

The Quality of Corporate Financial Statements and Their Auditors before and after Enron

by George J. Benston

Executive Summary

In recent years the financial statements of several large well-known corporations, most notably Enron Corporation and WorldCom, have had to be massively restated. Is this indicative of inadequate accounting and auditing rules or evidence of corporate misgovernance and auditor incompetence? Why did these problems occur, and are they widespread? Answers to those and other questions are provided in this paper, which examines historical and current evidence of problems with corporate financial statements auditing before Enron. To provide a better perspective, I discuss in detail the traditional historical cost model of accounting and the Financial Accounting Standards Board's move away from that model and toward a system of fair value accounting. A better understanding of accounting principles will help explain what Enron did wrong and the type and extent of recent misstatements by other corporations. In case after

case, it appears that fair value accounting that is not based on reliable market prices was abused by managers to create misleading financial reports. Given the influence of the Enron scandal in shaping public policy and public opinion about financial reporting, this paper analyzes all the links in the audit chain that failed to perform their duties, from the members of the board of directors to the independent auditors to the regulators at the state and federal levels. Finally, three changes to generally accepted accounting principles (GAAP)—allowing restatements of assets and liabilities only to the extent that those are based on trustworthy numbers, replacing the U.S. rules-based with a principles-based traditional “matching concept” system, and allowing publicly traded corporations to use international accounting standards as an alternative to U.S. GAAP—are proposed to restore value to corporate accounting reports.

George J. Benston is the John H. Harland Professor of Finance, Accounting, and Economics at the Goizueta Business School, Emory University.

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Introduction

The preamble to the Securities Exchange Act of 1934 states that it was designed “to provide full and fair disclosure of the character of the securities sold in interstate commerce and through the mails, and to prevent fraud in the sale thereof.” To that end, corporations with at least \$10 million in assets and securities held by more than 500 shareholders must file annual and quarterly financial statements with the Securities and Exchange Commission. Those statements are prepared by corporate managers’ accountants and must follow generally accepted accounting principles (GAAP). They must also be audited by a registered public accounting firm (RPA) that assures investors that the statements were, indeed, prepared in accordance with GAAP, based on their audit of the corporation’s books and records.¹ Those are the rules.

However, after the discovery of misstatements in the audited reports of well-known and seemingly successful corporations—notably Enron, Adelphia, Global Crossing, WorldCom, Qwest, Rite Aid, IBM, Sunbeam, Waste Management, and Cendant—journalists, legislators, and investors have increasingly questioned the integrity and usefulness of this disclosure-based system. Are the GAAP rules inadequate? Or, were they just not followed? If not followed, why did their independent public accountants (IPAs) attest that they were followed?² Did the SEC not do its job and ascertain that the disclosure and attestation requirements of the Securities Exchange Act of 1934 were being followed? Are corporations playing a “numbers game,” as claimed by former SEC Chairman Arthur Levitt, using “creative” and “aggressive” accounting to bend the rules and “reflect the desires of management rather than the underlying financial performance of the company”?³ Or is this an overstated problem, considering the thousands of corporations that file financial statements with the SEC and are not charged with wrongdoing? If it is a systemic problem, what might be done to correct it? In any event, what or

who is to blame for the scandals that led to overwhelming passage by the Congress of the Sarbanes-Oxley Act of 2002?

This paper begins with an historical review of accounting regulation, which indicates that the current criticisms are not new, and then goes “back to basics” to outline why audited financial statements are valued by investors. Stewardship and investment decisions are the principal reasons for which trustworthy numbers, as attested to by RPA firms, are particularly useful. Although economic values would be more useful than historical costs, these amounts often cannot be measured and verified as trustworthy. Indeed the movement by the Financial Accounting Standards Board and the SEC toward a non-market-based measure of economic values, “fair value,” will make financial statements less useful. Traditional accounting-based financial statements, though, are useful to investors for several reasons. The most important is that they describe the traditional accounting measure of net income, the procedures for revenue and expense recognition, and the role of conservatism in determining those numbers. This paper will also show why it is not possible to eliminate managers’ opportunities to manipulate reported net income or cash flows, a situation about which investors should be aware.

Next comes an analysis of what went wrong at Enron and what lessons might be drawn from this one very important case. Enron has had great importance in molding public perceptions about accounting statements and external auditors and is, to a large extent, responsible for Sarbanes-Oxley, the most sweeping regulation of accounting since the early 1930s. Overall, it appears that Enron’s managers and auditors presented misleading financial statements because they did not follow the prescriptions of basic, traditional accounting and many of the rules codified in GAAP. Enron’s failure, however, does reveal several shortcomings in GAAP, predominantly with respect to its rule-based approach and allowance of fair value accounting.

Enron is not the only or the first corporation to have misstated its financial statements, however. A review of the data reveals substantial deficiencies that are the result of corporations not following established generally accepted auditing standards (GAAS) and GAAP rules and IPAs not discovering these deficiencies or acquiescing to them. On the basis on those analyses, I consider who is to blame. Among the possible culprits are auditing and accounting standards and standards setters, boards of directors, external auditors (IPAs), and professional IPA associations and state and federal regulators, particularly the SEC. Finally, three changes to GAAP—allowing restatements of assets and liabilities only to the extent that those are based on trustworthy numbers, replacing the U.S. rules-based system with a principles-based traditional “matching concept” system, and allowing publicly traded corporations to use international accounting standards as an alternative to U.S. GAAP—are suggested.

Putting the Criticism into Perspective—The Historical Record

As harshly criticized as accounting and accountants are now, such criticism is not at all new. Strident complaints about dishonest and deceptive accounting in the 1920s⁴ and the distress of the Great Depression led to the creation in 1934 of the Securities and Exchange Commission, which was given the authority to prescribe, monitor, and enforce accounting rules that presumably would help investors to make informed decisions. In effect, the SEC’s motto is, “Ye shall know the truth, and the truth shall make ye rich.” Actually, the preambles to the Securities Act of 1933 (which governs new securities issues) and the Securities Exchange Act of 1934 (which governs periodic financial reporting) call the acts “disclosure statutes.” However, it is not disclosure, as such, that reigns, because publicly traded corporations cannot simply state, “we disclose that we will disclose nothing” or

“we follow international accounting standards,” or some other statement. Rather, the SEC adopted a rule that proclaims: “Where financial statements filed . . . are prepared in accordance with accounting principles for which there is no substantial authoritative support, such financial statements will be presumed to be misleading or inaccurate *despite disclosures* contained in the certificate of the accountant or in footnotes to the statements provided the matters involved are material.”⁵ Although the SEC promulgated Regulation S-X in 1940, which specifies what must be reported in filings submitted to it and how the material must be reported, it has generally relegated the development and codification of GAAP and GAAS to the public accounting profession. Its influence on what the profession does, particularly with respect to GAAP, though, is profound and continuing.

In its early years, the SEC adopted a strongly conservative stance. It insisted that corporate registrants use only historical cost-based numbers and not include intangibles as assets. Appraisals and other estimates of the current value of assets could not be reported in financial statements and goodwill was eliminated from balance sheets. The SEC followed that conservative approach in response to criticism that it had allowed corporations to report asset values that later evaporated. The American Institute of Certified Public Accountants, to which the SEC granted authority to codify GAAP, emphasized reducing the alternatives for reporting events that superficially appeared to be the same, such as recording long-term lease obligations either on or off the balance sheet, and providing guidance for reporting newly important events, such as the investment tax credit.

Over the years, various complaints about and scandals related to the inadequacies of GAAP led to the restructuring of the institutions dealing with and promulgating GAAP. The Financial Accounting Standards Board was created in 1973 as a well-funded, professionally staffed rulemaking body that is independent of the public accounting profession. It replaced the Accounting Principles Board,

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which was run by the AICPA and staffed with volunteer partners of CPA firms. The APB, in turn, had replaced the AICPA's Committee on Accounting Procedure, which was created in 1936. The CAP could only suggest rather than demand specific practices, while the APB and the FASB have been able to specify practices that must be followed by CPAs and companies that report to the SEC.

Since the mid-1970s, though, dissatisfaction with allegedly irrelevant historical costs has moved the SEC and the FASB toward requiring companies to report current values for financial assets. Marketable securities that are regularly traded or are held for sale must be shown at their market values (if these are available) on balance sheets, although revaluation gains and losses that are not realized are included in the income statement only for traded securities. Debt securities held until maturity are shown at cost, with their market values reported only in footnotes to the statements. Derivatives that do not qualify as hedges (based on a complex set of rules codified in Financial Accounting Statement 133 and 138 and interpretations thereof) must be stated at fair values, with changes in these values reported as income or expense in the income statement. Because these financial assets often are not regularly traded, their values are determined with models rather than from quoted market prices. In addition, contracts involving energy and risk management activities must be stated at fair values, even though these amounts are based on calculations of the present value of the net cash flows the assets are expected to generate.

Thus, under current FASB rules corporate balance sheets are mixtures of past (historical) values, current values based on market values, and fair values estimated by corporate managers. An issue that is (or should be) debated is whether financial accounting should continue moving toward showing all or some assets and liabilities at current values and, if so, whether these should be based only on market values or on market values and estimates thereof (fair values). Also to be debated is whether accounting should return

to values based on actual transactions (historical costs) or on some combination of values. The answers depend on the purposes for which financial statements are useful to investors.

The Value of Audited Financial Statements

Stewardship and Investment Decisions

Investors, whether present or prospective shareholders, benefit from learning about how their investments have been and might be used by the managers of their companies. Managers render financial reports to their boards of directors and shareholders. Those reports are the principal formal means by which managers convey how they have managed a company's resources over a period of time, usually no longer than a year, and the financial condition of the company at the end of that period, as determined by their accounting records. Prospective investors realize that once they have committed their funds to a corporation, either by purchasing shares directly or from a shareholder, they usually have little control over how the corporation is managed. Consequently, they have reason to be interested in how those who are in control of corporate resources use those assets and the extent to which controlling persons (senior managers, directors, and other shareholders) have conflicts of interest that might result in costs being imposed on them as noncontrolling shareholders. Reporting in these areas is called the "stewardship" function of accounting. Financial reports also help to motivate managers to operate their corporations in the interest of shareholders. This is called the "agency" or "contracting" function of accounting.

In addition to a report of stewardship, investors want data that help them determine the present and possible future economic value of their investments. If a corporation's shares are actively traded in a market, shareholders can obtain seemingly unbiased esti-

mates of the economic value of their investments from share prices. However, those prices are based, in part, on the information provided in financial reports. If that information is not useful and accurate, its receipt will not provide investors with insights that they want nor would it change the values ascribed to those shares. Hence, prospective investors might have to incur costs to obtain information elsewhere or discount the amount they are willing to pay for the shares, given the information currently available to them. That would make the shares worth less to them. Thus, present shareholders, including those who can exercise some control over the corporation, also benefit from their managers providing all investors with financial reports that investors find trustworthy.

Because the corporate managers who prepare their firms' financial reports have incentives to misreport the performance and financial condition of their enterprises, financial statement users have reason to question the trustworthiness of those statements. Assuring that figures are reliable and presented according to GAAP is the principal purpose of audits by IPAs—for example, Certified Public Accountants (U.S.), Chartered Accountants (UK), or Wirtschaftsprüfer (Germany). IPAs' attestations of the validity of the numbers presented provide surety that they have examined the corporate records in a manner that is expected to be sufficient to uncover material misstatements and omissions and that they have conducted an audit that conforms to GAAS.

