award amount, and both parties would pay substantial penalties. Finally, before starting the negotiation, each participant was asked to predict the amount the judge would award the plaintiff if negotiations stalled. To further eliminate bias, each member of the pair was assured that the other party wouldn't see his or her estimate and that the estimates would not influence the judge's decision.

The results were striking. Participants playing the motorcyclist plaintiff tended to predict that they'd receive dramatically larger awards than the defendants predicted. This is an example of self-serving bias: Armed with the same information, different people reach different conclusions-ones that favor their own interests. In addition, the degree to which the two hypothetical awards differed was an excellent predictor of the likelihood that the pair would negotiate a settlement. The greater the difference in the negotiators' beliefs, the harder it was for them to come to agreement.

How can such an impulse toward self-serving bias be moderated? In follow-up experiments, the same researchers tried to reduce participants' bias by paying them to accurately predict the amount of the judge's award and having them write essays arguing the other side's point of view. Neither strategy reduced bias; participants consistently thought that the judge would award damages that favored their side. And what about educating the subjects, alerting them that they were likely to reach biased conclusions? That didn't work, either. After teaching

participants about bias and testing them to make sure they understood the concept, the researchers found that the participants concluded that their negotiating opponents would be highly biased but refused to believe that they themselves would be.

In yet another of these experiments, participants were presented with 16 arguments-eight favoring the side they had been assigned (plaintiff or defendant) and eight favoring the other-and were asked to predict how a neutral third party would rate the quality of the arguments. In general, study participants found arguments that favored their own positions more convincing than those that supported the other side. But when participants were assigned to the role of plaintiff or defendant only after they'd seen the case materials-and so were unbiased in their evaluation of the data-their degree of bias was significantly less. Taken together, these findings suggest that unconscious bias works by distorting how people interpret information.

Accounting for Bad Accounting

Professional accountants might seem immune to such biases (after all, they work with hard numbers and are guided by clear-cut standards). But the corporate auditing arena is a particularly fertile ground for self-serving biases. Three structural aspects of accounting create substantial opportunities for bias to influence judgment.

Ambiguity. Bias thrives wherever there is the possibility of interpreting information in different ways. As we saw in the study involving the collision, people tend to reach self-serving conclusions whenever ambiguity surrounds a piece of evidence. While it's true that many accounting decisions are cut-and-dried-establishing a proper conversion rate for British pounds, for instance, entails merely consulting daily foreign exchange rates-many others require interpretations of ambiguous information. Auditors and their clients have considerable leeway, for example, in answering some of the most basic financial questions: What's an investment? What's an expense? When should revenue be recognized? The interpretation and weighting of various types of information are rarely straightforward. As Joseph Berardino, Arthur Andersen's former chief executive, said in his congressional testimony on the Enron collapse, "Many people think accounting is a science, where one number, namely earnings per share, is the number, and it's such a precise number that it couldn't be two pennies higher or two pennies lower. I come from a school that says it really is much more of an art." (See "Ambiguity in Accounting and Auditing.")

Attachment. Auditors have strong business reasons to remain in clients' good graces and are thus highly motivated to approve their clients' accounts. Under the current system, auditors are hired and fired by the companies they audit, and it is well known that client companies fire accounting firms that deliver unfavorable audits. Even if an accounting firm is large enough to absorb the loss of one client, individual auditors' jobs and careers may depend on success with specific clients.

Moreover, in recent decades, accounting firms have increasingly treated audits as ways to build relationships that allow them to sell their more lucrative consulting services. Thus, from the executive team down to individual accountants, an auditing firm's motivation to provide favorable audits runs deep. As the collision case also showed, once people equate their own interests with another party's, they interpret data to favor that party. Attachment breeds bias.

Approval. An audit ultimately endorses or rejects the client's accounting-in other words, it assesses the judgments that someone in the client firm has already made. Research shows that self-serving biases become even stronger when people are endorsing others' biased judgments-provided those judgments align with their own biases-than when they are making original judgments themselves? In one series of studies, researchers found that people were more willing to endorse an overly generous outcome that favored them than they were to make that judgment themselves. For example, if someone says that you deserve a higher raise than facts might suggest, you are more likely to come to agree with this view than you are to decide on your own that you deserve a higher raise. This kind of thinking implies that an auditor is likely to accept more aggressive accounting from her client than what she might suggest independently.

In addition to these structural elements that promote bias, three aspects of human nature can amplify unconscious biases.

