2003

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ENRON: A FINANCIAL REPORTING FAILURE?

ANTHONY H. CATANACH, JR.* & SHELLEY RHoades-CATANACH**

I. INTRODUCTION

The dramatic collapse of Enron Corporation, following a series of disclosures of accounting improprieties, has led many to question the soundness of current accounting and financial reporting standards. Within Enron's reported financial statements, including related note disclosures, were there signs of accounting and economic issues? Should an astute investor or analyst have been suspicious of Enron's reported results? How did management hide debt, inflate profits and support a stock price that considerably overstated the firm's value? Did Enron incorrectly apply existing standards, or do these standards permit the accounting "gimmickry" that allowed Enron to obscure its true financial position? This Article attempts to answer these questions by examining the two financial reporting issues that contributed to Enron's most significant accounting restatements: the consolidation of special purpose entities (SPEs) and the issuance of stock for notes receivable.

First, we examine Enron's financial performance during the ten years prior to its declaration of bankruptcy. This analysis reveals increasing variability of key performance measures from 1997 through 2000, a time during which Enron's stock price generally outperformed the NASDAQ composite. Additionally, using metrics developed by Messod D. Beneish to measure the likelihood of earnings management, we find a high probability of earnings manipulation in Enron's financial statements for several years preceding its bankruptcy. These results are particularly surprising because they are based on Enron's reported financial results, which we now know were erroneous. This investigation suggests that considerable evidence existed that should have lead analysts, sophisticated investors and regulators to question Enron's financial results and soaring stock price.

Next, we briefly describe the accounting and financial reporting standards applicable to Enron's consolidation of SPEs and issuance of stock.

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for notes receivable. We specifically discuss three major sets of transactions in which Enron created SPEs: to hold assets, to borrow money and to hedge fluctuations in the value of its investment activities. In each case, we identify whether Enron’s treatment of these SPEs complied with or failed to meet the requirements of existing accounting principles. We also discuss the impact of these transactions on Enron’s true financial position and how its reporting of these transactions obscured their economic substance. Several of these transactions involved Enron exchanging its own stock for notes receivable from the SPEs. The financial reporting implications of these transactions are also discussed. We conclude with a summary of important issues for consideration by those setting accounting standards.

II. Enron’s Financial Performance: What Did the Market See?


Prior to its collapse in late 2001, Enron was perceived by most analysts and investors as a company that could do no wrong. The market considered Enron’s management talented and aggressive, and its business model cutting edge and innovative. Investor demand for the company’s stock soared, pushing its stock price from almost seven dollars per share in 1990 to over eighty-three dollars per share a decade later. As Table 1 indicates, much of the stock price increase actually occurred between October 1997 and September 2000. In fact, for all of 2000, Enron’s stock even outperformed the NASDAQ composite index, which began to stumble as technology retreated.

What did the market see that caused it to value Enron so highly? The company’s annual financial statements may have fueled investor passions to own Enron stock. For example, Enron’s reported earnings increased eightfold between 1997 and 2000. As Table 2 illustrates, reported operating performance in the last four years of the decade was a marked improvement over the preceding six years. However, Table 2 also highlights an interesting development in Enron’s performance measures. Four financial indicators are commonly used to evaluate corporate performance: income before extraordinary items (IBE), cash flow from operations (CFO), comprehensive income (CI) and free cash flow (FCF). According to Table 2, these measures generally moved in tandem between 1991 and 1996 and within a narrow range. But in 1997, these four indicators not only diverged dramatically, but also appear to have increased in volatility. Could this “uncoupling” have been a signal of the accounting irregularities which we now know began in 1997? Did the financial statements filed with the Securities and Exchange Commission (SEC) (including the admittedly erroneous reports made between 1997 and 2000) provide any warning of the catastrophe that was about to befall investors? More importantly, how did well-educated and experienced analysts miss such a signal?
Analysts use a variety of models and techniques to evaluate operational performance in business entities. Once such tool is the Dupont System of Financial Analysis. This simple but robust framework relies primarily on three ratios (asset turnover, profit margin and leverage) to help an analyst see how a firm’s decisions and activities over the course of an accounting period interact to produce an overall return to the firm’s shareholders (i.e., return on equity). Increases in all three of these ratios suggest improved management of a firm’s assets, profit margins and financing activities, which should contribute to an overall rise in return on equity. When applied to Enron’s reported financial statement data from 1991 to 2000, Dupont System analysis provides additional insight into the company’s troubled operations. As Table 3 indicates, subsequent to the 1997 “uncoupling” noted above, Enron’s return on equity plummeted into single digits from its pre-1997 levels. Although both asset turnover and leverage ratios staged modest recoveries between 1997 and 2000, the increases were not enough to overcome a precipitous decline in the profit margin ratio which ultimately drove return on equity down. The declines