Trustworthiness of Financial Statements and IPAs' Attestations

For a substantial portion of stewardship, it is sufficient for the numbers presented to be trustworthy and the audits designed to uncover and reveal misuse of corporate resources, misstatement of income and expenses, overstatement of assets, and understatement of liabilities. Only an audit can provide this information.

For evaluating managers' performance and for investment decisions, it would be desirable

for financial statements to report the value to investors of their corporation's resources at the beginning- and end of an accounting period. Net income or loss for the period, then, would be the difference between the beginning- and end-of-period values, adjusted for distributions to and additional investments by shareholders. For those purposes, economic values for assets and liabilities, rather than historical costs, would be most relevant. Indeed, that is an important motivation for the increasing inclusion of market values and, where these are not available, "fair values" (which proxy for market values) in place of historical costs in the accounting standards adopted by the FASB and the International Accounting Standards Board.

A fair value is the amount for which an asset presumably *could* be (but hasn't been) exchanged or a liability settled between informed, willing parties on an arm's-length basis. That amount may be computed from management's estimates of the present values of expected cash flows (as described in the FASB's Statement of Financial Accounting Concept 7). The problem is that fair values (as distinct from market values) must often be derived from estimates rather than actual market values. Unfortunately, a financial report based on fair values can rarely be achieved within the requirement that the numbers also be trustworthy. It often is said that there is a trade-off between trustworthiness and relevance, but information is relevant and useful for decisionmaking to the degree that it is accurate and unbiased (where the bias is not known). Therefore trustworthy numbers are more relevant than fair values that are not based on market prices, because fair values are much more subject to managerial manipulation than are historical costs. Investors and others who want to know the economic market value of the enterprise must and can look to other sources of information apart from a company's financial statements. For example, fair values could be presented to investors in supplementary schedules and even attested to by IPAs as having been derived from models or sources that the IPAs find acceptable.

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Can Economically Meaningful and Trustworthy Numbers Be Obtained?

One problem in determining economic values stems from the cost and difficulty—often impossibility—of measuring the value of assets to an enterprise (value-in-use) and, hence, to an investor. That is the present value of the net cash flows expected from an asset's use (including disposal) by the enterprise in combination with other assets and liabilities. This is very difficult to estimate, even subjectively. Furthermore, the estimates are likely to change over time, as other enterprise operations, market conditions, and general and specific prices change. Although managers make formal or informal estimates of the present values of assets before their purchase, these estimates need only indicate that the present value of net cash flows exceeds the cost of the asset. Furthermore, this analysis (called "capital budgeting") often requires data that are not routinely available, such as current and expected prices and amounts related to asset purchase and use. Repeating these analyses for each periodic balance sheet would be very costly. Fixed assets, such as buildings, equipment, and land used for operations, provide prime examples of these valuation difficulties. Even more difficult to estimate are the values of intangible assets that are produced by the enterprise.

In addition, the value of an enterprise to an investor is almost always greater than the sum of the values of its assets less the sum of its liabilities. That is one of the principal reasons that companies exist. Their owners obtain rents (positive externalities) from the combination of assets and liabilities that comprise the company, which increase expected net cash flows above the amounts these assets and liabilities separately or in other combinations would have generated. (If the whole were not worth more than the sum of the parts, the company should be liquidated, in which event the value-in-use would be the net disposal value.) Thus, for almost all corporations, even if investors and IPAs were willing to accept as trustworthy the managers' estimates of the economic values of individual assets and liabilities, the amount shown as "fair-value

shareholders' equity" would not equal the economic value of the enterprise. Nor would the change in shareholders' equity (adjusted for distributions to and additions by shareholders) provide a valid measure of shareholders' net economic income.

A second and more important problem is that the only economic values that can be measured are rarely trustworthy unless they are based on relevant and reliable market values rather than managerially determined fair values. In this light there should be great concern about the FASB's move to require restatement of all financial assets to fair values, even when these amounts are not based on trustworthy market prices, with the changes in those values shown as current income (or loss). Managers who want to make it appear as if they had done well in a particular accounting period can readily increase the fair value of assets and, thereby, increase reported net income. All they have to do is increase their estimates of cash inflows, decrease their estimates of cash outflows, or decrease the rate that discounts the net cash flows to obtain present (fair) values. They can easily work backward toward the numbers they want, constructing a rationale for the estimates they make that IPAs would find difficult or impossible to refute. If the cash flows they estimated turn out to be incorrect (as they inevitably will, even if the managers sought only to make unbiased estimates), the managers can argue that conditions have changed (as they inevitably do). They can argue further that they could not reasonably have predicted the changes or that they did correctly predict a range of outcomes with associated probabilities, and that the outcome was within this range, although not equal to the expected amount. This lack of trustworthiness led the SEC in its early years to disallow estimates and appraisals.

The Usefulness of Financial Statements to Investors Considering the Limitations of Reporting Trustworthy Economic Values

Although financial statements that report

the economic position of an enterprise at the end of an accounting period and changes in that position over the previous period cannot be reliably produced by managers and audited by IPAs, the statements nevertheless have great value to investors. In addition to providing evidence of an audit and revealing the presence or absence of significant conflicts of interests and misappropriation of resources (stewardship), financial statements provide investors with five additional valuable benefits.

One benefit is disclosure of important numbers, the values of which investors can trust to be accurate. These presently include cash and marketable securities, accounts and notes receivable, prepaid expenses, current liabilities, floating-rate interest-bearing assets and liabilities and fixed-rate obligations when interest rates have not changed, and the physical presence, if not the economic values, of inventories, plants, equipment, and land. GAAP could be changed to have many inventories and fixed-interest-bearing assets and liabilities reliably stated at economic (market) values. Even then, however, in volatile markets the numbers reported as of the balance sheet date may not reflect current prices.

A second value is assurance that all the numbers presented in financial statements are consistent with GAAP. Even though many of these numbers (e.g., some long-term tangible and most, if not all, intangible assets) do not reflect economic values well, at least investors can readily understand the rules under which they are recorded. For example, when trustworthy valuations cannot be made, GAAP should not permit managers to increase the value of buildings or decrease the amount of depreciation to give investors the impression that the reported numbers actually measure the value of their investments or that accounting net income was greater. Revenue should not be recorded unless the corporation has substantially completed all it must do to be entitled to future cash inflows. Indeed, even though the income statement is not (and cannot be) a report of the change in shareholders' wealth embodied in the corpo-

ration over a period, net of dividends and new investments, it provides investors with a generally useful indicator of periodic changes in wealth. Because this is the statement that has been (and will continue to be) of greatest interest to investors, the next section outlines how it could be improved.

The third benefit is confirmation of earlier announcements by managers of a company's financial condition and earnings. By the time audited financial statements are published, market participants have usually learned and acted on information about the corporations' financial condition and changes over the period. This information often comes from corporate announcements, such as current and expected earnings, write-offs of discontinued facilities, and changes in earnings prospects as the result of new or revised contracts, employee lay-offs, and management changes. Much of this information is also reported in the financial statements. Because the statements are attested to by IPAs, both senior managers and investors can be assured that the announcements that reflect or affect the numbers in the statements are unlikely to be fabrications. That assurance improves the efficiency of share transactions, such that the cost of information is lower and share prices very quickly reflect changes in the economic value of corporate shares.

The fourth benefit, the usefulness of the numbers presented for analyses of trends, follows from the other benefits. As long as analysts and investors have assurance that the numbers presented are consistently produced, they can use these data to identify trends—such as growing or shrinking sales and profit margins, inventories, capital investments, and income and expense ratios to sales and assets—and changes therein, that help them evaluate and predict company performance.

The fifth benefit is provision of a useful measure of economic performance—the traditional accounting definition of net income from operations. Deliberate violation by managers of this measurement has been the greatest problem for public financial accounting.

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Revenue should not be recorded until reliably measured values can be determined.

The Accounting Measurement of Net Income

Revenue Recognition

Determining net income involves two key steps. The first is recognition of revenue, which has two essential requirements: timing and reliable measurement. Revenue may be recorded when a corporation has essentially fulfilled its obligations to the purchaser in whole or in part. When the transaction is complete, title to the product should have passed to the purchaser. When the product is delivered contractually over more than one accounting period, the proportion of revenue called for in the contract that is completed in a period should be reported as revenue in that period. That point of recognition is often called the “critical event.” For example, although the conversion of materials, labor, and overhead into finished goods available for sale usually increases their value above the sum of the resources expended, revenue is not recognized until the critical event, which is the sale to a customer. When there is a firm contract that essentially transfers title to the goods when they are manufactured, however, their completed manufacture is the critical event. In contrast, a consignment would not be treated as producing revenue to a company, because the critical event is sale of the consigned goods by the recipient and its acceptance of an obligation to pay the company. A similar situation is a sale that is financed by the seller, either directly with a loan or indirectly with a guarantee of a loan made to the buyer by a third-party lender (e.g., a bank) where the prospect that the buyer will pay for the goods as promised is unclear. The critical event is the payments received from the buyer or the buyer’s repayment of the loan and release of the seller’s obligation. In effect, this is an “installment sale,” and revenue should be recognized as the payments are made, not when the product was transferred. (Alternatively, the

account or note receivable could be reduced to the amount of expected repayment.) These “rules” for revenue recognition are well established, although they often are violated when managements seek to manipulate and misstate net income.

Reliable measurement is necessary to determine the value of assets received or liabilities extinguished in exchange for goods and services, and hence the amount of revenue earned. The amount of revenue earned should be determined by the value of the asset received. Where the market values of assets received in exchange cannot be reliably measured, revenue should not be recorded until reliably measured values can be determined. For example, if a company receives in exchange for its product the product of the purchasing company, the revenue amount should be no greater than the amount that the product received could be sold in an arm’s-length transaction. Thus, an Internet company that “sold” time on its website in exchange for time on another internet company’s website should record as revenue no more than the amount for which it could sell the time received. If either or both of the companies have surplus time that they cannot sell in arm’s-length transactions for cash or other assets that can be reliably valued, the “sale” has no value and no revenue should be recorded.

Another, often encountered example is a tied sale, where a company sells its product for a reliably measured asset, such as cash or a receivable, but agrees to purchase the buyer’s product, perhaps at an inflated price. In that and other situations, the issue is whether the asset purchased is valued at an arm’s-length price. If the price paid is greater than the arm’s-length price, the difference actually is a discount of the sales price, which should be recorded as a reduction of revenue.

Such would not be the case, however, in another fairly common situation that often involves commodities, where companies inflate their sales with largely offsetting sales and purchases to each other. For example, Company S sells electricity contracts to Company B for a reliably specified amount

but, in exchange, informally agrees to buy the same or similar amount of Company B's electricity contracts for almost the same price. These may be "sham" sales, but they are very difficult to distinguish from legitimate sales that may have been undertaken to diversify risk. Unless IPAs can determine that such sales really are shams, they have no alternative except to attest that the companies' financial statements accord with GAAP. Financial statement users should recognize this and other basic limitations of auditing and financial accounting. They can often discover and adjust for such situations by examining whether increases in revenue are associated with decreases in gross margins.