Familiarity. People are more willing to harm strangers than individuals they know, especially when those individuals are paying clients with whom they have ongoing relationships. An auditor who suspects questionable accounting must thus choose, unconsciously perhaps, between potentially harming his client (and himself) by challenging a company's accounts or harming faceless investors by failing to object to the possibly skewed numbers. Given this tension, auditors may unconsciously lean toward approving the dubious accounting. And their biases will grow stronger as their personal ties deepen. The longer an accounting partner serves a particular client, the more biased his judgments will tend to be.

Discounting. People tend to be far more responsive to immediate consequences than delayed ones, especially when the delayed outcomes are uncertain. Many human vices spring from this reflex. We postpone routine dental checkups because of the cost and inconvenience and the largely invisible long-term gain. In the same way, auditors may hesitate to issue critical audit reports because of the adverse immediate consequences-damage to the relationship, potential loss of the contract, and possible unemployment. But the costs of a positive report when a negative report is called for-protecting the accounting firm's reputation or avoiding a lawsuit, for example-are likely to be distant and uncertain.

Escalation. It's natural for people to conceal or explain away minor indiscretions or oversights, sometimes without even realizing that they're doing it. Think of the manager who misses a family dinner and blames the traffic, though he simply lost track of time. Likewise, an auditor's biases may lead her to unknowingly adapt

over time to small imperfections in a client's financial practices. Eventually, though, the sum of these small judgments may become large and she may recognize the long-standing bias. But at that point, correcting the bias may require admitting prior errors. Rather than expose the unwitting mistakes, she may decide to conceal the problem. Thus, unconscious bias may evolve into conscious corruption-corruption representing the most visible end of a situation that may have been deteriorating for some time. It's our belief that some of the recent financial disasters we've witnessed began as minor errors of judgment and escalated into corruption. As Charles Niemeier, chief accountant for the $EC's enforcement division, put it: "People who never intend to do something wrong end up finding themselves in situations where they are almost forced to continue to commit fraud once they have started doing this. Otherwise, it will be revealed that they had used improper accounting in the earlier periods."

Putting Theory to the Test

Bias, by its very nature, is typically invisible: You can't review a corporate audit and pick out errors attributable to bias. Often, we can't tell whether an error in auditing is due to bias or corruption. But you can design experiments that reveal how bias can distort accounting decisions. We recently did just that, with telling results.

We gave undergraduate and business students a complex set of information about the potential sale of a fictional company and asked them to estimate the company's value. Participants were assigned different roles: buyer, seller, buyer's auditor, or seller's auditor. All subjects read the same information about the company. As we expected, those who hoped to sell the firm thought the company was worth more than the prospective buyers did. More interesting were the opinions offered by the auditors: Their judgments were strongly biased toward the interests of their clients.

These auditors displayed role-conferred biases in two ways. First, their valuations (judgments) were biased in the clients' favor: The sellers' auditors publicly concluded that the firm was worth more than the buyers' auditors said it was. Second, and more tellingly, their private judgments about the company's value were also biased in their clients' favor: At the end of the experiment, the auditors were asked to estimate the company's true value and were told that they would be rewarded according to how close their private judgments were to those of impartial experts. Despite this incentive for accuracy, the estimates of the sellers' auditors averaged 30% higher than those of the buyers' auditors. This exemplifies the persistent influence of serf-serving biases: Once participants interpreted information about the target company in a biased way, they were unable to undo the bias later.

Earlier this year, we ran a study with Lloyd Tanlu that focused on professional auditors themselves. The study, of 139 auditors employed full time by one of the big U.S. accounting firms, illuminated the professionals' vulnerability to bias and

their tendency to be influenced by clients' biases. Each participant was given five ambiguous auditing vignettes and asked to judge the accounting for each. Haft the participants were asked to suppose that they had been hired by the company they were auditing; the rest were asked to suppose they had been hired by a different company, one that was conducting business with the company that had created the financial statements. In addition, half the participants in each of those two groups generated their own auditing numbers first, then stated whether they believed that the firm's financial reports complied with generally accepted accounting principles (GAAP), while the other half did the two tasks in the reverse order.

For all five vignettes, the auditors were on average 30% more likely to find that the accounting behind a company's financial reports complied with GAAP if they were playing the role of auditor for that firm. Furthermore, the participants who generated their own auditing numbers after first passing judgment on the company's financial reports tended to come up with numbers that were closer than the other participants' to the client's numbers. The study showed both that experienced auditors are not immune from bias and that they are more likely to accede to a client's biased accounting numbers than to generate such numbers themselves.

