
Financial Analysts and Enron: Asleep at the Wheel?

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EXECUTIVE SUMMARY

We attempt to replicate the duties of financial analysts by performing accounting and financial analyses for Enron, using information contained in the firm's Security and Exchange Commission filings and in annual and quarterly reports that were available to analysts prior to the firm's collapse. We focus on Enron accounting policies, estimates, and financial measures that reflect the key risk areas that we identified in our strategy analysis.

Given that the purpose of accounting analysis is to evaluate the degree to which a firm's accounting system captures its underlying economic reality, we attempt to assess the degree of distortion in Enron's reported numbers, based on our comfort level with management's choice of accounting policies and estimates. The purpose of our financial analysis is to assess the performance of the firm after its efforts to negate the effects of perceived distortions in the reported numbers. We ask, and attempt to answer, the question of whether financial analysts should have seen warning signs of Enron's collapse and should have warned investors of the firm's precarious financial situation long before the unfortunate event surprised stockholders and creditors alike.

Our detailed analyses show that from 1997 onward there was evidence of reporting and performance problems. We highlight areas of major concern about profitability and debt levels.

Although Enron management makes an abundance of information available to analysts, the language is not always clear; it is confusing even to accounting experts. The vast amount of information makes the analyst's job time consuming and tedious, yet essential information, such as sepa-

rate disclosures of unrealized gains on trading activities, is not available. This does not, however, excuse analysts who overwhelmingly would not see the woods for the trees, and who continued recommending to clients that they buy or hold Enron stock.

Our investigation shows that the red flags were plentiful and that the situation was aggravated by the incidents of apparent disdain (reported in the news media) with which Enron's top management dealt with financial analysts. The results of our accounting and financial analyses raise issues about the competence, independence, and objectivity of analysts who continued to recommend this stock.

INTRODUCTION

The strategy analysis in the previous chapter allows us to focus on Enron's related key risk areas for accounting analysis purposes. The first was *the financial success of its dealer and trading activities*. This risk factor stems from Enron's move away from its successful low-risk core energy businesses into high-risk dealer and trading activities, including broadband and derivatives (the specifics of which cannot clearly be identified from strategy disclosures in public filings). The move put the firm at increased risk into new and ill-defined business operations. According to a group of analysts who questioned Enron's precollapse performance,

The sustainability of Enron's business model is based on its ability to create and exploit markets, whether they be in energy, bandwidth, freighter capacity, data storage or toilet paper. Its profit potential declines as a function of the rate at which the markets mature. . . . markets mature very quickly these days thanks to the increased sophistication and variety of risk management products and services and speed of information flows that enhance trading liquidity. (Wasden, Ayers, and Arias 2001, 6-7)

These analysts (whose opinion differed markedly from most of their peers) succinctly concluded that Enron's earnings could suffer from the very market efficiency that the firm had helped to unleash.

The second risk area concerned *the maintenance of investor confidence and access to financing resources*. This risk area became especially important from 1999 onward. Management's self-declared intense focus on earnings per share led to quality of earnings and income management concerns. In addition, management's emphasis on the continued access to financing resources provided strong motivation to manage ratios stipulated in debt covenants.

A third risk area is *the financial success of international high-risk, hard-asset ventures and complex partnership and equity ownership structures*. Investments in these ventures and entities contradicted management's apparent new asset-light philosophy. Examples included investments in the litigation-racked Dabhol power plant project in India and water plants in England. Enron

also had complex ownership arrangements with many other companies and partnerships. These investments and ownership arrangements may have put a strain on the firm's capital budgeting and capital management systems.

We now use the conclusions reached in our strategy analysis to investigate Enron's accounting and financial information, in order to evaluate its financial performance and determine whether the firm's accounting and financial policies made sense. We believe that most financial analysts should have seen red flags and warned investors of the company's shaky financial situation. In this regard, we highlight actionable danger signals apparent in the financial statements and mandated Securities and Exchange Commission filings, signals that analysts should have recognized, identified, and warned stakeholders about.

ACCOUNTING ANALYSIS

Overview of Accounting Analysis

The purpose of accounting analysis is to evaluate the degree to which a firm's accounting system captures its underlying economic reality, given inherent management biases and the substantial accounting flexibility that management is empowered with (Palepu et al. 2000, 3-1). For this purpose we use Enron's precollapse publicly available and externally audited income statements, balance sheets, statements of cash flows, notes to the financial statements, management discussion and analysis (MD&A) reports, and independent auditor reports. We supplement this with other information that was readily available to analysts.

For each financial statement account category—assets, liabilities, shareholders' equity, revenues, and expenses—we use our knowledge of the firm's profit drivers and risk factors to identify key areas of accounting flexibility, bearing in mind that there are strong relations between the various categories (for example, revenue recognition policies directly impact assets). We evaluate the appropriateness of the accounting policies and estimates chosen by management, and we attempt to assess the degree of distortion in reported numbers. Where possible, we attempt to negate the effect of perceived distortions in reported numbers by using cash flow numbers, disclosures made in the notes to the financial statements, and qualified opinions given by the external auditors. This provides us a springboard from which to launch into financial analysis, using our own adjusted numbers (if deemed necessary) to improve the reliability of our financial analysis calculations (see Palepu et al. 2000, 3-1).

Another important part of accounting analysis is to demarcate the boundaries of the business by looking beyond the legal definitions that normally control financial reporting. As analysts, we should be far more concerned with economic substance than with legal form. We want to know what resources the firm controls, a much broader focus than the narrowly defined legal form

of an entity. Generally, we would search for hidden commitments or losses from investments in other entities, the transfer of resources to other entities that the firm can somehow control (e.g., related entities owned or managed personally by Enron management), and possible investment in management pet projects that have high risk and a low return (see Palepu et al. 2000, 8-1). Therefore, we also perform entity accounting analysis.

When performing the accounting analysis, we take the following six steps, consistent with the Palepu et al. framework (2000, 3-7 to 3-13):

Step 1: Check the audit report. Is it “clean”? Identify and evaluate the key accounting policies that Enron uses to measure critical success factors and risk areas.

Step 2: Assess the flexibility that management has in choosing accounting policies and estimates, and try to discern management’s most likely motivation (e.g., to improve earnings per share and debt covenant ratios).

Step 3: Evaluate accounting strategy. For example, was the strategy used to communicate business reality or to hide performance? Does management have strong motivation to manage earnings? Regarding earnings management, does the firm have debt covenants? Has management changed estimates and policies? Is there any evidence to suggest that Enron structures business transactions specifically to achieve certain accounting numbers?

Step 4: Evaluate the depth and quality of the disclosures. For example, do the notes to the financial statements adequately explain key accounting policies and assumptions? Does management adequately explain financial performance? What is the quality of segment disclosures? Does management aggregate many different businesses in a single segment? Does management disclose bad news in addition to good news? Does management adequately address performance problems? How good is Enron’s investor relations program? How does management deal with analysts?

Step 5: Identify red flags that indicate potential accounting-quality problems and use these as starting points for further investigation. For example, are there unexplained changes in accounting? Are there unexplained or complex transactions? Is there an increasing gap between net income from operations and cash flow from operations? Is there an increasing gap between net income and taxable income? Is there evidence of unusual financing? Are there large and unexpected asset write-offs? Are there related-party transactions or transactions between related entities that may lack objectivity in the marketplace—especially in view of Enron’s position of power due to vertical integration, which allowed it to control more than one stage of the industry’s transactions, including that of market maker? Is there evidence that Enron exerts control over other entities that are not legally part of the group?