It also is important for managers to distinguish between revenue earned from the operations of the enterprise and income derived from the sale and revaluation of assets and liabilities. Many financial statement users (particularly investors) base their calculations of a company's prospects on its past performance, as reflected by its revenue and net income from its continuing operations. In the past, accountants sought to limit the income statement to those numbers, with nonoperating and extraordinary revenue and expenses taken directly to shareholders' equity in the balance sheet (then called "earned surplus"). However, experience revealed that managers tended to exclude the effect of many unfavorable events from the income statement. Consequently, the accounting profession adopted the "clean surplus" approach, whereby almost all income and expense is reported in the income statement. Hence, it is important that revenue (or sales) and the associated expenses include only the results of the ordinary operations of an enterprise.

A very important task for the IPA, then, is to determine that the requirements for recognizing and classifying revenue have, in fact, been met. (Indeed, as explained later, this has been perhaps the most prevalent and important aspect of misreporting that has not been caught and corrected by external auditors.) An important part of this determination is the GAAP requirement that the financial

records must be presented in a manner consistent with earlier reports, unless otherwise noted and explained. Thus, a consistently applied recognition rule would tend to prevent managers from recording, say, a substantial increase in revenue from one previously specified source in a particular period to cover up losses or a substantial revenue decline from a different previously specified source. For example, a company should not report as "revenue or cash flows from operations" the gains or amounts received from its sale of a segment of its business.

Expense Recognition

The second key step is matching the expenses incurred (whether beneficially or not) to obtain the revenue recognized. These are the costs of acquiring the revenue less their economic value at the end of the accounting period. This is the "matching concept" that has served accounting very well over a long time. Some expenses, such as the cost of resold merchandise and salespersons' commissions, can readily be matched with revenue. Many expenses, though, are incurred before or after the associated revenue is recognized. In general, accruals are designed to deal with this situation. Expenditures for tangible assets that will generate revenue in future periods, such as buildings and equipment, are "capitalized" and charged against revenue (i.e., as depreciation expense) over the period of their estimated useful economic lives. Expenses incurred to generate currently reported revenue that will not be paid for until future periods, such as the cost of warranties and pension benefits, are charged against that revenue and a liability for the future expected expenditure is created. (The charge should be for the present value of the liability, preferably discounted at no higher rate than the yield on the company's debt, since the pension liability is a preferred obligation.) Expenses that are predominantly time-related, such as administrative and property expenses, are generally charged against revenue in the period in which they are incurred. The rationale is that the resources created, such as going concern value and other intan-

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GAAP does not allow IPAs to accept numbers that are inconsistently determined from period to period.

gibles, rarely can be reliably measured and, if they were recorded as assets, would be untrustworthy and subject to manipulation by managers.

Similar reasoning, however, has not been applied to manufactured inventory, perhaps because it is a tangible rather than an intangible asset. Overhead expenses that are fixed (i.e., do not vary with inventory produced) are allocated to inventory with arbitrary but not readily manipulated procedures (e.g., per dollar or hour of direct labor). Those fixed amounts, though, ought to be charged to the period in which they were incurred, based on the assumption that the opportunity value of the inventory in process of manufacture or finished goods is the cost to replace it—the variable costs that were incurred. (Where the inventory cannot be replaced at variable cost because the plant is operating at capacity, the asset value of the inventory would be the lower of the estimated replacement cost or net realizable value.)

As suggested by E. Edwards and P. W. Bell in 1961,⁶ assets and liabilities that can be valued reliably as of the end of the accounting period should be recorded and the difference between those values and the recorded values should be reported as income (or expense) from holding gains (or losses). The important element is trustworthiness. In general, this means that the amounts are those that are or, if based on accepted independent valuations, would be based on prices determined from arm's-length market transactions.

Conservatism

“Conservatism” refers to the bias in traditional accounting to delay the recognition of income and speed up the recognition of expense when there is substantial uncertainty about both the timing and the amounts involved. For example, if a construction firm has undertaken a contract spanning several years, where the amount it will eventually gain cannot be determined until the contract is completed, revenue is not reported until it is clear that it has been earned and will be (or has been) received. Expenses incurred to earn

that revenue will be similarly delayed (the matching concept), although if they exceed the expected revenue, they will be reported as expenses (reductions in equity) in the current period.

Accountants necessarily must estimate some items of revenue and expense. For example, the amount of revenue that will be earned on a project and employees' pensions that will not be paid until some future time can only be estimated. The estimated revenue, though, will rarely be reported until there is reliable evidence of its amount and that it has, indeed, been earned and will be received. The estimated expense, though, will be reported currently.

The essential reason for the conservative bias is accountants' long-term experience that people get very upset when they learn that events are worse than they believe they were led to expect, but usually are happy when events are better than expected. Hence, it is better to delay the good news until it is likely to occur and recognize the bad news earlier rather than later.

Eliminating Some Managerial Discretion to Manipulate Reported Net Income Is Not Possible

The traditional accounting measure of net income (with or without the change suggested that would incorporate trustworthy current values of inventories and other assets and liabilities) must necessarily be derived, to some extent, from assumptions and judgments, which give managers some ability to affect reported net income. For example, the amount of depreciation of plant, equipment, and other fixed assets is determined by assumptions about the useful economic life of those assets and the rate at which their costs are written off as expenses. The relevant measure would be the reduction (or possibly increase) in the value-in-use of depreciating assets. However, those measurements are generally unreliable and often subject to deliberate misrepresentation. Accountants, therefore, have used predetermined procedures, such as straight-line or accelerated allocations of the historical cost of fixed assets, to determine

periodic depreciation expenses. As long as financial statement users understand that, at best, those numbers only approximate the cost to equity holders of holding and using depreciable assets, they can make adjustments to the reported net income numbers, including ignoring depreciation as a meaningful measure of economic user cost.

Liabilities that must be estimated also give managers an opportunity to affect reported net income. For example, a company's liability for warranties and employee retirement benefits is based on assumptions about expected future cash flows and discount rates. The amounts that are charged as current-period expenses can vary considerably, depending on those assumptions.

Managers can also time transactions and take advantage of alternative accrual procedures to alter revenue recognition and expense incurrence. For example, they can delay or speed up revenue recognition between accounting periods by specifying when title passes to a purchaser. Period expenses that are not inventoried as part of manufactured goods—such as advertising, research and development, and maintenance—can be reduced, delayed, or incurred earlier than need be in order to affect the amount charged against revenue in an accounting period. IPAs cannot object to those actions, because they represent the effect of actual events. Newly appointed CEOs can decide that the value of substantial assets are impaired and write them off (a procedure known as the “big bath”), thereby reducing future expenses. IPAs can and should examine the rationale for such write-offs for conformity with the matching concept.

However, the ability of opportunistic managers to manipulate reported net income with timing and accrual assumptions is limited by three factors. One is the self-correcting nature of accruals. Earlier revenue recognition that overstates net income in a period results in understated net income, usually in the next period. Direct charges of “extraordinary” events to retained earnings that bypass the income statement are not self-correcting and, thus, rarely are (or should be) accepted by

IPAs. The second is managers' decisions to advance or delay the acquisition, purchase, and use of resources. Unfortunately for shareholders, this form of manipulation is more than cosmetic; it can be detrimental to economic performance. This detriment, though, limits the extent to which these manipulations of expenses can be made, because their negative effect will be reflected by such actual events as lower sales and higher expenses. Third, GAAP does not allow IPAs to accept numbers that are inconsistently determined from period to period. Hence, although managers can, say, initially reduce depreciation expense by assuming a longer economic life for a fixed asset, in the future the depreciation expense must be greater.

Nevertheless, users of financial statements should be aware of possible management manipulations of financial accounting data that are accepted by IPAs. IPAs might accept the data because they conform to GAAP rules and could accurately reflect the operations of a company, or because the IPAs are not competent or have been (perhaps unknowingly) suborned. Users should and can evaluate and interpret the reported data.⁷

To summarize, net income should be the amount that can be reliably reported as having increased the claim of equity holders over the assets of their corporation, although some of the numbers are derived from estimates and judgments. The balance sheet should only partially reflect the economic market values of individual assets and liabilities as of the balance sheet date. To some extent, managers can manipulate the numbers presented in the income statement. That is the best that accounting can do, and, when the numbers reported are trustworthy, that is very valuable to investors and other users of financial statements.

The Role of Auditing and Accounting Standards

Standards governing audits (GAAS) and the content and presentation of financial accounting data (GAAP) in formal statements (balance sheets, income statements,

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The role of accounting misstatements and corrections in causing, rather than reflecting, Enron's demise still is unclear.

and statements of cash flow) substantially improve the usefulness of financial reports. Users of those reports can efficiently determine the extent to which the attesting IPAs have examined the books and records of their clients. Users also should be able to readily determine the meaning and validity of the numbers presented in the statements, particularly if IPAs have done their jobs well. Consequently, it is very important that IPAs determine that the financial statements really were prepared in accordance with GAAP.

Standards provide substantial benefits to IPAs as well, who are likely to be under pressure from some managers to overlook or even accept misrepresentations of poor performance. Codified accounting concepts and standards and auditing procedures can provide IPAs with guidance and protect them from demands by clients to attest to numbers that might mislead financial statement users. They can rightly claim that there is no point for the client to go to another IPA who might be more compliant, because all IPAs must adhere to the same general standards.

What Went Wrong at Enron?

Enron's bankruptcy has generated substantial concern about inadequacies of GAAS and GAAP, probably because Enron became bankrupt so very quickly after having been so highly regarded. Its stock price, which had increased from a low of about \$7 in the 1990s to a high of \$90 a share in mid-2000, plunged to less than \$1 by the end of 2001, wiping out shareholders' equity by almost \$11 billion. That decline was preceded by an announcement, on October 16, 2001, that the company was reducing its after-tax net income by \$544 million and its shareholders' equity by \$1.2 billion. On November 8, it announced that, because of accounting errors, it was restating its previously reported net income for the years 1997 through 2000. These restatements reduced previously reported net income as follows: 1997, \$28 million (27 percent of previ-

ously reported income of \$105 million); 1998, \$133 million (19 percent of previously reported income of \$703 million); 1999, \$248 million (28 percent of previously reported income of \$893 million); and 2000, \$99 million (10 percent of previously reported income of \$979 million). These changes reduced stockholders' equity by \$508 million. Thus, within a month, Enron's stockholders' equity was lower by \$1.7 billion (18 percent of previously reported equity of \$9.6 billion at September 30, 2001). On December 2, 2001, Enron filed for bankruptcy under Chapter 11 of the United States Bankruptcy Code. With assets of \$63.4 billion it was the largest corporate bankruptcy in U.S. history until WorldCom declared bankruptcy in 2002.⁸ Not only did investors and employees, whose retirement plans included large amounts of Enron stock, lose wealth, but Enron's long-time auditor, Arthur Andersen, was destroyed, and the U.S. system of financial accounting was severely questioned, with strong and insistent calls for reform that culminated in the enactment of the Sarbanes-Oxley Act of 2002.