Table 2
ENRON OPERATING PERFORMANCE 1991-2000

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<td>IBE</td>
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<td>CI</td>
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Source: Research Insight supplemented with data from 10-K annual filings.
IBE—Income before extraordinary items and discontinued operations.
CFO—Cash flow from operations.
CI—Comprehensive income defined as the change in owners’ equity plus dividends net of capital contributions.
FCF—Free cash flow is measured by cash flow from operations (CFO) minus net capital expenditures plus net interest payments.
Note: The four performance measures shown in Table 2 are commonly used by analysts to evaluate a company’s operations. The graph shows that all four performance indicators closely tracked with each other between 1991 and 1996. In 1997, however, the four measures “uncoupled,” with comprehensive income and free cash flow actually diverging. This “uncoupling” provided an “early warning” of the “earnings games” that Enron had begun to play in 1997. The increased variation among the four performance measures continued through 2000.

in profit margin are particularly noteworthy as they occurred during a period of significant stock price appreciation. Could profit pressures have created incentives for Enron’s managers to engage in the type of behavior which we now know occurred? Why did so few analysts question the obvious disparity between Enron’s operating performance and its stock price valuation? Were Enron’s financial statements and the related accounting really all that bad if they raised this many questions?

B. The Potential for Earnings Management

Many consider Enron a textbook case of earnings management. Charles W. Mulford and Eugene E. Comiskey define earnings management as the “active manipulation of accounting results for the purpose of
Creating an altered impression of business performance.\(^3\) Clearly, Enron was guilty at some level of such behavior, but were there no signals to alert the market? In 1987, the Treadway Commission provided specific guidelines for assessing the risk of fraudulent financial reporting.\(^4\) The Commission noted three primary influences on financial reporting: performance pressures, oversight issues and changing structural conditions.\(^5\) Enron displayed troubling symptoms in all three categories. For example, Enron was a high visibility company with significant contractual incentives (e.g., debt and stock options) that asserted enormous pressure on management to sustain and improve operating performance. With respect to oversight, the company employed complex ownership and financial structures to execute its business strategy, which made it difficult for analysts, auditors and regulators to effectively monitor its operations. Fi-

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5. See id.
nally, Enron was impacted by numerous changes in its business environment that ultimately affected its reporting. The company's innovativeness carried it into new industries that employed new technologies, required new financing techniques and ultimately pushed original accounting rules to their limits. The decline in the technology sector in the late 1990s also negatively affected the company's performance, providing additional incentives for management to engage in earnings manipulation.

Qualitative factors, however, such as those proposed by the Treadway Commission are often difficult to apply. Moreover, qualitative arguments are likely to fall on deaf ears, particularly in markets as euphoric as those depicted in Table 1. Consequently, quantitative data must supplement qualitative arguments when evaluating the potential for earnings management. Historically, analysts have been content to compare balances and ratios between years to evaluate the quality of reported financial results. Over the last decade, however, researchers have developed more sophisticated models to assess the probability of earnings manipulation. One such technique is the Beneish probit analysis model. This is a user friendly, low cost approach yielding an earnings manipulation index that is easily computed as a linear combination of financial variables and converted to a "probability of manipulation." Beneish used several measures to capture distortions in financial statement data in order to assess the probability of detection. These are based on the financial statement analysis literature and are described in Table 4.

Table 5 compares Enron's index data for the period 1995 through 2000 with that of Generally Accepted Accounting Principles (GAAP) violating and control firms used in Beneish. The gross margin index consistently exceeds that of the GAAP violators between 1996 and 2000, reflecting declining margins that may have created performance pressures on management. Between 1995 and 1999, Enron's asset quality index also surpassed that reported by Beneish's GAAP violators. For four years, the index was greater than one, suggesting a growing tendency to defer costs. Similarly, the depreciation index exceeded one in 1995, 1997 and 2000. The sales growth index also signaled the potential for manipulation in four of the six years examined. When computed, the probability of ma-

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6. See Beneish, supra note 1, at 288-89 (describing use of probit estimations as model to assess earnings manipulation).
7. See id. Beneish uses the probit model to assess the probability that a company manipulated its earnings. See id. at 289-90. To develop the model, he examined sixty-four firms known to have manipulated their financial statements through Generally Accepted Accounting Principle (GAAP) violations between 1987 and 1993. See id. at 274-82. This sample of firms was then compared to firms that resembled the violators (large discretionary accruals and increasing sales), but who had not been identified as having violated GAAP in their financial statements. See id. at 278-82.
8. See id. at 274-82.
9. See id. at 276-81.
10. See id. at 285-86.
Table 4
Beneish (1997) Model Variable Definitions

**Days Sales in Receivables Index**: Measures if changes in receivables are consistent with changes in sales. Increases suggest that either (1) more and more sales are made on credit rather than cash, or (2) a company is experiencing collection problems.