Step 6: Unravel possible accounting distortions by restating reported numbers. This is not always possible, because of lack of information. The notes to the financial statements and the cash flow statement may supply information useful for this purpose. By making these restatements as analysts, we do not accuse the firm of misstatement, but *we restate components of the financial statements based on our external perceptions of the underlying business reality of the firm.* In the event of an error in judgment, we would prefer to err on the side of caution.

Asset Analysis

Enron's audit reports from Arthur Andersen are clean. In both the 1999 and 2000 reports, however, Arthur Andersen specifically informs shareholders and the Board of Directors of the following (using identical wording for both years): "As discussed in Note 18 to the consolidated financial statements, Enron Corp. and subsidiaries changed . . . its method of accounting for certain contracts in energy trading and risk management activities in the first quarter of 1999" (1999 annual report, 40; 2000 annual report, 30). We will deal with the effects of this very significant accounting change—accounting for contracts (derivatives) in energy trading—under asset analysis.

Significant challenges face the financial analyst with regard to reported assets. Management often has considerable discretion over whether expenditures are capitalized or expensed. Decisions in this area can significantly affect profits and earnings per share, a ratio that stock market participants (including the financial news media) and Enron management (by its own admission) were particularly fixated on. We have already identified this self-declared fixation as a key risk area for Enron.

Instead of launching into an unstructured examination of Enron's financial statements, we will (to use the same term that Enron used with regard to earnings per share) "laser-focus" on the risk areas that we identified during strategy analysis and apply the six accounting analysis steps to each risk area.

The Financial Success of Dealer and Trading Activities

A major area of concern is the firm's move away from its successful core businesses into higher-risk dealer and trading activities, although this was not immediately evident to us from strategy disclosures in the firm's public filings but took some "digging" to discern. Accounting analysis may provide additional insight and either alleviate or strengthen our concerns. A related reported asset is called "assets from price risk management activities," and it was immediately apparent that a decided increase occurred in 2000, in both absolute and relative terms. The amount of this asset, with the percentage of total assets in parentheses, for each of the past five years was 1996, \$2,473 million (15%); 1997, \$2,384 million (11%); 1998, \$3,845 million (13%); 1999, \$5,134 million (15%); and 2000, \$21,006 million (32%). This dramatic increase coincided with the introduction of Enron Online, which Web-enabled Enron's trading activities. A scrutiny of the quarterly Form 10-Q filings for 2000 reveals that at the end of the first quarter the amount was \$6,567 million (18%), in the second quarter \$10,924 million (24%), and in the third quarter \$14,661 million (28%), a continual increase throughout the year.

Management explains Enron's accounting policy for this asset in footnote 1, "Summary of Significant Accounting Policies," of the 2000 annual report as follows (emphasis added by authors):

Accounting for Price Risk Management. *Enron engages in price risk management activities for both trading and non-trading purposes.* Instruments utilized in connection with trading activities are accounted for *using the mark-to-market method.* Under the mark-to-market method of accounting, forwards, swaps, options, energy transportation contracts utilized for trading activities and other instruments with third parties *are reflected at fair value and are shown as "Assets and Liabilities from Price Risk Management Activities" in the Consolidated Balance Sheet.* These activities *also include the commodity risk management component embedded in energy outsourcing contracts.* *Unrealized gains and losses from newly originated contracts, contract restructurings and the impact of price movements are recognized as "Other Revenues."* . . . The market prices used to value these transactions *reflect management's best estimate considering various factors including closing exchange and over-the-counter quotations, time value and volatility factors underlying the commitments.* (p. 36)

The question that comes to mind is: What percentage of net income is attributable to these *unrealized* gains that are included in earned revenue? As the footnote mentions, revenues from price risk management activities are not shown separately on the income statement but are unobtrusively lumped in with "Other Revenue." Nevertheless, we attempt to quantify the revenue impact of these financial instrument trading activities by appealing to the statement of cash flows and the reconciliation between accrual-based net income (which is increased by these activities) and cash generated by operating activities (which excludes revenue from these activities because the revenue is unrealized and has not been collected). After taking into consideration Enron's disclosure of significant accounting policies—"Enron engages in price risk management activities for both trading and non-trading purposes,"—we decided on a wish list of what we would like to see in the statement of cash flows.

First, under "Cash Flows from Operating Activities," we would like to see the following line items for net price risk management assets: unrealized gains (losses) on trading price risk management assets and unrealized gains on non-trading price-risk-management assets.

Second, under "Cash Flows from Investing Activities," we would like to see the aggregate amount of expenditures on the portion of net price-risk-management assets reported as noncurrent (and hence nontrading net assets, in our view as outsiders without proprietary information or management disclosure to the contrary), as well as proceeds from the sale of such noncurrent net assets.

We are disappointed on both counts. An analysis and attempt at recalculation of the single line item of disclosure on "net assets from price risk management activities" under "Cash Flows from Operating Activities" reveals that current and noncurrent net assets have been lumped together; only the net asset increase has been disclosed (note that there is a \$17 million unexplained discrepancy in 2000). Details of our calculations appear in table 5.1.

Table 5.1
Enron's Net Assets from Price-Risk-Management Activities (In Millions of U.S. Dollars)

	2000	1999	1998	1997
Current Assets	12,018	2,205	1,904	1,346
Current Liabilities	10,495	1,836	2,511	1,245
Net Current Assets	1,523	369	(607)	101
Non-Current Assets	8,988	2,929	1,941	1,038
Non-Current Liabilities	9,423	2,990	1,421	876
Net Non-Current Assets	(435)	(61)	520	162
Calculated Net Assets (Combined)	1,088	308	(87)	263
Calculated Net Change (Combined)	780	395	(350)	-
Net Change (Combined) per Cash Flow Statement*	763	395	(350)	(201)
Unexplained Difference	(17)	0	0	0

*Entire amount classified as resulting from "operating" activities as opposed to the long-term portion being classified as resulting from investing activities.

The effects of Enron's highly aggregated disclosure are first, that unrealized gains or losses in net income cannot be ascertained; and second, cash flow effects of *nontrading* risk-management activities have been excluded from "Cash Flows from Investing Activities" and diverted to the operating activities section of the cash flow statement. Enron does have nontrading activities in this regard, as evidenced by its disclosure that "Enron engages in price risk management activities for both trading and non-trading purposes." If we accept that the noncurrent net assets should be excluded from the operating section, the impact on operating cash flow would be positive, at \$708 million instead of \$350 million, for 1998; negative, at \$976 million instead of \$395 million for 1999; and negative at \$1,154 million instead of \$763 million, for 2000. Cash flows relating to investing activities would be affected by the same amounts but in the opposite direction.