Enron's Accounting Errors and Shortcomings

The role of accounting misstatements and corrections in causing, rather than reflecting, Enron's demise still is unclear.⁹ Over time, as congressional, SEC, bankruptcy court, and other investigations proceed and lawsuits against Enron's officers and directors, accountants, and lawyers unfold, we should learn more. Nevertheless, five groups of issues may be delineated: (1) the failure to account properly for and investments in special purpose entities (SPEs—organizations sponsored by and benefiting Enron but owned by presumably independent outside investors) and Enron's dealings with them, (2) Enron's income recognition practice of recording as current income fees for services rendered in future periods and recording revenue from sales of forward contracts, which were, in effect, disguised loans, (3) fair-value accounting resulting in restatements of "merchant" investments that were

not based on trustworthy numbers, (4) Enron's accounting for its stock that was issued to and held by SPEs, and (5) inadequate disclosure of related party transactions and conflicts of interest and their costs to stockholders. All but one of these issues (the third, fair value accounting) involved violations of the provisions of GAAP and GAAS. One other (inadequate accounting for SPEs) appears to have violated the spirit, if not the letter, of GAAP, and has resulted in a change in GAAP adopted by the FASB.¹⁰

Accounting for and Associated with Investments in SPEs. Enron sponsored hundreds (perhaps thousands) of SPEs with which it did business.¹¹ Many were used to shelter foreign-derived income from U.S. taxes. The SPEs for which its accounting has been criticized, though, were domestic and were created to provide a means whereby Enron could avoid reporting losses on some substantial investments.¹² The structure and activities of the specific SPEs in question are quite complicated, in part because the SPEs themselves created other SPEs that dealt with Enron.¹³

Outside investors held all of the equity in Enron's SPEs, usually amounting to no more than the minimum of 3 percent of assets established by the accounting authorities (SEC and the FASB) for a sponsoring corporation to avoid consolidating the SPEs into its financial statements. The balance of the assets was provided from bank loans guaranteed, directly or indirectly, by Enron or with restricted Enron stock and options to buy Enron stock at less than market value, for which Enron got a receivable from that SPE. Had Enron accounted for transactions with these SPEs in accordance with the spirit as well as the letter of GAAP requirements on dealings with related enterprises and disclosure of contingent liabilities for financial guarantees, nonconsolidation, as such, should not have been an issue.

Six accounting problems are associated with Enron's SPEs, all of which appear to have involved violations of GAAP as it existed at the time. First, in some important instances, the minimum "3 percent rule" was violated, but the affected SPEs were not consolidated.

When Arthur Andersen realized that this was not done, it required Enron to restate its financial statements. Second Enron failed to follow the dictates of FAS 5, the accounting standard that deals with contingencies, and report in a footnote the amounts and conditions of financial contingencies for which it was liable as a result of its guaranteeing the SPEs' debt. Had that been done, analysts and other users of Enron's statements would have been warned that the corporation could be liable for a very large amount of debt. Indeed, the bankruptcy court examiner found that Enron's debt of \$10.23 billion reported as of December 31, 2000 would have increased by \$1.35 billion.¹⁴ In this regard, Enron's not consolidating the SPEs was not the problem. Indeed, where Enron did not own or control the SPEs, it should not have consolidated them. Third, Enron did not but should have consolidated the SPEs that, in fact, it controlled, because they were managed by its chief financial officer (CFO), Andrew Fastow, or his employees. Fourth, although Enron controlled some SPEs through its CFO, transactions with them were treated as if the SPEs were independent enterprises; Enron should not have recorded net profits from those transactions. Fifth, Enron funded some SPEs with its own stock or in-the-money options on that stock, taking notes receivable in return. That violated a basic accounting procedure, under which companies should not record an increase in stockholders' equity unless the stock issued was paid for in cash or its equivalent. Reversal of this error resulted in a \$1.2 billion reduction in shareholders' equity in October 2001. Sixth, Enron used a put option written by an SPE to avoid having to record a loss in value of previously appreciated stock when its market price declined, without recognizing that the option was secured by the SPE's holding of unpaid-for Enron stock and loans guaranteed by Enron.

Incorrect Income Recognition. Several of the SPEs paid Enron fees for guarantees on loans made by the SPEs. Although GAAP and the matching concept require recognition of revenue only over the period of the guarantees,

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Enron recorded millions of dollars of up-front payments as current revenue. It also appears to have engineered several sizeable sham “sales,” where the buyers simultaneously or after a pre-arranged delay sold back to Enron the same or similar assets at close to the prices they “paid.” This allowed Enron to report profits on the sales and, almost simultaneously, increase the book value of some assets.

In addition, Enron recorded as “sales” transfers of assets to SPEs even though it still controlled and substantially kept the risks and rewards derived from the assets. Enron first transferred the assets to subsidiaries, then exchanged nonvoting stock in the subsidiaries to SPEs in exchange for funds that the SPEs borrowed. Simultaneously, Enron swapped rights to the cash flow from the assets for an obligation to pay the bank loans. Thus, in essence Enron still owned the assets and had borrowed funds from banks, but recorded the transaction as sales and did not record the debt.¹⁵

Fair Value Restatements of “Merchant” Investments Not Based on Trustworthy Numbers. The AICPA’s *Investment Company Guide* requires investment, business development, and venture-capital companies to revalue financial assets held (presumably) for trading to fair values, even when these values are not determined from arm’s-length market transactions. In such instances, the values can be based on “independent” appraisals and on models using discounted expected cash flows. The models allow managers who want to manipulate net income the opportunity to make “reasonable” assumptions that would give them the gains they want to record. Enron designated various projects and investments in subsidiaries as “merchant” investments, which allowed it to restate these investments at fair values in accordance with AICPA’s *Investment Company Guide*.

A particularly egregious example is Enron broadband investment and joint venture with Blockbuster, Inc., which was called Braveheart. Enron invested more than \$1 billion on broadband and reported revenue of \$408 million in 2000, much of it from sales to Fastow-

controlled SPEs. In addition, on July 19, 2000, Enron entered into a 20-year agreement with Blockbuster, Inc., to provide movies on demand to television viewers. The problem was that Enron did not have the technology to deliver the movies and Blockbuster did not have the rights to the movies to be delivered. Nevertheless, Enron, as of December 31, 2000, assigned a fair value of \$125 million to its Braveheart investment and a profit of \$53 million from increasing the investment to its fair value, even though no sales had been made. Enron recorded additional revenue of \$53 million from the venture in the first quarter of 2001, although Blockbuster did not record any income from the venture and dissolved the partnership in March 2001. In October, Enron had to reverse the \$110.9 million in profit it had earlier claimed, an action that contributed to its loss of public trust and subsequent bankruptcy.

How could Enron have so massively misestimated the fair value of its Braveheart investment, and how could Arthur Andersen have allowed Enron to report those values and their increases as profits? Indeed, the examiner finds that Arthur Andersen prepared the appraisal of the project’s value.¹⁶ Andersen assumed the following: (1) the business would be established in 10 major metro areas within 12 months, (2) eight new areas would be added per year until 2010 and those would each grow at 1 percent per year, (3) digital subscriber lines (DSLs) would be used by 5 percent of the households, increasing to 32 percent by 2010, and those would increase in speed sufficient to accept the broadcasts, and (4) Braveheart would garner 50 percent of this market. After determining (somehow) a net cash flow from each of these households and discounting by 31 percent to 34 percent, the project was assigned a fair value.

Another example is the Eli Lilly transaction.¹⁷ On February 26, 2001, Enron announced a \$1.3 billion 15-year agreement with Lilly for energy management services. The fair value of the project was determined by estimating the energy savings that Lilly was projected to achieve over 15 years and

discounting those amounts by 8.25–8.50 percent. That yielded a present value of \$39.7 million. Within two years, this contract was considered worthless.

Accounting for Stock Issued to and Held by SPEs. GAAP and long-established accounting practice do not permit a corporation to record income from increases in the value of its own stock or to record stock as issued unless it has been paid for in cash or its equivalent. Nevertheless, that is what Enron did, to the tune of \$1 billion. For reasons that are not clear, Arthur Andersen did not discover those accounting errors or, if it did, it allowed Enron to proceed. Correction of the errors in October 2001 contributed to concerns about Enron's accounting.

Inadequate Disclosure of Related Party Transactions and Conflicts of Interest. Enron disclosed that it had engaged in transactions with a related party, identified in its proxy statements (but not its SEC 10K report) as Andrew S. Fastow, its chief financial officer. Enron asserted in footnote item 16 of its 2000 10K that "the terms of the transactions with the Related Party were reasonable compared to those which could have been negotiated with unrelated third parties."¹⁸ However, those transactions do not appear to have been at arm's length. Indeed, the Powers Report, commissioned by the Enron board of directors to investigate Fastow's activities, concludes that he obtained more than \$30 million personally from his management of the SPEs that did business with Enron, and other employees who reported to Fastow got over \$11 million more. Furthermore, a detailed analysis of the Fastow-controlled SPEs indicates that the outside investors solicited by Fastow obtained multiple millions from investments on which they took little risk and that provided Enron with few benefits, other than providing a vehicle to overstate income and delay reporting losses and debt. The requirements of FASB Statement 57 and SEC's Regulation S-X item 404 for disclosure of transactions exceeding \$60,000 in which an executive officer of a corporation had a material interest were not followed, except in the most general of ways.

The Implications of the Enron Experience for Changes in GAAS and GAAP

Thus, except for fair value accounting and Enron's use of financial engineering to obviate the intent of traditional accounting GAAP while technically conforming to or aggressively interpreting the rules, most of Enron's misstated and misleading accounting resulted from violations of GAAP. Based on the public information available at this time, one must conclude that Arthur Andersen violated the basic prescriptions of GAAS in conducting an audit that would allow it to state, as it did: "In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Enron Corp. and subsidiaries . . . in conformity with accounting principles generally accepted in the United States."¹⁹

The Enron experience indicates that only two changes in GAAP are necessary. One is a rule that fair values should not be included in financial statements unless they are based on trustworthy information—prices determined by arm's-length market transactions. The second is that the traditional accounting definition of revenue and expenses described earlier should govern and, if necessary, override rules specified in authoritative (FASB and SEC) pronouncements and interpretations.

The destruction of Arthur Andersen as a firm should serve as a sufficient lesson to other IPA firms. Moreover, as is discussed below, more effective punishment of individual IPAs who materially violate GAAS and GAAP might serve to motivate them to act more effectively as gatekeepers.

Major Financial Statement Problems Associated with Other Corporations

The accounting problems revealed by Enron's bankruptcy should be put into perspective. Enron, after all, was only one of thousands of publicly traded corporations. A broader view can be obtained from recently published research that describes financial misstatements

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and frauds over several years. These studies and the more recent highly publicized restatements by such companies as WorldCom, Global Crossing, and Quest show that many of Enron's accounting issues were not unique to Enron. Similar to Enron, most misstatements are violations of basic GAAP requirements (particularly involving revenue recognition) that IPAs should have found and dealt with effectively. From the studies, it does not appear that these problems have been widespread or indicative of a systemic breakdown.