**Gross Margin Index**: Measures whether gross margins (sales less cost of goods sold) have declined, suggesting negative future firm prospects. Increases in this index signal declining margins.

**Asset Quality Index**: Measures changes in quality of a company's assets (e.g., tangible v. intangible assets). Increases in this index (i.e., a decline in asset quality) suggest a growing tendency to capitalize intangibles or expenses, thus deferring costs.

**Depreciation Index**: Measures the change in the rate of depreciation. Increases in this index suggest company efforts to slow depreciation to increase earnings.

**SG&A Index**: Measures sales, general and administrative expenses (SG&A) relative to sales. Increases suggest loss of managerial cost control or unusual sales efforts. However, significant declines may also signal manipulation if sales are materially distorted.

**Total Accruals to Total Sales**: Measures the extent to which earnings are cash based. High increases in non-cash working capital may reflect possible manipulation.

**Sales Growth Index**: Measures the growth in sales between periods. The index may reflect earnings manipulation because research suggests that high-growth firm stock prices may be sensitive to news that may give the impression that growth is slowing.

**Abnormal Return**: Companies that underperform their peer group (e.g., declining stock prices) have incentives to violate GAAP. This measure quantifies the performance difference (size adjusted return) of Enron with its peer group of companies.

**Leverage Index**: Measures the company's total debt relative to assets at the beginning of the fiscal year. High values may identify companies whose managers have incentives to manipulate earnings to avoid debt covenant violations.

**Probability of Manipulation**: Using coefficients from the Beneish (1997) probit analysis, an earnings manipulation index is computed. The index is then converted into a probability of manipulation using a standard normal distribution table. The median estimated probability of manipulation of GAAP violation from the model was 0.095 and 0.011 for control firms.

*This measure has an expected value of 1.0 reflecting the assumption that relationships between certain financial statement items remain constant over time.
EARNINGS MANIPULATION INDICATORS FROM BENEISH (1997)

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<tbody>
<tr>
<td>Days Sales in Receivables Index</td>
<td>1.644*</td>
<td>0.989</td>
<td>0.625</td>
<td>0.872</td>
<td>0.955</td>
<td>1.376*</td>
<td>1.269</td>
<td>1.199</td>
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<tr>
<td>Gross Margin Index</td>
<td>1.027</td>
<td>1.263*</td>
<td>1.447*</td>
<td>2.015*</td>
<td>1.169*</td>
<td>2.143*</td>
<td>1.042</td>
<td>1.004</td>
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<tr>
<td>Asset Quality Index</td>
<td>0.992*</td>
<td>1.136*</td>
<td>1.308*</td>
<td>1.062*</td>
<td>1.064*</td>
<td>0.771</td>
<td>0.957</td>
<td>0.807</td>
</tr>
<tr>
<td>Depreciation Index</td>
<td>1.039*</td>
<td>0.946</td>
<td>1.017*</td>
<td>0.852</td>
<td>0.956</td>
<td>1.109*</td>
<td>0.981</td>
<td>1.021</td>
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<tr>
<td>SG&amp;A Index</td>
<td>1.059*</td>
<td>0.806</td>
<td>0.648</td>
<td>1.084*</td>
<td>1.008*</td>
<td>0.416*</td>
<td>0.997</td>
<td>0.981</td>
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<tr>
<td>Total Accruals to Total Assets</td>
<td>0.010</td>
<td>-0.039</td>
<td>-0.005</td>
<td>-0.040</td>
<td>0.027</td>
<td>0.001</td>
<td>0.204</td>
<td>0.441</td>
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<tr>
<td>Sales Growth Index</td>
<td>1.022</td>
<td>1.446*</td>
<td>1.525*</td>
<td>1.541*</td>
<td>1.128*</td>
<td>2.512*</td>
<td>1.431</td>
<td>1.379</td>
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<tr>
<td>Abnormal Return</td>
<td>0.232</td>
<td>-1.337*</td>
<td>0.102</td>
<td>0.742</td>
<td>-0.534*</td>
<td>-1.271*</td>
<td>-0.325</td>
<td>0.011</td>
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<tr>
<td>Leverage Index</td>
<td>0.426</td>
<td>0.415</td>
<td>0.437</td>
<td>0.455</td>
<td>0.458</td>
<td>0.416</td>
<td>0.564</td>
<td>0.500</td>
</tr>
<tr>
<td>Probability of Manipulation</td>
<td>0.018</td>
<td>0.257**</td>
<td>0.035</td>
<td>0.024</td>
<td>0.087</td>
<td>0.392**</td>
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Note: The first five ratios (days sales in receivables, gross margin, asset quality, depreciation and SG&A) all have an expected value of 1.0 reflecting the assumption that relationships between certain financial statement items should remain constant over time. All of the indexes (excluding total accruals to total assets and abnormal return) are constructed with the expectation of being positively related to the probability of manipulation.