The reported effects of the change in net assets from risk-management activities on operating cash flow from 1996 to 2000 are as follows (percentage impact on net income before tax is shown in parentheses): 1996, \$15 million negative (*minus* 3%); 1997, \$201 million negative (*minus* 191%); 1998, \$350 million negative (*minus* 50%); 1999, \$395 million positive (44%); and 2000, \$763 million positive (78%). Scrutiny of the quarterly Form 10-Q filings for 2000 reveals that at the end of the third quarter the negative impact on cash flow amounted to \$952 million, exceeding the net income amount of \$919

million. This switch from a negative cash-flow impact situation (1996 to 1998) to a positive situation (1999 and 2000) may be related to the adoption at the beginning of 1999 of the Emerging Issues Task Force Issue No. 98-10, "Accounting for Contracts Involved in Energy Trading and Risk Management Activities," which requires energy trading contracts (including energy transportation contracts) to be recorded at fair value on the balance sheet (mark to market). This standard gave the rubber stamp to management to use its considerable discretion as buyer, seller, and market maker in determining the value of its price-risk-management assets and liabilities. The cumulative financial effect of this accounting change on net income was not separately quantified but was aggregated in the amount of \$131 million, together with an amount relating to another accounting change made at the beginning of 1999. Taken at face value, the effect of the change does not appear to be material. The Accounting Pronouncements footnote states, "The first quarter 1999 charge was primarily related to the adoption of SOP 98-5," which requires the expensing of all startup and organization costs. However, once the new Emerging Issues standard on energy trading contracts was issued, the management of Enron was effectively given *carte blanche* on related net-asset valuations.

As discussed in the strategy analysis, Enron changed its SIC code during the last quarter of 2000, probably because of its focus on energy trading activities. This knowledge, coupled with our concerns about unrealized gains on risk-management nets assets, leads us directly into the second risk factor—management's self-declared sharp focus on earnings per share. Our concerns are heightened because management, by its own admission in the quoted accounting policy statement, largely determines the market value of these financial instruments, including energy transportation contracts, in an unregulated market. Coincidentally, in late 2000 Congress passed legislation that exempted over-the-counter derivatives from regulation after some very aggressive lobbying by Enron (see Schroeder and Ip 2001; Schroeder 2002). This market was new and largely initiated by Enron, often without externally quoted prices upon which to base asset valuations. Enron, in its capacity as the market maker, was free to effectively manage its earnings. A major concern that comes to mind is whether management is using these unrealized gains to make up for possible poor performance in other high-risk ventures, such as the asset-intensive Dabhol power plant in India, water systems, and broadband.

Even if a firm chooses to blindly follow an accounting standard, without considering the underlying business reality, the resultant financial information can be misleading. The question is this: Does the selection of the policy or estimate result in the closest portrayal of business reality, fairly presenting the underlying economic conditions? If the analyst believes that business reality is not reflected, she or he should attempt to undo distortions caused by the selection of a particular accounting policy or estimate, regardless of its institutionalized general acceptance. This notion is not new (see Palepu et al. 2000), but it gained prominence with the spate of recent accounting failures. In an

unprecedented and surprising move, a post-Enron SEC has taken this notion a step farther. In a warning by the chief accountant for the SEC's enforcement division (Liesman 2002), management and the auditors have been informed in no uncertain terms that it is possible to violate SEC laws while being in compliance with generally accepted accounting principles. Therefore, mere compliance with the rules without considering whether the results "fairly present" financial performance could lead to legal proceedings for securities fraud. It is in this light that we discuss briefly the FASB standards for derivatives, by which Enron justified its mark-to-market valuation approach.

Derivatives are initiated via legal contracts, without any immediate significant expenditure. These contracts represent legal rights and obligations, from which assets and liabilities arise. Enron to some degree highlighted this problem when during the first half of the 1990s it took the lead and incorporated mark-to-market accounting for energy-related derivative contracts and thereafter used it on an unprecedented scale. Under mark-to-market rules, assets and liabilities resulting from the legal rights and obligations of the contracts are recorded at fair market value. The determination of a fair value at which to record these rights and obligations as assets and liabilities is a major problem in accounting for markets that are largely unregulated and not well established, with no quoted prices. Enron began trading in a variety of these markets as a first-mover (for example, trading in energy-related derivatives, bandwidth, data storage, paper, and weather derivatives) and essentially caught accounting standard setters off guard. Firms like Enron were free to develop and use discretionary valuation models to value their assets and liabilities, allowing considerable management discretion. The resultant unrealized gains or losses were used to determine net income. Existing financial instruments standards had not been prepared with unregulated markets (such as those that Enron created) in mind. The latitude that Enron had, by which it acted as buyer, seller, and market maker, exacerbated this situation, regardless of whether or not it followed FASB standards. Consequently, we do not feel at all comfortable with the quality of these earnings.

From a financial analysis perspective, because of Enron's multiple roles (buyer, seller, market maker) and resultant quality of earnings concerns, we argue for the reversal of unrealized gains until such time as realization warrants recognition as revenue. In the event of a net unrealized loss, we support a transfer to the income statement, invoking the conservatism concept in accounting as justification for the disparate treatment. As we cannot determine the amount of the unrealized gains because of insufficient disclosure in the cash flow statements, we will use the cash flow numbers as reported by Enron (although we strongly suspect that these are also flawed, because noncurrent price risk net assets are treated as current and operating). However, we will adjust net income to the best of our ability to negate the effect of increases resulting from these activities. The cash flow does provide an alternative benchmark for reporting (Palepu et al. 2000, 3-13). This is the route we will take for

Enron in undoing distortions before performing our financial analysis. As a result, net income will change materially for 1999 and 2000, with a resultant decrease in earnings per share, and net assets from price risk management activities will be reduced. We acknowledge that our adjustment has limitations, in that the full amount of the increase in net assets (included in our adjustment because these amounts have not been disclosed separately on the cash flow statements) does not have an effect on net income. The effect is limited to unrealized gains, which cannot be determined because of lack of information in Enron's disclosures.

We will now proceed with an examination of the company's ventures into broadband. We analyze the MD&A and the Broadband Services business segment, which makes its debut in the 2000 annual report, although Enron had dabbled in broadband since 1998 at the very latest but had been incorporating it in other business segment disclosures. The MD&A disclosure includes the following statement: "Broadband Services is constructing . . . a nationwide fiber-optic network that consists of both fiber deployed by Enron and acquired capacity on other non-Enron networks and is managed by Enron's Broadband Operating System software. Enron is extending its market-making and risk management skills from its energy business to develop the bandwidth intermediation business" (2000 annual report, 25). The segment disclosure shows identifiable assets (\$1,313 million) and capital expenditures (\$436 million) for the 2000 fiscal year. This is a new industry, and the risk is high. In theory, this could be a very successful venture for Enron, but if a glut of fiber-optic capacity develops, Enron may have to take a hit against its asset values. This would, in turn, reduce net income. We cannot predict an outcome, but the risk is high, especially since, after three years of experimentation, broadband generated a net loss of \$60 million for the 2000 fiscal year (2000 annual report, 51).

The Maintenance of Investor Confidence and Access to Financing Resources, and Resultant Focus on Earnings per Share and Components of Other Key Financial Ratios

Assets are often components of key ratios, either as an absolute amount, or because of the key role that asset valuation plays in income determination, stemming from the relationship between assets and revenues and assets and expenses. A major concern regarding this risk area is covered in the preceding discussion on Enron's change in operating activities. However, we want to determine whether there are any other asset amounts that we need to examine more closely, after we consider the degree of risk with regard to possible asset misstatement.

To get a feel for this risk, we ask the following questions: How good is Enron's investor relations program? How does management deal with analysts? Here, we resort to external sources for answers.

We could find only a few voices of dissent in the analyst community prior to November 2001. For example, as far back as March 2001, the Reed Wasden Research team wrote: "At the risk of offending Enron's *mighty investor relations army* [emphasis added], we will attempt to paint a simplistic portrait of what we believe Enron really is" (Wasden, Ayers, and Arias 2001, 4). This firm appears to have emerged unscathed after questioning Enron's future prospects, but other dissenting analysts were not as fortunate. One of these was Chung Wu of UBS PaineWebber (Lozano 2002; Babineck 2002). Another was Daniel Scotto, a bond analyst in New York for BNP Paribas, a French securities firm (Smith 2002).