In their book *The Financial Numbers Game*, Charles Mulford and Eugene Comiskey describe many creative and fraudulent accounting practices employed in recent years. The authors base their discussion on an examination of reports by the SEC, the press, and corporate financial filings.²⁰ Many of the violations they found are identified as frauds, most of which involved misstatements of revenue. These include fictitious sales and shipments, booking revenue immediately for goods and services sold over extended periods, keeping the books open after the end of an accounting period to record revenue on shipments actually made after the close of the period, recording sales on goods shipped but not ordered and ordered but not shipped, recognizing revenue on aggressively sold merchandise that was returned ("channel stuffing"), recording revenue in the year received even though the services were provided over several years, booking revenue immediately even though the goods were sold subject to extended periods when collectibility was unlikely, making shipments to a reseller who was not financially viable, and making sales subject to side agreements that effectively rendered sales agreements unenforceable. Another distortion is misclassification of a gain from the sale of a substantial investment as other revenue rather than nonoperating income.

Expenses also were misrecorded. Some involved booking promotion and marketing expenses to a related, but not consolidated, enterprise and recognizing revenue on shipments, but not the cost and liability of an

associated obligation to repay purchasers for promotion expenses. Several corporations took "big bath" write-offs when a new CEO took over. Warranty and bad debt expenses were understated. Aggressive capitalization and extended amortization policies were used to reduce current-period expenses.

Assets were overstated by such means as recording receivables for which the corporation had established no legal right, such as claims on common carriers for damaged goods that were not actually submitted and those that it probably could not collect. Inventories were overstated by over counts and by delaying write-downs of damaged, defective, overstocked, and obsolete goods. Declines in the fair market values of debt and equity securities were delayed, even though the chances of recovery were remote. Liabilities were understated, not only for estimated expenses (such as warranties), but also for accounts payable, taxes payable, environmental clean-up costs, and pension and other employee benefits.

Additional insights can be obtained from three other studies. Thomas Weirich examined the SEC's Accounting and Auditing Enforcement Releases (AAERs), which criticize audits of registrant corporations, issued between July 1, 1997, and December 31, 1999.²¹ Of the 96 AAERs issued against Big 5 audit firms and their clients, 38 cases, or 40 percent, involved misstated revenue and accounts receivable.

Mark Beasley et al. studied all AAERs issued between 1987 and 1997 that charged registrants with financial fraud.²² Their analysis of 204 randomly selected companies (of nearly 300) revealed, among other things, that the companies were relatively small (78 percent had assets less than \$100 million) and had weak boards of directors and that the fraud involved senior officers (72 percent named the CEO, 43 percent the CFO). Half the instances involved improper revenue recognition, resulting largely from recording fictitious revenue and premature revenue recognition. An overlapping 50 percent overstated assets, 18 percent understated expenses

and liabilities, and 12 percent misappropriated assets. The SEC explicitly named external auditors in 56 cases, of which only 10 involved auditors from the major IPA firms. Auditors, of whom 9 (35 percent) were from major IPA firms, were charged with performing a substandard audit in 26 of the 56 cases (46 percent). A minority of the corporations and their senior officers paid fines and made monetary settlements to plaintiffs (30 and 35 corporations, respectively) and the officers of some 76 corporations lost their jobs and were barred from working for another SEC registrant for a period of time (54 corporations); only 31 were criminally prosecuted and 27 were jailed. But Beasley et al. do not report any actions against the individual IPAs or their firms.

Finally, the General Accounting Office searched Lexis-Nexis for mentions of restatements between January 1, 1997, and June 30, 2002. The GAO found that 845 public companies announced material restatements involving accounting irregularities. The number increased each year, from 83 in 1997 to 195 in 2001 and 110 in the first six months of 2002. Over this period, the percentage of publicly traded corporations that restated their financial statements increased substantially, from 0.89 percent in 1997 to 2.95 percent in 2002, in part because the number of corporations listed on the exchanges decreased from 9,275 to 7,446. The GAO also found that the proportion of large corporations (those with assets of more than \$1 billion) among those that restated increased from about 25 percent in 1997 to over 30 percent in 2001. Consistent with other studies, the most important reason for restatements was improper revenue recognition (38 percent). This reason is followed by improper recognition or capitalization of costs or expenses (16 percent). The GAO studied the effect of 689 of the restatements on the stock prices of the affected corporations. It found a three-day loss (adjusted for changes in the market) of 10 percent of those corporations' capitalization, or a total of \$95.6 and \$14 billion for the 689 and 202 restatements. This loss, though, is only 0.11 percent of the total market capitalization of listed corporations.²³

Thus, the several studies of financial statement restatements yield similar findings.²⁴ The number of restatements has increased, largely because of changes in SEC practices, but is still quite small in relation to the approximately 12,000 corporations that report to the SEC. Until recently, smaller companies tended to restate their financial statements more often than larger companies. The most pervasive reason for restatement is misstatement of revenue. A substantial minority of companies that restate financial statements and a smaller number of their auditors are sued. Losses to investors who hold diversified portfolios, which may result from misstatements that are corrected, are small overall, although the losses can be substantial (particularly recently) for investments in those companies.

Who Is to Blame?

Auditing and Accounting Standards and Standard Setters

There do not appear to be published studies showing why external auditors did not discover and prevent managers of companies from substantially misstating financial reports. In particular, we do not as yet know how, for several years, the chief financial officer of Global Crossing could have gotten away with capitalizing billions of dollars of current expenses, thereby massively overstating net income and total assets. Nor has it been revealed how the auditors of Tyco apparently were unaware that its senior officers personally took hundreds of millions of dollars. Nor did the authors of the studies reviewed earlier indicate whether accounting misstatements were due to failures of external auditors to discover the "errors" because the auditing procedures mandated by GAAS were inadequate, because the auditors failed to conduct audits that complied with GAAS, or because the auditors colluded with managers. Consequently, I cannot draw conclusions about the necessity of changing auditing standards. From my personal experience with two large

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Given the rules-based system, some blame should be placed on the Financial Accounting Standards Board.

corporate failures in which auditors were charged with gross negligence—Continental Illinois Bank and Phar-Mor—I determined that auditors' failure to use statistical sampling to determine whether the records substantially reflected the correct valuation of important assets (loans and inventory) was the principal reason that the auditors did not discover the misstatements.²⁵

Accounting standards in the United States, more than in Europe, tend to be rule based rather than principle based, in part because the former offers greater protection against potential plaintiffs, who are more likely to bring lawsuits in this country than in Europe. Consequently, at least some managers have viewed GAAP as a set of rules that they must meet only minimally, even if (and, in many cases such as Enron, particularly because) it results in misleading financial reports of net income.²⁶

Given the rules-based system, some blame should be placed on the Financial Accounting Standards Board. The FASB has been considering a restatement of consolidation policy regarding SPEs for more than 20 years.²⁷ The SPE situation as exemplified by Enron could have been avoided had the FASB done its job expeditiously. The Sarbanes-Oxley Act of 2002 (§401jj), now requires disclosure of "all material off-balance sheet transactions, arrangements, obligations (including contingent obligations), and other relationships of the issuer with unconsolidated entities or other persons, that may have a material current or future effect on financial condition, changes in financial condition, results of operations, liquidity, capital expenditures, capital resources, or significant components of revenues or expenses." In addition, as discussed earlier, the FASB's move toward fair value accounting has given opportunistic managers the means to grossly overstate reported net income.

The FASB also should be criticized for giving in to pressure from which it was supposed to be immune. For example, pressure from commercial banks led to its curious decision to have debt securities not restated at market

values, even though their market values can be reliably measured when the securities are designated as "held to maturity." More recently, pressure from the Business Roundtable and the CEOs of high-tech companies (among others) apparently has kept the FASB from requiring corporations to show as expenses the economic values of compensation in the form of options granted to executives, even though options have economic value and, thus, constitute compensation in the same way that compensation that includes physical goods given to employees rather than cash for their services. The problem is that stock options often cannot be readily valued. But, then, neither can employee pensions and future health benefits. Indeed, options often can be more easily valued with a model (e.g., the Black-Scholes options-pricing model),²⁸ by independent experts (such as investment bankers), or using market prices. Market prices (which usually provide the best estimate) could be obtained from similar options that corporations could sell directly or distribute to shareholders as dividends or rights offerings. These prices should be reduced to reflect the effect of restrictions placed on employee-granted options.²⁹ Consistent with the matching concept, the cost of the employee stock options should be charged against revenue in the same periods that the revenue, presumably generated by the employee, is reported, and not extend beyond the time when the options vest. Similar to amortization generally, the cost to the corporation of the options could be charged as an expense in equal periodic amounts.

With these exceptions, the inadequate, misleading, and even fraudulent financial reporting that has been revealed in recent years is due primarily to failures in enforcing the rules. Individual investors should be able to rely on several "gatekeepers" to see that financial statements were, in fact, produced in accordance with GAAP and GAAS. Those gatekeepers include corporate boards of directors, IPAs and their professional associations, and state and federal regulators.

Boards of Directors

The initial gatekeeper is the board of directors. Company accountants prepare financial statements for the benefit of shareholders, investors, and others who are expected to use those statements.³⁰ The board of directors is supposed to represent the shareholders. It is boards that must and, in many cases, did, approve granting CEOs and other senior managers substantial compensation in the form of stock options. These options, which offer managers enormous gains if the price of their corporations' shares increase, may have given them strong incentives to manage reported earnings in order to meet or exceed stock analysts' expectations, in the belief that this would increase share prices.³¹ In 2003, though, the SEC approved rules adopted by the NYSE and Nasdaq requiring listed corporations to submit to stockholder approval equity compensation plans, including stock options, repricings, and material plan changes.

The audit committee of the board has particular responsibility for the reliability of the financial statements and the audits (both internal and external) that should be designed to assure that reliability of the statements. The New York Stock Exchange and Nasdaq adopted a requirement in 2002 (amended in 2003, subject to approval by the SEC) that a majority of the board of directors, and all members of its nominating and corporate governance committees, its compensation committee, and its audit committee must be independent of their corporation and its CEO, including not having been an employee of the company or its affiliates or auditors within the previous five years. The Sarbanes-Oxley Act of 2002 (§301) also requires that all members of the audit committee be independent directors and makes them responsible for the appointment, compensation, oversight, and dismissal of external auditors. The law also allows the audit committee to engage independent counsel or other advisers, as it determines necessary, to carry out its duties, supported by appropriate corporate funding. These changes might make the boards of directors more effective gatekeepers.

External Auditors

IPAs who attest to the financial statements are the most important gatekeepers. As noted earlier, external audit firms have strong incentives to be effective gatekeepers, by not allowing their partners and employees to grossly violate the prescriptions of GAAS and GAAP. If, to satisfy one or a few clients, they are not effective gatekeepers, they risk losing their reputations and their other clients, a cost that should greatly exceed any benefits they might have achieved. That said, Arthur Andersen did a poor job as a gatekeeper for several publicly important corporations, for which it paid a very heavy price. What might explain its ineffectiveness as a gatekeeper and that of other external audit firms?