These experiments show that even the suggestion of a hypothetical relationship with a client distorts an auditor's judgments. Imagine the degree of distortion that must exist in a long-standing relationship involving millions of dollars in ongoing revenues.

Problems with Proposed Reforms

Because the reforms in the Sarbanes-Oxley Act and those proposed by others do not address the fundamental problem of bias, they will not solve the crisis in accounting in the United States. Some of the reforms, in fact, may well make it worse.

Consider the provisions dealing with disclosure. They require individual auditors or their firms to reveal conflicts of interest to investors. But to counteract bias, such disclosure must either inhibit bias outright or allow investors to adjust for it. Neither is likely. With regard to inhibiting bias, we saw earlier that a person's conscious efforts to reduce bias have limited effect. And the latter idea, that disclosure would help investors interpret auditors' reports, would be of little benefit unless investors knew how a disclosed conflict of interest biased an auditor's judgment. Imagine an investor who reads a positive audit report containing the caveat that the auditor receives $60 million in annual fees from the audited company. By how much should the investor adjust the company's self-reported earnings per share? Without specific guidance, people cannot accurately factor conflict of interest into their investment decisions.

More worrisome is evidence that disclosure could actually increase bias. If auditors suspect that disclosure will lead investors to discount or make adjustments for the auditors' public statements, they may feel less duty bound to be impartial and may make judgments more closely aligned with their personal interests. Research by Daylian Cain, Don Moore, and George Loewenstein paired participants and assigned one member of each pair to the role of estimator and the other to that of adviser. The estimator viewed several jars of coins from a distance, estimated the value of the money in them, and was paid according to how close the estimates were to the jars' true values. The adviser, who could study the jars up close, gave the estimator advice. The adviser, however, was not paid according to the estimator's accuracy but according to how high the estimator's guesses were. In other words, advisers had an incentive to mislead the estimators so that they would guess high.

In addition, we told half of the estimators about the advisers' pay arrangement; we said nothing about it to the rest. Disclosure had two effects. First, advisers whose motives were disclosed provided much more biased guesses (i.e., high estimates of coin jar values) than did advisers whose motives were not disclosed; second, disclosure did not cause estimators to substantially discount their advisers' advice. As a result, disclosure led advisers to make much more money and estimators to make much less. Applied to auditing, this finding suggests that auditors who are forced to disclose conflicts might exhibit greater self-serving bias.

One other proposed policy warrants mention: the move to impose stricter accounting standards. This remedy, too, is unlikely to improve the situation. Research shows that it takes very little ambiguity to produce biased judgments? In one study, some participants were asked to imagine that they had worked seven hours on a task and that another person had worked ten hours on the same task. Other participants were asked to imagine the opposite scenario: They'd worked ten hours on the project while the other person worked seven. In each case, it was specified that the person who had worked seven hours would be paid $25; the question was how much the person who had worked ten hours should be paid. Ten-hour participants, on average, thought that they should be paid about $35 for their ten hours of work, while those who had worked seven hours thought that the 10-hour person should receive less-about $30. Here, all it took was a tiny bit of ambiguity-whether the fair solution was equal hourly pay (as the ten-hour people thought) or equal total pay (as the seven-hour people thought)-to produce different self-serving assessments of fairness. Note, too, that the incentives for being biased in this study were awfully weak because the question was hypothetical; in the real world, incentives for bias are far stronger. It seems implausible that stricter accounting rules could eliminate ambiguity-and thus they are unlikely to reduce self-serving bias.

Radical Remedies

The key to improving audits, clearly, is not to threaten or cajole. It must be to eliminate incentives that create self-serving biases. This means that new policies must reduce an auditor's interest in whether a client is pleased by the results of an audit.

One provision of the Sarbanes-Oxley Act prohibits accounting firms from providing certain consulting services to companies they audit. This is a step in the right direction, but it doesn't go far enough. Clearly, accounting firms that advise their clients on how to boost profits, while at the same time trying to impartially judge their books, face an impossible conflict of interest. This reform both reduces this conflict and eases the pressure on auditors to act as salespeople for their firm's other services. Unfortunately, while the new law limits the consulting services auditing firms can provide, it doesn't prohibit them entirely, and it gives the new oversight board created by the Sarbanes-Oxley Act the option of overriding this provision.