Wu sent an e-mail message to his clients on August 21, 2001, expressing concern about Enron's financial future and advising them to sell their Enron stock. He was fired the same day. This happened a week after Jeffrey Skilling resigned as Enron's chief executive officer. At the time, Enron stock was in the range of \$36, less than half of its peak earlier in the year. In a regulatory filing dated August 31, 2001, to the National Association of Securities Dealers, Wu made the following statement: "Enron management was not pleased and due to the employee stock option relationship UBS PaineWebber has with them, the pressure came from my corporate office to the branch level (Houston) to dismiss me." (For detailed newswire reports, see Lozano 2002; Babineck 2002.) UBS PaineWebber did not deny that it had sacked Chung, nor did the firm deny that the dismissal came after complaints about the e-mail from the Enron executive in charge of its stock option program (*Washington Post* March 28, 2002, A47).

Another example is that of Scotto, a thirty-year Wall Street veteran, who issued a research report to his clients on August 23, 2001, in which he lowered his recommendation on Enron from "buy" to "neutral" and suggested that Enron be used as a "source of funds" (i.e., in analyst language, "consider selling the stock to raise funds for other investments"). He followed up his written report with a conference call, recorded from the firm's trading floor, wherein he advised his clients to dump Enron securities. Shortly afterward, he was demoted, put on leave, and then terminated. BNP Paribas declined to give reporters reasons for Scotto's termination but made the statement that it "was completely unrelated to any research he wrote on any company, including Enron." Scotto, however, claims that BNP Paribas had an investment-banking relationship with Enron. (For the detailed business news report, see Smith 2002.)

Management's seemingly aggressive and intimidating manner of handling adverse analyst reports should have incensed the financial analyst community, as it impairs its independence. The Reed Wasden quote shows that analysts were well aware of the "mighty investor relations army." This behavior toward analysts does not inspire confidence in reported numbers. One has to ask the question: What is Enron trying to hide? It is in this light that we scrutinize asset balances and the related accounting policies.

The following asset balances catch our eye: first, "Investments in and advances to unconsolidated equity affiliates," which increased by 211% between 1996 and 2000, from \$1,701 million to \$5,294 million; second, "Other investments," which increased by 236%, over the same period, from \$1,626 million to \$5,459 million. A related accounting policy intensified our interest: "Investments in unconsolidated affiliates are accounted for by the equity method, except for certain investments resulting from Enron's merchant investment activities which are included at market value in 'Other Investments' in the Consolidated Balance Sheet. See Notes 4 and 9. Where acquired assets are accounted for under the equity method based on temporary control, earnings and losses are recognized only for the portion of the investment to be retained" (2000 annual report, 37). On reading footnotes 4 and 9, we decide that this is a major area of concern and that these assets will best be discussed under the Equity Accounting Analysis subsection.

Second, we would like to see more transparency on "Other" assets, classified under "Investments and Other Assets." The amounts are material—for example, \$5,459 million for 2000 and \$4,681 for 1999. Without knowing the nature of these assets, it is difficult to determine whether we would prefer to expense part or all of these assets.

***The Financial Success of International High-Risk,
Hard-Asset Ventures and Complex
Partnership and Equity Ownership Structures***

Footnote 4 (2000 annual report, 40), "Merchant Activities," shows a split between "Merchant Investments" in the amount of \$601 million (included in "Other Assets" on the balance sheet) and "Merchant Assets" of \$89 million (included in "Investments in and Advances to Unconsolidated Equity Affiliates").

The cash flow statements show that both merchant investments and merchant assets are generators of net income from operating activities, despite the fact that a large portion is included under noncurrent assets on the balance sheet. This suggests the possibility that cash flow from operations may be overstated (as was possible with net assets from price-management activities). In this regard, disclosures in the cash flow statements show how accrual-based net income is converted to cash flow from operations. In 2000, the line item "Additions and Unrealized Gains" on merchant assets and investments is deducted from net income to arrive at cash flow from operating activities, to the tune of \$1,295 million. Comparative amounts for this line item were 1999, \$827 million; 1998, \$721 million; 1997, \$308 million; and 1996, \$192 million. We have already decided to adjust net income from operations downward for unrealized gains on price-risk-management activities; a similar adjustment for "Additions and Unrealized Gains" on merchant assets and investments has a profound negative affect on net income, especially for 2000. "Other Assets" will also be decreased, for duality purposes. Although the cash

flow statement better fulfills our information requirements for merchant assets and investments than it did for net assets from risk-management activities, we are concerned about the additions and unrealized gains being aggregated and shown on a single line item. This severely hampered our ability to make accurate adjustments for unrealized gains, which may have much less of an impact on net income than we are surmising. There is a lack of disaggregated information disclosure for this line item, but due to the potential for management manipulation of these numbers, we decided to treat this line item as an unrealized gain in its entirety, as we did for net assets from risk-management activities. The potential impact is too great for us to ignore such an adjustment, and we would rather err on the side of caution. We do, however, realize that our adjustment has limitations, in that the “additions” component of the line item “Additions and Unrealized Gains” does not have an effect on net income. Our adjustment is therefore misstated by the amount of the unknown cost of these additions.

Hard-asset, high-risk ventures, such as Dabhol Power and Wessex Water, are included in unconsolidated affiliates, and as such the assets are kept off Enron’s balance sheet. This issue is dealt with under Entity Accounting Analysis.

Liability Analysis and Shareholders’ Equity Analysis

There are two types of claims against a firm’s assets: liabilities and shareholders’ equity. Equity is, by definition, a residual value. Therefore, fair valuations of assets, liabilities, revenues, and expenses automatically result in a fair residual value. Accounting questions concerning equity generally revolve around hybrid securities, interest rates used to value long-term debt, and the allocation of equity amounts between reserves, retained earnings, and capital. Some important questions concerning Enron’s liabilities are: Does the firm have a business strategy that appears to favor off-balance sheet financing to improve debt ratios? Are these significant? (see Palepu et al. 2000, 5-1 to 5-2, 5-14). We now examine liabilities and equity under each of the key risk areas.

The Financial Success of Dealer and Trading Activities

Enron’s “Accounting for Price Risk Management” is described under Asset Analysis. Just as these contracts have asset implications to capture rights, they also capture Enron’s contractual obligations. The difference between the assets and liabilities for each contract results in unrealized gains or losses, using the mark-to-market method of valuation, which has already been discussed under Asset Analysis. The resultant liabilities are shown as “*Liabilities from Price Risk Management Activities*” on the Consolidated Balance Sheet. We have already discussed the reasoning behind our decision to reverse such unrealized gains, even though the exact amount could not be determined due to incomplete information.

The Maintenance of Investor Confidence and Access to Financing Resources, and Resultant Focus on Earnings per Share and Components of Other Key Financial Ratios

Footnote 7 of the 1998 annual report (p. 55) delineates an important timeframe with regard to debt: "Enron has credit facilities with domestic and foreign banks which provide for an aggregate of \$1.67 billion in long-term committed credit and \$1.37 billion in short-term committed credit. Expiration dates of the committed facilities range from April 1999 to June 2002. . . . Certain credit facilities contain covenants which must be met to borrow funds." From this quote, it is clear that continued financial success during this window period is essential to the company's ability to maintain external financing. It provides a very strong incentive for management to maintain the ratios stipulated in the debt covenants.