One explanation is the alleged weakening in 1995 of federal securities laws governing auditor liability. Specifically, did the Private Securities Litigation Reform Act of 1995, which generally made it more difficult for class action plaintiffs to sue public firms for accounting abuses, and the Securities Litigation Uniform Standards Act of 1998, which abolished state court class actions alleging securities fraud, increase plaintiffs' difficulty in suing accounting firms so much that these firms decided to risk the cost of being successfully sued for larger audit and other fees?³² Columbia University law professor John C. Coffee Jr., among others, points to that legislation and two court cases that made bringing lawsuits against IPAs more costly to plaintiffs as possible explanations for the presumed weakening of auditing performance. Although he supports the changes that reduced the auditors' proportionate liability and would support a ceiling on their total liability, he concludes that "their collective impact was to appreciably reduce the risk of liability."³³

However, the legislation cannot be blamed for the recent rise in earnings restatements and accounting abuses. For one thing, as noted earlier, a substantial portion of the increase in the numbers of earnings restatements is attributable to changes in SEC practices. More significantly, the PSLRA did not

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**Clearly,
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by the AICPA
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very effective, nor
can it be expected
to be.**

exempt IPAs from liability; it only eliminated their joint-and-several liability for accounting misdeeds when there are several defendants before the court.³⁴ The PSLRA also raised pleading standards and restricted the extension of the statute designed to punish organized crime (the RICO statute) by trebling damages. These reforms were enacted to prevent plaintiffs from digging into the deepest pockets among a group of defendants, regardless of the degree of culpability of individual defendants, and from bringing extortionist lawsuits against IPAs in the hope of a settlement. Furthermore, the SLASA only abolished state court class actions alleging securities fraud; federal class actions can still be brought against accountants. Indeed, no accounting firm named as a defendant in any large recent accounting controversies has been excused from liability in any of these actions because of the legislation. To underline the point, plaintiffs have not been dissuaded from suing Arthur Andersen for liability in Enron and other cases.

Another alleged cause of IPAs having been inadequate gatekeepers is fear of losing substantial fees from consulting services provided to their audit clients. Critics have pointed to Arthur Andersen's having received \$29 million in consulting fees in addition to \$27 million in audit fees from Enron in 2000. However, no evidence has been presented showing that these collateral activities have been more prevalent at corporations that experienced reporting problems, failures, or frauds. It also seems likely that IPAs who could be suborned with the consulting fees could as easily be influenced with higher audit fees. Indeed, the audit partner gets direct credit for the audit fee, and only indirect credit for net revenue earned from collateral business with the client.³⁵ Furthermore, if consulting services provided by audit firms were banned, economies of scope from IPA firms providing both audit and consulting could no longer be achieved. These economies include lower business development costs on the part of consultants and search costs on the part of corporations,

because the audit firm already is known and trusted. Operations costs for both the audit firm and its client are likely to be lower, because the audit firm already understands the client's financial system and problems. Nevertheless, the Sarbanes-Oxley Act of 2002 (§ 201) has made it unlawful for a public accounting firm to provide virtually any nonaudit service to a corporation it audits, with the exception of tax-related services. The result will be higher audit costs that, necessarily, will be paid by shareholders. These higher costs are likely to exceed the savings from better audits, particularly for investors who hold diversified portfolios.

Professional IPA Associations and State and Federal Regulators

Several bodies oversee both individual auditors and the firms they work for, and all seem to have failed in their duties. The auditing profession's "self-regulatory" body is the American Institute of Certified Public Accountants, which has a committee that is supposed to discipline wayward auditors. The reality, however, has been quite different. As reported in a study conducted by the *Washington Post* of more than a decade of SEC professional misconduct cases against accountants, the AICPA took disciplinary action against fewer than 20 percent of those accountants already sanctioned by the commission.³⁶ Moreover, even when the AICPA found that sanctioned accountants had committed violations, it closed the vast majority of ethics cases without taking disciplinary action or publicly disclosing the results, but instead issuing confidential letters directing the offenders to undergo training. Clearly, "self-regulation" by the AICPA has not been very effective, nor can it be expected to be: the most stringent penalty the AICPA can apply is simply to expel the offending member from the organization.

The record of the state accountancy agencies that issue and can withdraw CPA certificates is not much better. By and large, those agencies are not well-funded or staffed with sufficient numbers of highly trained individ-

uals to both ferret out and investigate accounting misconduct. This is especially true for complex accounting matters of the kinds revealed in some of the large corporate scandals of recent years. In general, the agencies tend to act after a client or other government agency has successfully brought a legal action against a CPA. Indeed, the *Washington Post* study of a decade of SEC enforcement action finds: “The state of New York, which had the most accountants sanctioned by the SEC, as of June had disciplined [only] 17 of 49 New York accountants.”³⁷

The SEC, though, has the staff, the authority, and the responsibility to investigate and discipline IPAs who attest to statements filed with it. Unfortunately, it has not been an effective gatekeeper; indeed, it has rarely used its authority to discipline IPAs. A 2002 GAO study of 689 restatements found that from January 2001 to February 2002, 39 CPAs were suspended or denied the privilege of appearing or practicing before the SEC, 23 of those for three years or less. In addition, one non-Big Five accounting firm was permanently barred, one Big Five and one other were given cease-and-desist orders, and one Big Five firm was censured. A reading of the GAO’s “case study” descriptions of restatements by 16 major corporations, each of which includes information on civil and criminal actions taken against the auditors, indicates that the penalties were inadequate for the crime.

The 16 “case studies” in the GAO report detail the reasons for, effects of, and actions taken by the SEC as a consequence of these corporations restating their financial reports.³⁸ In three cases the violations of GAAP were discovered by the auditor and in three the restatements resulted from changed interpretations of GAAP requirements. Ten cases involved important and substantial violations of GAAP (e.g., liabilities not reported, improper recognition of income, expensing costs that should have been capitalized, falsification of expenses, and rampant self-dealing by management). In three of these cases the SEC took action against the individual auditors. In the case of

Sunbeam, the auditor was charged with having his firm, Arthur Andersen, sign unqualified statements, even though he knew about the misstatements. He faces trial. In Waste Management, Arthur Andersen issued unqualified statements, even though its auditors had identified and quantified the improper accounting practices. It was fined \$7 million. Two of the firm’s three auditors were fined \$50,000 and \$40,000 and barred from practice before the SEC for five years; the other was barred for one year. The GAO states that they continued to be active partners of Arthur Andersen. In the Enron case, Arthur Andersen was charged with destroying documents in advance of an SEC investigation, and, in a jury trial, was found guilty. No mention is made of Andersen’s partner in charge of the audit, who destroyed the documents. The GAO does not indicate any actions taken by the SEC against the audit firms or the CPAs who conducted the audits of the seven other corporations where there were serious errors, misclassifications, and omissions that substantially overstated reported net income and assets and understated liabilities.³⁹

SEC action is important because it can trigger several consequences: private lawsuits against company officers and directors for negligence or even willful commission of fraud or misrepresentation; similar lawsuits against accounting firms; and, if the facts warrant, criminal fraud investigations by the Department of Justice. Because these consequences have been apparent for some time, the puzzle is why the consequences have not done more to deter the kind of accounting abuses that seem to have become more frequent in recent years. One reason may be that lawyers, who may find financial statements boring, dominate the SEC. Indeed, the SEC has reviewed only about 2,300 annual 10K reports in recent years.

In part because the SEC had failed, the Sarbanes-Oxley Act of 2002 (§101) was enacted to do what the SEC could have done. The act established a Public Company Accounting Oversight Board, which reports to the SEC, but is largely independent of it. The PCAOB has its

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There must be a mechanism for applying discipline to external auditors who fail to live up to their professional responsibilities. This was (and still is) the responsibility of the SEC.

own very well paid “financially literate” members (only two of which shall be or have been CPAs) and staff, and the power to impose fees on SEC-registered corporations (in addition to the fees charged by the SEC).⁴⁰ It will register public accounting firms, establish standards related to the preparation of audit reports, conduct inspections of registered public accounting firms every three years (annually if they audit more than 100 issues), and conduct investigations and disciplinary proceedings. It then may impose appropriate sanctions, presumably against both firms and individual IPAs. It also has authority to establish standards related to auditing, quality control, ethics, independence, and other standards related to the preparation audit reports.

Sanctions imposed by the PCAOB, together with fear that what happened to Arthur Andersen might happen to them, probably will be successful (although costly to shareholders) in getting external audit firms to be effective gatekeepers. But, this mechanism is likely to be seriously incomplete unless it is applied to individual external auditors, particularly those whose salaries and bonuses depend on how much business they bring in (or work on) and whose liability costs may be covered by insurance or the firm (or both). Individual partners of large IPA firms who are in charge of a single very large client have considerable incentives to accede to the demands of those clients. If they do not and lose the account for the firm, they stand to lose a substantial amount of their personal income, if not their positions in the firm. If they do, there are three possibilities. First, the misstatements might not be discovered. Second, if discovered, the partner-in-charge may not be blamed. Third, if blamed, the other partners are likely to defend the errant partner to avoid having to assume substantial damages.

Considering the externalities that accompany major audit failures and the possibility that the costly new procedures might yet be inadequate, it is critical that there be an institutional mechanism for applying discipline to individual external auditors who fail to live up to their professional responsibilities. This was

(and still is) the responsibility of the SEC. Although it has had the authority under Rule 201.102 (e) to discipline IPAs who attest to financial statements that violate GAAP or GAAS, it has used that power sparingly. One can understand why the Commission has rarely used its ultimate weapon—prohibiting an offending firm from attesting to financial statements of public companies—the most notable exception being Arthur Andersen. But it is baffling why the Commission has so rarely sanctioned individual auditors who have attached their names to the financial statements that included the substantial violations outlined above.⁴¹ If individual CPAs had reason to believe that their professional careers and personal wealth were seriously in jeopardy, they would be much more likely to risk losing a client than to agree to that clients’ demands for inadequate audits and overly aggressive or significantly misleading accounting. The Public Company Accounting Oversight Board should now fulfill the role largely abdicated by the SEC.⁴²

Additional Changes That Should Be Made

Changes to GAAS

In 2003 the PCAOB took over the development of auditing standards that had been left to the AICPA. This change in responsibility can be both negative and positive for investors. The negative prospect is that the development of auditing standards and procedures will pass from the professional IPAs who must balance the costs of auditing against the value of audits, as determined by investors’ representatives, the audit committees of corporate boards of directors. If the staff of the PCAOB acts similarly to the staff of the FASB, investors are likely to have to purchase more extensive audits than is cost effective. As noted earlier, the prohibition against concurrent consulting work by IPA firms is likely to increase the costs of audits even more.

On the positive side, if inadequate audits have resulted in externalities from reduced investor confidence in equity securities generally and IPAs particularly, changes mandated or suggested by the PCAOB that improve audits can reduce the externalities. One such improvement would be the mandated use of statistical sampling, which at present is only suggested and inadequately used or even understood by many IPAs.⁴³ Without sampling, it is difficult to see how in many important situations IPAs have a meaningful basis for determining the extent to which a corporation's statements are materially incorrect and that corporate resources have not been stolen or grossly misused. The PCAOB might be able to establish an understanding and acceptance of the reality that, at best, audits provide a high, but not 100 percent, probability that all material irregularities have been uncovered.