True auditor independence requires, as a start, full divestiture of consulting and tax services. And even then, a fundamental problem will remain: Because auditors are hired and fired by the companies they audit, they are in the position of possibly casting negative judgments on those who hired them-and who can cut them loose. Therefore, even with the elimination of consulting, the fundamental structure of the auditing system virtually ensures biased auditing. To eliminate this source of bias, we must remove the threat of being fired for delivering an unfavorable audit. Auditors must have fixed, limited contract periods during which they cannot be terminated. All fees and other contractual details should be specified at the beginning of the contract and must be unchangeable. In addition, the client must be prohibited from rehiring the auditing firm at the end of the contract; instead, the major accounting firms would be required to rotate clients. Current legislation requires auditor rotation; however, this is defined as a change in the lead partner within an auditing firm. There is no provision to rotate the firms conducting the audit, and there is no provision to prevent a client from firing an auditor. Thus, auditors will continue to have powerful incentives to keep their clients happy.

Audit clients must also be prohibited from hiring individual accountants away from their audit firms. As the Enron scandal unfolded, the common practice of Arthur Andersen employees taking positions with Enron, and vice versa, came to light. Clearly, an auditor can't be impartial when he or she hopes to please a client in order to develop job options. We believe that auditors should be barred from taking positions with the firms they audit for at least five years.

Less tangibly, auditors must come to appreciate the profound impact of self-serving biases on judgment. Professional schools have begun to take ethics seriously in recent years, but teaching auditors about ethics will not have an impact on bias. What's needed is education that helps auditors understand the

unconscious errors they make and the reasons they make them. That knowledge alone won't solve the problem, but once members of the auditing profession understand the role of bias in their work, honest and visionary leaders in the profession can help change the conduct of accounting to prevent the conflicts of interest that promote bias. And audit leaders who say that so-called professionalism is a sufficient safeguard against audit error-a claim that's inconsistent with the weight of empirical evidence on human judgment-might abandon that claim if they truly understood the role of bias in auditing.

Our proposals are not perfect. Indeed, it's hard to imagine any practical system that could eliminate all bias. Even with our remedies, for instance, it's still possible that auditors' social contact with clients could introduce subtle biases. But we envision a system in which clients regard auditors as more like tax collectors than partners or advisers-a system that could be expected to at least ameliorate bias. Devising a more robust separation of auditor and client, one that might go further to reduce bias, would require approaches-such as turning over the auditing function to government-that could create problems as serious as those they solve. We see our proposals as both realistic and effective. In the absence of radical and innovative reform, we believe, further accounting disasters are inevitable.

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Ambiguity in Accounting and Auditing

Each year, Money magazine sends the financial records of a hypothetical family to 30 to 50 professional tax preparers and asks, "How much does this family owe in taxes for the year?" No two preparers ever agree. The range of answers is shocking. In 1998, the range varied from $37,715 to $68,912, a difference of 83%. However, these tax professionals could be proud that they agreed far more than did their colleagues who performed a similar exercise in 1990: That group's results ranged from $6,807 to $73,247, a 976% difference.

How could experts disagree so vastly on something that seems as objective as accounting? It turns out that deciding what is income, what is deductible, and what is an appropriate depreciation schedule is subjective. Judgment calls are part of a tax preparer's work. Similarly, at a corporate level, a myriad of ambiguous accounting questions, such as when to recognize revenue and which items to expense, opens the door for self-serving interpretations. An item such as late-stage R&D that one auditor might regard as an investment can be seen by another as an expense. With executives deciding how to state earnings, the two treatments can significantly affect the bottom line reported to the public.

Another indication of ambiguity in accounting is the common practice of negotiating about accounting rules. In one study by Michael Gibbins, Steven Salterio, and Alan Webb of 93 audit partners working for international accounting firms, 67% reported that they commonly negotiated with 50% or
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more of their clients. These negotiations, for example, might involve the timing of revenue and expenses recognition. Executives are often in a hurry to recognize revenue but prefer to delay recognizing an expense. If there were such a thing as "correct" timing, these negotiations wouldn't take place. Another indication of auditing ambiguity is the tendency of clients to opinion-shop-that is, to ask multiple auditors to interpret specific accounting problems before deciding whom to hire. Because no "right" conclusion exists, different auditing firms can have different opinions.

Finally, in the current political discussion about expensing options, opponents of expensing often argue that an option's value is too ambiguous to assess. They proffer ambiguity as a justification for ignoring the value of options executives receive.

1. This and subsequent studies about the collision mentioned in this article were conducted by Linda Babcock, Colin Camerer, Sam Issacharoff, and George Loewenstein and are summarized in L. Babcock and G. Loewenstein, "Explaining Bargaining Impasse: The Role of Self-Serving Biases," Journal of Economic Perspectives, winter 1997.

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