In the 2000 annual report, in the MD&A (p. 27), management confirms this risk factor: "Enron is party to certain financial contracts which contain provisions for early settlement in the event of a significant market price decline . . . or if the credit ratings for Enron's secured, senior long-term debt obligations fall below investment grade. . . . Enron's continued investment grade status is critical to the success of its wholesale businesses as well as its ability to maintain adequate liquidity." According to the 1998–2000 annual reports, Enron consistently maintained its credit ratings. But the possibility of an understatement of liabilities is a key consideration, especially when favorable credit ratings are so critical to the firm's success.

To get a feel for long-term debt obligations, we summarize the disclosures on annual maturities of long-term debt outstanding for 1998 to 2000 (see table 5.2).

In the 2000 annual report (p. 41), long-term debt due during 2001 rocketed to \$2.1 billion, from \$569 the year before. The sudden escalation in the amount of this debt is a major cause for concern, especially when compared to prior year long-term debt levels. We will place particular emphasis on this risk area when we do ratio analysis in the financial analysis section.

The Financial Success of International High-Risk, Hard-Asset Ventures and Complex Partnership and Equity Ownership Structures

Unconsolidated affiliates provide management with the opportunity to understate liabilities. This topic is fully investigated in the subsection dealing with entity accounting analysis, and it is a major area of concern.

In addition, Enron entered into complex equity arrangements and commitments, and the related disclosures are confusing, to say the very least. The disclosure in the 2000 annual report illustrates the difficulties confronting an analyst:

Table 5.2
Enron's Reported Long-Term Debt Maturity Values (In Millions of U.S. Dollars)

Matures →	1999	2000	2001	2002	2003	2004	2005
1998 Report	541	413	666	182	656	N/A	N/A
1999 Report	N/A	670	569	432	494	493	N/A
2000 Report	N/A	N/A	2,112	750	852	646	1,592

In 1999, Enron entered into a Share Settlement Agreement under which Enron could be obligated, under certain conditions, to deliver additional shares of common stock or Series B Preferred Stock to Whitewing for the amount that the market price of the converted Enron common shares is less than \$28 per share. In 2000, Enron increased the strike price in the Share Settlement Agreement to \$48.55 per share in exchange for an additional capital contribution in Whitewing by third-party investors. . . . Absent certain defaults or other specified events, Enron has the option to acquire the third-party investors' interests. If Enron does not acquire the third-party investors' interests before January 2003, or earlier upon certain specified events, Whitewing may liquidate its assets and dissolve. (p. 43)

Whitewing is one of Enron's 50 percent unconsolidated equity affiliates. This is but the tip of the iceberg. A separate disclosure note reveals (2000 annual report, 42), "In 2000 and 1999, Enron sold approximately \$632 million and \$192 million, respectively, of merchant investments and other assets to Whitewing. Enron recognized no gains or losses in connection with these transactions." This is but one of many very troubling and confusing disclosures of intermingled "unconsolidated affiliate" disclosures.

Revenue Analysis

Revenue should only be recognized if Enron has provided all, or substantially all, of the goods or services to the customer and if the customer with reasonable confidence is expected to pay cash.

The Financial Success of Dealer and Trading Activities

The 2000 quarterly results show increasing and unprecedented levels of revenue for each quarter. For example, revenues for the third quarter skyrocketed from \$16.9 billion for the preceding quarter to \$30 billion, a 77 percent increase. The fourth quarter shows revenues of \$40.8 billion. A partial explanation is that unrealized gains resulting from "Assets from Price-Risk-Management

Activities” were included in “Other Revenues” on the income statements, an issue addressed as part of asset analysis. The cash-flow statements also show that merchant assets and investments generated unrealized gains. From a revenue-recognition perspective, the issue revolves around the ability to eventually collect the cash related to unrealized gains, which management recorded as revenue. We choose to exclude these gains from revenues for purposes of financial analysis.

The Maintenance of Investor Confidence and Access to Financing Resources, and Resultant Focus on Earnings per Share and Components of Other Key Financial Ratios

Management included revenues from unconsolidated equity affiliates (related parties) of \$150 million in 2000, \$674 million in 1999, \$563 million in 1998, and \$219 million in 1997. We believe that these transactions should be eliminated on consolidation, and we will deal with this issue under entity accounting analysis. However, we find an obvious contradiction and a very strong warning signal in wording that Enron uses in an explanatory small-print footnote to its reporting on “Unaffiliated Revenues” amounts: “Unaffiliated revenues include sales to unconsolidated equity affiliates” (2000 annual report, 51). Enron’s so-called unaffiliated revenues, which have shown a rampant increase, include non-arm’s length sales to affiliates. Examples of percentage holdings in these affiliates are Azurix Corp., Citrus Corp., Dabhol Power, and JEDI—all 50 percent; Jacare Electrical—51 percent; Enron Teesside—100 percent (disclosed in the 2000 annual report, 56).

The Financial Success of International High-Risk, Hard-Asset Ventures and Complex Partnership and Equity Ownership Structures

By consolidating unconsolidated equity affiliates (see Entity Accounting Analysis), we may be able to partially undo revenue distortions with regard to this risk area.

Expense Analysis

Reporting challenges related to expenses arise when resources provide benefits over multiple accounting periods (e.g., goodwill), the timing and amount of future payments are uncertain (e.g., pension benefits); it is difficult to determine a value for resources consumed (e.g., stock option compensation) and the decline in value of unused resources (e.g., asset impairments and changes in the value of financial instruments). Typically, we appeal to the matching and conservatism principles to arrive at a fair value (Palepu et al. 2000, 7-1 to 7-16).

The Financial Success of Dealer and Trading Activities

If the broadband business segment proves to be unsuccessful, it could result in a write-off of a portion, or all, of the broadband assets of \$1,313 million. The future profitability of this new business area, far removed from Enron's core area of expertise, is uncertain and risky, but we do not know enough to make any adjustments to the numbers. This possibility was discussed under the asset analysis. We also discussed unrealized losses resulting from trading in derivatives under asset analysis.

The Maintenance of Investor Confidence and Access to Financing Resources, and Resultant Focus on Earnings per Share and Components of Other Key Financial Ratios

Enron's focus on earnings per share leads us to consider the possible understatement of expenses, rather than overstatement. Specifically, we consider whether any reported assets should be expensed (e.g., goodwill and other intangibles) and whether there are expenses that have been completely omitted (e.g., stock-option remuneration). We also look for large and unexpected asset write-offs, which may indicate management reluctance to incorporate changing business conditions into accounting estimates, especially if unfavorable to earnings per share (Palepu et al. 2000, 3-12).

First, we consider "Goodwill" and "Other" assets (which are disclosed just below the goodwill line item). These are reported as follows. For Goodwill: 1996, \$0.87 billion; 1997 and 1998, \$1.9 billion; 1999, \$2.8 billion; 2000, \$3.6 billion. For Other: 1996, \$1.6 billion; 1997, \$3.7 billion; 1998, \$4.4 billion; 1999, \$4.7 billion; 2000, \$5.5 billion. These assets have increased progressively and form a substantial portion of total assets, but we have no way of estimating possible overstatements or impairments. It is unusual to see assets in the billions classified as "Other." We would like to see more disclosure on the nature of these assets.