Changes to GAAP

Fair-Value Accounting. The accounting authorities (SEC, FASB, and IASB) have attempted to make accounting statements more relevant by adopting fair value accounting for financial assets and liabilities. Their argument is that investors would want to know the current values of assets and liabilities, rather than the amounts originally expended or obligated. What they do not appear to recognize sufficiently is that numbers that are likely to be manipulated by opportunistic or overoptimistic managers are considerably worse for investors than numbers that are not current. Consequently, the authorities have required fair values, at least for financial assets, even when they are not based on reliable market values. As the Enron situation revealed, substantially misleading reporting of net income is likely to be the result.

It might appear that the FASB has limited "fair value" reporting to financial assets and liabilities. This presumed limitation yields several important disadvantages. First, most corporations hold other assets that can be reliably measured and that are more important to investors than financial assets. In par-

ticular, as noted earlier, inventories can often be valued at their opportunity cost, particularly when they will be replaced. In this event, their value can be measured at their replacement cost, numbers that are usually known before the financial statements are published. Second, fair-value accounting has been applied inconsistently, with debt instruments identified as "held to maturity" not being marked to market, even though readily and reliably measured gains and losses in their value accrue to the benefit of shareholders and creditors, whether or not the assets are sold. Third, trustworthy values cannot be obtained for many financial assets, which allows for substantial misstatements of both assets and net income. This is a very serious situation that compromises the reliability and usefulness of published financial accounting numbers, and thus merits discussion in greater detail.

Enron was able to increase the unrealized (and, as it turned out, unrealizable) values of large-scale nonfinancial assets to what its managers' decided were "fair values" by recording as income the increase in those values. The company did this by declaring that its investments in large-scale projects were "merchant" investments for which the provisions of the AICPA's *Investment Company Guide* permit (indeed, mandate) fair value accounting. Section 1.32 of the guide states: "In the absence of a quoted market price, amounts representing estimates of fair values using methods applied consistently and determined in good faith by the board of directors should be used." According to the FASB, this is how fair values are to be measured:

If a quoted market price is not available, the estimate of fair value should be based on the best information available in the circumstances. The estimate of fair value should consider prices for similar assets or similar liabilities and the results of valuation techniques to the extent available in the circumstances. Examples of valuation techniques include the present value of estimated

One such improvement would be the mandated use of statistical sampling, which at present is only suggested and inadequately used or even understood by many IPAs.

The rules-based approach is clearly not working.

expected future cash flows using discount rates commensurate with the risks involved, option-pricing models, matrix pricing, option-adjusted spread models, and fundamental analysis.⁴⁴

Corporations can also use the following procedure (as did Enron) to extend “fair value” accounting to many non-financial assets. First, either develop a new product, facility, or business in a wholly owned subsidiary or transfer the assets the managers want to restate at “fair values” into a subsidiary. Call it FV Inc. The corporation now owns FV Inc.’s stock, which is a financial asset. Large corporations can do this many times and have a series of subsidiaries—FV1 Inc., FV2 Inc., and so forth. Then exchange the stock in the FVs for stock in another subsidiary that is designated a securities broker-dealer or an investment company (e.g., venture capital or business development company). Because the FV Inc. shares are not traded, these values must come from the corporate managers’ estimates of the fair values of the underlying assets, including intangibles. Finally, because the subsidiaries are 100 percent owned, they must be consolidated with the parent, which now puts the revalued assets on the corporation’s consolidated financial statements. Voilà—almost any group of assets can be revalued to what the managers say they are worth, and changes in those valuations (usually increases) are reported as part of income.

The evidence on corporate and industry practices, the Enron experience, and the logical possibilities for manipulation or overoptimistic estimation of “fair values” leads me to conclude that allowing corporate managers to value assets and liabilities in situations where trustworthy market values are not present and cannot be verified should not be permitted by GAAP. The AICPA has taken one step in the right direction with its proposal to limit fair valuation of nontraded securities to registered investment companies and legally and actually separate investment companies, no owner of which owns 20 percent or more of its financial interests.⁴⁵

However, it is likely that clever corporate managers will figure out a way around this limitation. Furthermore, managers can still manipulate income through “fair valuation” of derivatives and energy contracts.

Principles-Based Rather Than Rules-Based GAAP. Under the current rules-based approach, managers and their consultants design accounting procedures that are in technical accordance with GAAP, even though those procedures tend to mislead investors and violate the substance or spirit of GAAP. Enron provides an excellent example of that approach. Accountants not only find it difficult to challenge the use of such procedures; they often propose or assist in their design. In this sense, the practice of public accounting has become similar to tax practice, with clients demanding and accountants providing expertise on ways to avoid the substantive requirements of GAAP while remaining in technical compliance.

There are several reasons for this rules-based approach. First, auditors believe that they can avoid losing lawsuits if they can show that they did in fact follow the rules. Second, there is the fear of losing a client by refusing to attest to an accounting procedure that does, after all, technically conform to GAAP. Third, government agencies such as the SEC tend to establish or support rules and then demand strict adherence to them. This protects the agencies from claims of favoritism and arbitrariness, forestalling political interference. Last, but by no means least, GAAP has been criticized because it permits managers some degree of choice under some circumstances. As noted earlier, the FASB was created in 1973 largely in response to concern about excessive accounting flexibility. Its well-funded professional staff and directors have fulfilled their mandate and have developed a very large set of detailed rules designed to limit alternative means of compliance with GAAP.

However, the rules-based approach is clearly not working. Accounting firms are sued when a company they audited goes bankrupt, or even when the company’s share price drops for some reason. Courts have not accepted as a

sufficient defense that specific GAAP rules were followed or not explicitly violated. The SEC and FASB have been severely criticized for allowing companies and accounting firms to violate the spirit of GAAP. Of greatest importance, users of financial statements, who have reason to believe that the numbers presented therein are at least not *deliberately* deceptive, have at times been misled.

The principles of accounting are clear enough. Revenue should not be recognized until there is objective and reliable evidence that it has been earned. Expenses should be matched to the associated earnings or to the time periods in which assets are determined to have lost future value. Most important, the numbers reported in financial statements should be trustworthy, as verified by independent public accountants who have conducted audits and ascertained that the numbers reported accord with the basic principles embodied in GAAP. Having satisfied these conditions, the traditional income statement would be a fair and consistent record of a company's operations and would therefore fulfill the stewardship function of public accounting.

*Competition among Accounting Standards.*⁴⁶ A central problem with any monopoly standard-setter—whether the FASB, the IASB, or any other similar body—is that it has no incentive to respond quickly to market forces, let alone act in a manner free from political influence. As in private markets, the solution to monopoly is competition. As is the situation for private enterprises, quasi-governmental agencies seek acceptance of their products and modify those products to meet substitutes produced by other agencies. Consequently, at a minimum, the Congress or the SEC should permit corporations with publicly traded stock to base their financial accounting statements on either U.S. or international accounting standards.⁴⁷

Conclusion

Investors should recognize the inherent limitations of financial information reported

in audited financial statements. Accounting cannot yield both trustworthy and completely adequate measures of the economic performance and the condition of an enterprise. Managers to some extent do manipulate the reported numbers by timing expenditures and choosing among reasonable assumptions. Notwithstanding those limitations, financial statements can be very useful. GAAS should ensure that audits conducted by IPAs result in corporations presenting numbers that investors can trust.

The misstatements in the financial reports of Enron and other corporations were by and large the result of violations of GAAP and inadequate audits. Many, perhaps most, of those misstatements could and should have been caught and stopped by auditors if they had been more diligent in examining and evaluating their clients' records and financial statements, as required by GAAS. The one major exception is the GAAP requirement that companies revalue assets classified as traded financial assets (to which many assets can be converted) at their fair values, a measure that gives managers too much scope for manipulation.

The SEC has had the authority under Rule 201.102 (e) to discipline IPAs who attest to financial statements submitted to it, once it becomes known that those statements include gross violations of GAAP or GAAS. Nevertheless, it appears that the SEC has rarely disciplined the IPAs who attached their names to the financial statements that included the substantial violations outlined above.

The Sarbanes-Oxley Act of 2002 now offers the possibility that individual IPAs who are grossly derelict in fulfilling their professional responsibilities will be sanctioned. In addition to punishing the few IPAs who fail in their duties, the authorities could help restore trust in and respect for the accounting industry by empowering IPAs to withhold unqualified opinions when they find reporting that violates the *spirit* of GAAP, even if the letter is followed.

However, the bureaucracy and regulation established by the Sarbanes-Oxley Act of 2002 is likely to be quite costly to shareholders. The

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board's costs will be met by fees imposed on registered corporations in proportion to their equity market capitalization. The fees now imposed by the SEC on registrants will not be reduced. In addition, public corporations will have to pay higher auditing fees to offset the costs and risks imposed on their external auditors and their own internal costs to meet the requirements of the act. Shareholders necessarily will bear these costs. Whether those costs will exceed the benefits that shareholders might gain from better audits is unclear at this time.

GAAP should be improved by an overall rule that the numbers reported be trustworthy and that the matching concept be followed. The overall rule proposed here would change GAAP to include reporting as operating or as nonoperating income (depending on the asset or liability) changes in values that can be reliably measured. Expenses that were incurred in a period, such as managerial compensation in the form of stock options, would have to be recorded.

"Fair value" accounting, which allows managers to restate many financial assets and liabilities to their managerially estimated values even when these values are not based on reliable market transactions, is subject to misstatement by opportunistic or overly optimistic managers, as shown by the Enron disaster. Only numbers that are trustworthy should be used for financial accounting statements that are attested to by IPAs.

Although these proposals, if adopted by the FASB and SEC, would improve accounting, there are differences in opinion about what should be included in GAAP as well as significant political costs that would make changes difficult to effect. Therefore, a competitive system that would allow corporations to prepare their financial statements in accordance with alternative GAAPs, such as the International Accounting Standards that have been adopted by the European Community, should be adopted in the United States.

Notes

1. The designation "registered public accounting firm" was established by the Sarbanes-Oxley Act

of 2002, which limits audits of public companies to independent auditors who are registered with the Public Company Accounting Oversight Board, also established by the Act.

2. IPAs is the general designation for independent auditors. I use this title, rather than RPA, because the latter did not exist prior to the Sarbanes-Oxley Act, or CPA, because CPAs need not be employed by external auditors. Indeed, they often work directly for companies or, like myself, are teachers who no longer practice public accounting.

3. See Arthur Levitt, "The Numbers Game," Remarks to the New York University Center for Law and Business, September 28, 1998, www.sec.gov/news/speeches/spch/220.txt.

4. See, in particular, William Z. Ripley, *Main Street and Wall Street* (Boston: Little Brown, 1927).

5. See Securities and Exchange Commission, Accounting Series Release 4, 1938, emphasis added.

6. See Edgar O. Edwards and Philip W. Bell, *The Theory and Measurement of Business Income* (Berkeley and Los Angeles: University of California Press, 1961).

7. Howard Schilit, president of the Center for Financial Research and Analysis, describes the various ways in which managers have used accounting to misinform investors. With many examples from actual situations, he delineates seven practices that he calls "shenanigans." Three involve misreporting revenue: recording revenue too soon or of questionable quality, recording bogus revenue, and boosting income with one-time gains. Three involve violations of the matching concept: shifting current revenue to a later period, shifting current expenses to a later or earlier period, and shifting future expenses to the current period as a special charge. The seventh is failing to record or improperly reducing liabilities. He shows how analysts can detect these "shenanigans" and offers his proprietary computer-based service for detecting these practices. See Howard Schilit, *Financial Shenanigans: How to Detect Accounting Gimmicks and Fraud in Financial Reports*, 2nd ed. (New York: McGraw-Hill, 2002).