Next, we consider employee stock option expenses. Companies are not required to include employee stock-option expenses in net-income calculations, even though the expense can be material. This expense should appear on the income statement, but the Financial Accounting Standards Board bent to intense corporate lobbying and political pressure and in 1995 released FASB Statement 123, which compromised by requesting that the expense be recorded but allowing it to be disclosed in the footnotes if the company wished, effectively allowing for overstatement of net income and earnings per share. We are not surprised that Enron chose the footnote-disclosure route. Fortunately, FASB Statement 128 requires disclosure of diluted earnings per share, which includes the effects of unexercised options. Therefore, the reported impact of unexercised stock options (an unrecorded expense) can be estimated by exam-

ining the mandatory reconciliation between basic and diluted earnings per share. The impact of including this stock option expense is a decrease in after-tax net income as follows: 2000, \$93 million; 1999, \$66 million; 1998, \$29 million; 1997, \$39 million; and 1996, \$22 million.

The Financial Success of International High-Risk, Hard-Asset Ventures and Complex Partnership and Equity Ownership Structures

The MD&A (2000 annual report, 21) mentions a \$326 million impairment charge for Azurix, a water and wastewater “unconsolidated equity affiliate” and one of Enron’s new ventures. This impairment is not separately disclosed on the face of the income statement. We cannot determine whether further impairments are likely.

By consolidating unconsolidated equity affiliates (see Entity-Accounting Analysis), we may be able to partially undo distortions with regard to this expense risk area.

Another problem we experienced is the lack of disclosure on foreign assets. We were unable to determine whether the reported value of foreign assets could be impaired.

Entity-Accounting Analysis

Entity-accounting analysis is crucial in determining reporting boundaries for financial analysis purposes. The focus is on resources that an entity controls in evaluating performance rather than on legal definitions of control. The accounting challenge is whether to aggregate the financial performance of two or more reporting entities (see Palepu et al. 2000, 8-1). Enron has a complex and confusing myriad of related unconsolidated affiliates and related parties. A convolution of financing and other arrangements, combined with bewildering disclosures, make this a difficult and troubling area to examine.

The Financial Success of International High-Risk, Hard-Asset Ventures and Complex Partnership and Equity Ownership Structures

Footnote 9 (2000 annual report, 42–43) makes warning bells go off. Enron’s unconsolidated equity affiliates are mostly 50 percent holdings. Are we to believe that a company of Enron’s size, stature, and aggressiveness does not exercise control over these affiliates? This is especially pertinent when we consider the power that Enron management appears to exert over financial analysts. In addition, Enron guarantees the performance, liabilities, and lease obligations of some these affiliates to the tune of over \$2.5 billion. Is this the action of a third party without control over these entities? Is it possible that

Enron purposely structured its holdings to be exactly at 50 percent mainly to avoid consolidation? Some of the unconsolidated affiliates even exceed the rule-of-thumb limit of 50 percent. For example, on December 31, 1998, Enron's ownership interest in one unconsolidated affiliate, Enron Teesside Operations, was 100 percent. Enron's position is that it intended to ultimately hold a voting interest of no more than 50 percent and therefore chooses not to consolidate. We beg to differ.

Asset-heavy Dabhol Power Company and Wessex Water are included in these unconsolidated affiliates, along with the JEDI and JEDI II and other partnerships. Enron states in the footnote that it has also entered into various arms-length administrative service, management, construction, supply, and operating agreements with these affiliates, but based on the percentage holdings, we discount this assertion. The footnotes include a summary balance sheet of all the affiliates combined. In our adjustments, we will use the information obtained from the financial statements and shown in table 5.3 to consolidate these affiliates. This affects not only asset balances but also liabilities, shareholders' equity, and net income for 1996 to 2000.

Table 5.3
Financial Information for Unconsolidated Equity Affiliates (In Millions of U.S. Dollars)

	2000	1999	1998	1997	1996
Investment in Affiliates	5,294	5,036	4,433	2,656	1,701
Equity in Earnings (Losses)	87	309	97	216	215
Balance Sheet					
Current Assets	5,884 ^a	3,168 ^a	2,309 ^a	3,611	2,587
Property, Plant & Equipment (net)	14,786	14,356	12,640	8,851	8,064
Other Non-Current Assets	13,485	9,459	7,176	1,089	902
Current Liabilities	4,739 ^b	4,401 ^b	3,501 ^b	1,861 ^b	2,381
Long-Term Debt	9,717 ^b	8,486 ^b	7,621 ^b	5,694 ^b	5,230
Other Non-Current Liabilities	6,148	2,402	2,016	1,295	1,139
Owners' Equity	13,551	11,694	8,987	4,701	2,803
Income Statement^c					
Operating Revenues	15,903	11,568	8,508	11,183	8,258
Operating Expenses	14,710	9,449	7,244	10,246	7,335
Net Income	586	1,857	142	336	226
Distributions Paid to Enron	137	482	87	118	68

Source: Notes to the Financial Statements in 1998, 1999, and 2000 annual reports; 1997 Form 10-K.

^aIncludes Receivables from Enron: 2000, \$410 million; 1999, \$327 million; 1998, \$196 million.

^bIncludes Payables to Enron: 2000, \$302 million; 1999, \$84 million; 1998, \$296 million; 1997, \$569 million.

^cEnron recognized revenues from transactions with unconsolidated equity affiliates: 2000, \$510 million; 1999, \$674 million; 1998, \$563 million; 1997, \$219 million.

Another footnote of interest, “Related Party Transactions,” appears for the first time in the 1999 annual report (p. 59). A major concern is that these transactions may lack the objectivity of the free market and consequently have the potential to materially distort financial information. Extracts from Enron’s footnote include: “In June 1999, Enron entered into a series of transactions involving a third party and LJM Cayman. . . . A senior officer of Enron is the managing member of LJM’s general partner”; “An officer of Enron has invested in the limited partner of JEDI and from time to time acts as agent on behalf of the limited partner’s management.” The thirty-seven lines of related party disclosure in 1999 increase to ninety lines in 2000, indicating increased activity in this area. The proxy statement for the 2001 shareholders’ meeting (available around the time of the release of the 2000 annual report) identifies the senior official as Andrew Fastow, Enron’s chief financial officer. The limited partner is unknown. The footnote goes on to describe some of the related party transactions and discloses pretax gains for Enron of approximately \$16 million, which is not material. However, in 2000, the related party footnote more than doubles in length (2000 annual report, 48–49). It starts as follows: “In 2000 and 1999, Enron entered into transactions with limited partnerships (the Related Party) whose general partner’s managing partner is a senior official of Enron.” The pretax effects on net income from transactions with these partnerships appear to be in excess of \$550 million. This is a substantial portion of Enron’s pretax earnings of \$1,413. This raises serious questions about the quality of earnings. Ideally, our consolidation adjustments for unconsolidated affiliates will adjust for these transactions, but we are not given enough information to be completely confident.

Consolidation of these unconsolidated affiliates increases Enron’s reported debt equity ratio at December 31, 2000, by almost 40 percent, which could result in violation of debt covenants. This ratio will be discussed in more detail when we perform the detailed financial analysis.

Additional Red flags

In addition to the concerns already raised, we review the relationships between Enron’s reported net income and cash flow from operating activities and its reported net income before taxes and taxable income.