8. Texaco, Inc., the third largest, went bankrupt in April 1997 with assets of \$35.9 billion.

9. This section is largely drawn from George J. Benston and Al L. Hartgraves, "Enron: What Happened and What We Can Learn from It," *Journal of Accounting and Public Policy* 21 (2002): 105-27, which is based on our reading of press reports; and William C. Powers Jr., Raymond S. Troubh, and Herbert S. Winokur Jr., "Report of

Investigation by the Special Investigation Committee of the Board of Directors of Enron Corp.,” February 1, 2002 (hereinafter the Powers Report), and supplemented by information made public in Neal Batson, “First Interim Report of Neal Batson, Court-Appointed Examiner,” United States Bankruptcy Court, Southern District of New York, In re *Enron Corp., et al., Debtors*, Chapter 11, Case No. 01-16034 (AJG), Jointly Administered, September 20, 2002; and Neal Batson, “Second Interim Report of Neal Batson, Court-Appointed Examiner,” United States Bankruptcy Court, Southern District of New York, In re *Enron Corp., et al., Debtors*, Chapter 11, Case No. 01-16034 (AJG), Jointly Administered, January 21, 2003.

10. Enron’s accounting practices were much more complicated than I can describe here. See Benston and Hartgraves, and the Powers Report for much more detailed descriptions. See, also, Batson (2002 and 2003) for extensive descriptions and the legal implications of Enron’s use of SPEs.

11. For a detailed account of SPEs, their origins, and their accounting conventions, see Barbara T. Kavanagh, “The Uses and Abuses of Structured Finance,” Cato Institute Policy Analysis no. 479, July 31, 2003.

12. For a complete description of the accounting rules governing consolidation of SPEs and other investments see Al L. Hartgraves and George J. Benston, “The Evolving Accounting Standards for Special Purpose Entities (SPEs) and Consolidations,” *Accounting Horizons* 16 (2002): 245–58.

13. Because summaries can be found in Benston and Hartgraves and more detailed descriptions in the Powers Report and Batson (2002 and 2003), I will present here only the essential features.

14. Enron also avoided recording \$4.02 billion of debt with a complicated series of transactions, called “prepays,” wherein it traded energy contracts with organizations established by banks, such that it recorded as prepaid income (a liability) what, in actuality, were loans from banks for which it was liable. These are summarized in Batson (2003, pp. 58–66) and described in detail in Appendix E.

15. See Batson (2002 and 2003) for descriptions of these FAS 140 transactions.

16. See Batson 2003, pp. 30–31.

17. *Ibid.*, pp. 33–35.

18. See Enron Corp., *2000 Annual Report*, 2001, p. 48.

19. *Ibid.*, p. 30.

20. See Charles W. Mulford and Eugene E. Comiskey, *The Financial Numbers Game: Detecting Creative Accounting Practices* (New York: John Wiley, 2002).

21. See Thomas Weirich, “Analysis of SEC Accounting and Auditing Enforcement Releases,” in *The Panel on Audit Effectiveness Report and Recommendations*, Public Oversight Board, Shaun F. O’Malley, Chair, August 31, 2000, Appendix F, pp. 223–28.

22. Mark S. Beasley, Joseph V. Carcello, and Dana R. Hermanson, “Fraudulent Financial Reporting: 1987–1997: An Analysis of U.S. Public Companies,” Research commissioned by the American Institute of Certified Public Accountants, Committee of Sponsoring Organizations of the Treadway Commission, Jersey City, N.J., 1999.

23. A follow-on study of an additional 202 of the restatements found a three-day unadjusted market price loss of 5 percent, or \$14 billion.

24. Three other comprehensive studies of restatements are Financial Executives International, “Quantitative Measures of the Quality of Financial Reporting,” FEI Research Foundation PowerPoint presentation, 2001, www.fei.org; Zoe-Vonna Palmrose and Susan Scholz, “The Circumstances and Legal Consequences of Non-GAAP Reporting: Evidence from Restatements,” Contemporary Accounting Research Conference, 2002; and Report Pursuant to Section 704 of the Sarbanes-Oxley Act of 2002 (analysis of 227 investigations of financial reporting and disclosure violations over the five years ended July 31, 2002), Securities and Exchange Commission, January 2003. All three studies yield similar results to the ones summarized in this paper.

25. I was an expert witness for the plaintiffs against the external auditors in Continental Illinois Securities Litigation (1987) and Phar-Mor Securities Litigation (1995).

26. The Sarbanes-Oxley Act of 2002, §108(d)(1)(A), directs the SEC to “conduct a study on the adoption by the United States financial reporting system of a principles-based accounting system.”

27. This is detailed in Hartgraves and Benston.

28. The Black-Scholes model tends to overprice the options when stock price volatility is not stationary.

29. Options are still an imperfect form of performance-based compensation, because managers are rewarded for increases in corporate stock prices due to general upward movements in the market and stock repurchases rather than dividends and are not punished when their corpora-

tions' stock prices decrease, except for loss of the value of the options. Even then, compliant boards of directors often reduce the option strike price. More incentive-compatible shareholders' and managers' rewards could come from compensating managers with actual or phantom stock.

30. The Sarbanes-Oxley Act of 2002 (§ 302) requires principal executive and financial officers to sign and certify that, to their knowledge, their corporation's reports "fairly present in all material respects the financial condition and results of operations of the issuer" and similar collateral statements.

31. The increased use of options to compensate senior managers appears to have been driven, at least in part, by the 1994 Internal Revenue Code § 162 (m) disallowance as a deductible expense of executive compensation over \$1 million unless it is "performance based."

32. For an analysis of the effects of the PSLRA on securities class actions, see, for instance, Adam C. Pritchard, "Should Congress Repeal Class Action Reform?," Cato Institute Policy Analysis no. 471, February 27, 2003.

33. In John C. Coffee Jr., "Understanding Enron: 'It's about the Gatekeepers, Stupid,'" *Business Lawyer* 57 (2002): 1403. Coffee cites and discusses two cases: (1) *Lampf, Pleva, Lipkind & Petigrow v. Gilbertson*, 501 U.S. 350, 359-61 (1991) (which created a federal rule requiring plaintiffs to file to one year when they should have known of the violation underlying their action, but in no event to more than three years after the violation; previously the state-law-based rule was from five to six years); and (2) *Central Bank of Denver, N.A., v. First Interstate of Denver, N.A.*, 511 U.S. 164 (1994) (which eliminated private "aiding and abetting" liability in securities fraud cases).

34. In particular, the act assigns joint-and-several liability only where the jury specifically finds that the defendant knowingly violated the securities laws.

35. Rick Antle and Mark Gitenstein analyzed the financial records of the Big Five accounting firms and found that, while the per-hour rate for consulting is higher than the rate for auditing, the present value to IPAs of audit fees is considerably greater, because the net cash flow from audits is steadier and continues for a longer time. Antle and Gitenstein, *Analysis of Data Requested by the Independence Standards Board from the Five Largest Accounting Firms*, unpublished report presented to the Independence Standard Board, February 17, 2000.

36. See David S. Hilzenrath, "Auditors Face Scant Discipline; Review Process Lacks Resources, Co-

ordination, Will," *Washington Post*, A.1 ff, December 6, 2001.

37. Ibid.

38. See General Accounting Office, "Financial Statement Restatements: Trends, Market Impacts, Regulatory Responses, and Remaining Challenges," GAO-03-138, October 2002, Appendix V, pp. 113-235.

39. These corporations (and their auditors) are Adelphia Communications Corporation (Deloitte & Touche), MicroStrategy Incorporated (PricewaterhouseCoopers), Orbital Sciences Corporation (KPMG), Rite Aid Corporation (KPMG), Safety-Kleen Corporation (PricewaterhouseCoopers), Sea View Video Technology, Inc. (Carol McAtee, CPA), and Xerox Corporation (KPMG).

40. Some critics of Sarbanes-Oxley have questioned whether the creation of the PCAOB, a body that is structured as a private nongovernmental organization that has the power to levy taxes (or fees) on all publicly traded companies, is constitutional. See Peter J. Wallison, "Acting in Haste on Corporate Governance," *On the Issues*, November 1, 2002.

41. Indeed, the Sarbanes-Oxley Act of 2002 (§703) instructs the SEC to determine the public accountants, public accounting firms, attorneys, and securities professionals who have violated federal securities laws in 1998-2001 and describe their offenses. Section 704 instructs the SEC to "review and analyze all enforcement actions by the Commission involving violations of reporting requirements imposed under the securities laws, and restatements of financial statements," over the prior five years. The reports were submitted to the Congress in January 2003. See footnote 24 above and Securities and Exchange Commission, "Study and Report on Violations by Securities Professionals," Report by the Securities and Exchange Commission pursuant to section 703 of the Sarbanes-Oxley Act of 2002, January 2003. This study covers the calendar years 1998-2001, during which period enforcement actions were taken against 1,713 persons or organizations, including 75 "other," a category that includes accounting firms, exchanges, investment companies, and persons associated with investment companies. No other breakdown is given and nothing is mentioned about violations by or actions taken against public accountants or CPA firms.

42. Two provisions of the Sarbanes-Oxley Act might additionally reduce individual auditors' willingness to accede to clients' demands: the lead audit or coordinating partner and the reviewing partner must rotate off the audit every five years (§ 203), a company's senior financial/accounting

officer (e.g., CFO) cannot have been employed by its audit firm during the one-year period preceding the audit. I am not aware of any analysis of whether the benefits from these rules are likely to exceed their costs to shareholders from higher audit fees and executive search costs and compensation.

43. Statistical sampling procedures that could be applied to accounting data are outlined in Statement of Auditing Standards (SAS) No. 39 and in many textbooks. From a properly taken sample (random or stratified random), an auditor can assess the probability that the population values are within a specified bound. From tables based on such samples, auditors can determine the number of items to examine, given their acceptance of a specified risk. The results of the examination, then, can provide auditors with a reliable measure of the validity of the aggregate number being audited (e.g., accounts receivable) and the necessity of conducting a more extensive examination.

44. FAS 140, ¶15.

45. "Clarification of the Scope of the Audit and Accounting Guide Audits of Investment Companies and Equity Method Investors for Investment in Investment Companies," AcSEC's Proposed Statement of Position, December 17, 2002. It has been cleared by the FASB. If adopted it would become part of GAAP for fiscal years beginning after December 15, 2003.

46. See Chapter 3 of George J. Benston, Michael Bromwich, Robert Litan, and Alfred Wagenhofer, *Following the Money: The Enron Failure and the State of Corporate Disclosure* (Washington: AEI-Brookings Joint Center for Regulatory Studies 2003) for a much more complete discussion.

47. This suggestion follows that made by Ronald Dye and Shyam Sunder in "Why Not Allow FASB and IASB Standards to Compete in the U.S.?" *Accounting Horizons* 15 (September 2001): 257-71.

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