Table 5.4 clearly shows large and inconsistent fluctuations between net income and operating cash flow (especially in 2000), as well as enormous differences in reported net income (before taxes) and taxable income. This is an indication that quality of earnings may not be high. In particular, the large gap between 2000 net income of \$979 million and cash generated by operations of \$4,779 requires more explanation. Is it possible that cash flow from investing activities was diverted to cash flow from operating activities? We have already put forth an argument for this in regard to noncurrent price-risk-management activities.

Table 5.4
Enron's Relationships between Income, Cash Flows, and Taxes (U.S. Dollar
Amounts in Millions)

	1996	1997	1998	1999	2000
1. Net Income	\$584	\$105*	\$703	\$893	\$979
Cash Flow from Operations	\$884	\$211	\$1,640	\$1,228	\$4,779
% Net Income to Cash Flow	69%	50%	43%	73%	15%
2. Income before Income Taxes	\$855	\$15*	\$878	\$1,128	\$1,413
Tax Payable on Income	64	84	88	83	227
% Tax Payable	7.5%	560%	10.1%	7.4%	16.1%
% Deferred Tax	24.2%	(1160%)	9.9%	1.8%	14.6%
% Effective Tax	31.7%	(600%)	20%	9.2%	30.7%

*Includes unusual nonrecurring contract restructuring charge of \$675 million.

We also scrutinize the 1998 to 2000 annual reports for evidence of large fourth quarter fluctuations, as annual reports are audited, whereas quarterly reports are (normally) merely reviewed (Palepu et al. 2000, 3-12). Management could make adjustments in the fourth quarter to satisfy the external auditors; this would heighten our concern about the credibility of the numbers. We do notice an anomaly during the fourth quarter of 2000. Revenues increased by 36 percent over the third quarter, and yet net income decreased by 79 percent. We now feel even more comfortable with our decision to make adjustments to revenues.

Undoing Perceived Accounting Distortions

Before proceeding to financial analysis, we will undo accounting distortions as we believe warranted, based on our accounting analysis interpretations. We had additional concerns, but we do not have enough information to quantify and adjust for them. The adjustments we decided on for financial analysis purposes are as follows:

Possible unrealized gains from price risk management activities (included in "Other Revenues" on the income statement): Restate revenues (and net income before tax) for 1999 and 2000, and reduce Retained Earnings. Income before tax decreases materially as follows: 2000, \$763 million; and 1999, \$395 million. "Assets from price risk management activities" decreases as well, to complete the double entry. We also adjust for deferred taxation at the statutory federal income tax rate.

Possible unrealized gains on merchant assets and investments: Reduce revenues (and net income before tax) and "Other Assets" as follows: 2000, \$1,295 million; 1999, \$827 million; 1998, \$721 million; 1997, \$308 million; and 1996, \$192 million. We also adjust for deferred taxation at the statutory federal income tax rate.

Adjustment for impact of stock option expense as a decrease in after-tax net income as follows: 2000, \$93 million; 1999, \$66 million; 1998, \$29 million; 1997, \$39 million; and 1996, \$22 million.

Consolidate unconsolidated affiliates as best we can with the incomplete information available to us (see table 5.3). Our consolidated financial information is subject to the following limitations: we have only aggregated amounts for all affiliates; we do not have individual affiliate ownership interest percentages, acquisition dates, amounts, and preacquisition equity information; and we do not have the breakdown of revenues and expenses that are not operating revenues/expenses and cannot split these expenses between interest, income tax, and other expenses or revenues. Because of the above limitations, assets may be understated, because we could not determine at-acquisition goodwill. We achieve duality by adjusting the reported amount for Minority Interests.

FINANCIAL ANALYSIS

Overview of Financial Analysis

The purpose of financial analysis is to assess the performance of the firm. We use two tools for this purpose: ratio analysis and cash flow analysis. In ratio analysis, we determine how selected financial statement line items relate to each other, and we assess the firm's profitability. In cash flow analysis, we analyze liquidity and evaluate cash flows from operating, investing, and financing activities (Palepu et al. 2000, 9-1).

Our financial analysis is somewhat limited by a lack of information on the unconsolidated affiliates. For example, we do not have the details of interest expense, income tax expense, and cash flow for these affiliates. Therefore, we could not calculate the ratios that require this information (e.g., Earnings before Income Tax margins), and consequently we could not use the Palepu et al. (2000, 9-1 to 9-29) financial analysis model in its entirety. Although our financial analysis may not be as comprehensive as we would like it to be, we believe that the key ratios that we could calculate provide us with enough information to make an informed decision about Enron's financial results and condition.

Ratio Analysis

The ratios that we use for our personal decision-making purposes are summarized in table 5.5. These calculations are based the adjusted amounts that we calculated, not on Enron's reported amounts. Where relevant, we use the average of the beginning and ending balances for assets, liabilities, and shareholders' equity in our ratio calculations. The only exception to this is for 1996, because we do not have adjusted amounts for 1995.

The starting point for analyzing a firm's profitability is return on equity. ROE indicates how well management has used shareholders' funding to generate returns. On average, over long periods, large public U.S. firms have tradi-

Table 5.5
Enron Ratio Analysis after Adjustments to Reported Amounts

	1996	1997	1998	1999	2000
Return on Equity	12.2%	-3%	3.5%	0.4%	-4.9%
Return on Assets	1.7%	-0.5%	0.5%	0.1%	-0.6%
Financial Leverage	7.2	6.5	6.6	6.6	7.9
Net Profit Margin	2%	-0.4%	0.5%	0.1%	-0.4%
Asset Turnover	0.8	1.1	1.0	1.0	1.6
Gross Profit Margin	6.5%	4.1%	4.9%	4.1%	0.8%
Basic EPS	0.86	-0.28	0.29	-0.05	-0.73
Net PP&E Turnover	1.4	1.9	1.9	2.1	4.4
Current Ratio	1.1	1.4	0.9	0.9	1.1
Debt Equity Ratio	5.7	4.5	5.0	4.2	7.2

tionally generated ROEs of 11 to 13 percent (Palepu et al. 2000, 9-3). Enron's ROEs are: 2000, *minus* 4.6 percent; 1999, 0.4 percent; 1998, 3.2 percent; 1997, *minus* 2.5 percent; and 1996, 12.2 percent. The return for 1996 is the only one that is within the normal range. The subsequent years (1997 to 2000) are well below this range, with 2000 being the worst year by far. Problems with overall profitability appear to surface as early as 1997. A review of a Reed Wasden Research publication (Wasden et al. 2001, 2-8) shows that Enron's ROEs (even the preadjustment ROE) fall far short of those of its comparable peers—AES, Calpine, Constellation, Duke, Dynegy, TXU, and Williams Companies. For example, peer 2000 ROEs were 17.21 percent, 20.21 percent, 10.6 percent, 13.5 percent, 19.29 percent, 11.3 percent, and 9.14 percent, respectively. Even Enron's preadjustment ROE of 7 percent is the lowest for this group. Yet, as the report indicates (Wasden et al. 2001, 2), Enron was trading at a substantial valuation premium over its peers.

A further decomposition of ROE can be done, into return on assets or ROA (*Net Income/Average Assets*) to determine how profitably assets have been employed and financial leverage (*Average Assets/Average Shareholders' Equity*), which shows how big the firm's asset base is relative to shareholder investment. Enron's ROAs are 2000, *minus* 0.5 percent; 1999, 0.06 percent; 1998, 0.4 percent; 1997, *minus* 0.4 percent; and 1996, 1.7 percent. An already low ROA declined sharply from 1996 to 1997 and has remained at extremely low or negative levels. Ratios for the peer group ranged between 2.45 and 5.37 for the 2000 fiscal year.

Financial leverage ratios, which show how many dollars of assets the firm deploys for each dollar of shareholder investment, were fairly constant, except for the increase shown during the 2000 fiscal year: 2000, 9.3; 1999, 6.2; 1998, 7.1; 1997, 6.1; 1996, 7.2. The main problem appears to be with the ROA factor of ROE.

ROA can be further decomposed into *Net Income/Sales* multiplied by *Sales/Average Assets*, the net profit margin and asset turnover ratios, respectively (see table 5.5). Enron's profit margins are dismal, dropping from 2 percent in 1996 to -0.4 percent in 1997 and 2000. The two positive returns of 0.5 percent and 0.1 percent in 1998 and 1999 are well below those of six of Enron's seven peers. Comparative peer ratios for 2000 were: 9.58 percent, 16.32 percent, 8.9 percent, 3.6 percent, 1.70 percent, 4.78 percent, and 5.19 percent (Wasden et al. 2001, 8). The asset turnover ratio appears to be reasonable, given the heavy asset investment requirements that are characteristic of energy companies. Once again, profitability appears to be problematic. Gross profit margins (calculated with limited information as follow: $[\text{Operating Revenues} - \text{Operating Costs and Expenses}]/\text{Operating Revenues}$) indicate a problem in 2000. The ratios remained fairly constant from 1997 to 1999 but then dropped from 4.1 percent in 1999 to 0.8 percent in 2000, despite an increase of 129 percent in the amount of operating revenue from 1999 to 2000. In summary, we are concerned about Enron's operating management. Restated earnings per share strongly reinforce our concerns (1997, from 0.16 to *negative* 0.28; 1998, from 1.07 to 0.29; 1999, from 1.17 to *negative* 0.05; and 2000, from 1.22 to *negative* 0.73). How do these deteriorating profit ratios justify the increase in stock price of nearly 90 percent in 2000?

With regard to long-term asset management, the only ratio that we could calculate was the property, plant & equipment (PP&E) turnover ratio ($\text{Sales}/\text{Average Net PP\&E}$), which shows the efficiency with which PP&E was used. The only major fluctuation that we noted was the increase in this ratio from 2.1 in 1999 to 4.4 in 2000, a result of the dramatic increase in operating revenues in 2000, without a comparable increase in PP&E. As previously discussed, we opine that the 2000 revenues are of questionable quality.

Finally, we evaluate financial management. Enron's current ratio ($\text{current assets}/\text{current liabilities}$) appears to be consistently low, ranging between 0.9 and 1.4 for 1996 to 2000. From a debt and long-term solvency perspective, our concerns center round the vastly deteriorating debt equity ratio in 2000. Our restated consolidated amounts indicate an increase in the debt equity ratio from 4.2 in 1999 to 7.2 in 2000. Also, reported debt/equity and restated debt/equity showed a deterioration of close to 40 percent. This, along with earnings management concerns, does not inspire investment confidence.

However, we will analyze Enron's cash flow numbers before reaching to a final conclusion.

Cash Flow Analysis

We do not have the required unconsolidated equity information to adjust Enron's reported cash-flow information. Therefore, we will perform certain aspects of cash-flow analysis based on reported amounts. We are particularly interested in the large gap between Enron's reported net income (\$979 mil-

lion) and cash flow from operating activities (\$4,779 million) for the 2000 fiscal year, a difference of \$3.8 billion. In contrast, the difference for 1999 was a mere \$335 million. Also, net cash from operating activities increased by \$3,551, or 289 percent, in 2000. Enron's management explains this enormous difference as "primarily reflecting decreases in working capital, positive operating results and a receipt of cash associated with the assumption of a contractual obligation" (2000 annual report, 26). Our concern is that cash flow from investing activities (e.g., sale of investment assets) may have been diverted to cash flow from operating activities. Proceeds from the sale of merchant assets and investments are recorded at \$1,838 million. We also notice an amount of \$1,113 million cash inflow, described as "Other operating activities." The comparative amount for 1999 was a mere \$174 million. Is this the contractual obligation of which management briefly makes mention? What is the nature of this obligation? Should this obligation possibly be better classified as a financing activity? We do not have the answers to these questions, but we do not feel comfortable with the cash flow disclosures. We would like to see more of an explanation from management, because of the materiality of the difference between net income and cash flow from operating activities. If this business generated this much in cash from operations, why is the current ratio so low and the debt equity ratio so high at the end of 2000?

CONCLUSION

Based on the foregoing analyses, we would not recommend this stock. From 1997 onwards, our analyses indicate reporting and performance problems. We have major concerns about profitability and debt levels.

Enron throws an abundance of information at financial analysts in its Form 10-K filings (which are generally in excess of 200 pages). The language is not always clear; it can be downright confusing, even to accounting experts—a major red flag in and of itself. The quantity of information makes the analyst's job time consuming and tedious, effectively drowning the analyst in paper, and yet essential information (e.g., separate disclosures of unrealized gains on trading activities) is not available. Nonetheless, this does not excuse those analysts who overwhelmingly would not see the woods for the trees and who continued recommending to clients that they buy or hold Enron stock.

Our investigation shows that the red flags were plentiful, and the situation was aggravated by the apparent disdain (judging by incidents reported in the news media) with which Enron's top management dealt with financial analysts. Coupled with the results of our accounting and financial analyses, we should be very concerned about the competence, independence, and objectivity of financial analysts who continued to recommend this stock. This raises the question of whether these analysts were remiss in the discharge of their fiduciary duties.

We posit that financial analysts may have been buying into the mindset of financial management, if one believes that the pre-Enron CFO literature re-

flects what was happening within financial management circles. When reviewing this literature, bear in mind that the purpose of financial reporting is to reflect underlying business reality so that external users can make informed economic decisions. We conclude this chapter with examples from this literature, which was freely available to financial analysts.

Ronald Fink, a senior editor of *CFO Magazine*, wrote about Enron's substantial need for capital in June 1999: "But conventional financing techniques to exploit the industry's current and potential size would jeopardize the BBB+ credit rating Enron earns. . . . The financial balancing act that this situation requires has turned Enron into a master of creative financing. . . . Enron does not consolidate a number of highly leveraged subsidiaries in which it owns—or plans to own—no more than 50 percent of the voting stock. Under current practice, Enron can use the equity method of treating these subsidiaries' results, which keeps their debt and assets off Enron's own books." The article goes on to describe the "creative financing" that Fastow used to keep some \$10 billion in long-term debt and other liabilities off Enron's balance sheet. The writer concludes: "No wonder Fastow goes to great lengths to convince financial analysts that such nonrecourse debt shouldn't be consolidated, regardless of FASB's position." A second article appears in the same publication in October 1999 (Banham 1999), singing Fastow's praises for "walking the tightrope" of creative financing: "Fastow's expert balancing act, in fact, has earned him this year's CFO Excellence Award for Capital Structure Management." The very acts that resulted in this Excellence Award are contrary to the purpose of financial accounting, which is to help external decision makers make informed decisions about the economic activities of the firm.¹

NOTE

1. Enron's employee evaluation/incentive system that provided high rewards for good short-term performance reports and termination for the bottom 15 percent "performers" certainly created a fertile environment for accounting manipulation and distorted reports (Cruver 2002). This fact must be taken into consideration for any firm having or considering such a system.

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