* See Table 3 for index definitions.
* These are median measure values for the GAAP violators in Beneish (1997). They include 64 firms known, during the period 1987-1993, to have manipulated their financial statements through violations of GAAP.
* Median measures for a sample of firms in Beneish (1997) that resemble the GAAP violators but that were not identified as having violated GAAP in their financial statements.
* Ratio indicates possible earnings manipulation when compared to Beneish (1997) GAAP violator median ratios or historical trend for the company.
** Probability of manipulation exceeds the median found for Beneish (1997) GAAP Violators (0.095), suggesting possible earnings manipulation in the year indicated.

nipulation was quite high in 1996 and 2000 (over twenty-five percent).\(^{11}\) Thus, Enron’s reported numbers appear to have provided ample warning to the potential for earnings management. These findings suggest that Enron’s major problem may not have been in the reporting of numbers, but rather in the lack of oversight that should have been provided by analysts, auditors, institutional investors and regulators. Nevertheless, Table 5 clearly indicates that Enron’s numbers were suspect. The next two sections shed light on the extent of the major, non-subjective accounting ir-

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\(^{11}\) The median estimated probability of GAAP violators in the Beneish model was 9.5 percent and 1.1 percent for control firms. See id. at 291. Selecting the appropriate cutoff point, however, depends on the analyst’s purpose. For example, Beneish found that using a probability cutoff of 2.94 percent resulted in the correct classification of eighty-three percent of GAAP violators in his sample. See id. Conversely, using an 11.72 percent probability cutoff resulted in only correctly classifying forty-five percent of GAAP violators. See id.
regularities that impacted Enron’s financial performance subsequent to 1996.

III. The Accounting and Financial Reporting Rules

Many of the accounting and financial reporting issues related to Enron deal with the treatment of SPEs. SPEs may take the legal form of a trust, partnership or corporation, and are established for a specific purpose or a specific business activity, typically for the benefit of a single company (often referred to as the SPE’s sponsor). The SPE’s activities are typically limited in scope, often to a single activity such as leasing, securitization, hedging, research and development or reinsurance. These activities are often predetermined by the documents creating the entity or by contracts between the parties involved.

A. Consolidation Rules

The American Institute of Certified Public Accountants’ Accounting Research Bulletin No. 51 (ARB 51) provides general rules for combining the financial results of related entities. ARB 51 states that consolidated financial statements are “usually necessary for a fair presentation when one of the companies in the group directly or indirectly has a controlling financial interest in the other companies.” ARB 51 defines a controlling financial interest as “a majority voting interest.” Thus, a company and any entity in which that company has greater than fifty percent voting control would file consolidated financial statements reflecting the assets, liabilities, revenues and expenses of each member of the consolidated group.

Application of ARB 51 to SPEs is problematic in many cases because the parties involved in an SPE may not control its activities through voting equity interests. For example, the activities of an SPE formed as a trust are controlled by the trust document under the direction of a trustee. Beneficiaries of the trust have no voting rights or control over trust activities. In an SPE formed as a partnership, limited partners are prohibited from participating in partnership management; activities are directed by a general partner or partners, subject to the terms of the partnership agreement.

During the last decade, the Financial Accounting Standards Board (FASB) has considered the treatment of SPEs used in particular activities but has not promulgated general guidance regarding when SPEs should be consolidated for financial reporting purposes. The FASB’s Emerging Issues Task Force (EITF) issued regulatory opinion EITF 90-15 to address

13. Id. § 1.
14. Id. § 2.
the use of SPEs in leasing transactions. Among other factors, EITF 90-15 indicated that an SPE lessor should be consolidated with a lessee when “[t]he owner(s) of record of the SPE has not made an initial substantive residual equity capital investment that is at risk during the entire term of the lease.” In applying this test, the Task Force indicated that three percent was the minimum acceptable investment by owners other than the lessee. Although EITF 90-15 focused on leasing transactions, the staff of the SEC in its comments to the EITF indicated that the conditions set forth in EITF 90-15 might be “useful in evaluating other transactions involving SPEs.” Thus, EITF 90-15 provides the underlying authority by which Enron and many other corporations structured SPEs to avoid consolidation by obtaining three percent outside investment.

B. Equity Method of Accounting

When an SPE is not consolidated with another entity, investments in the SPE are recorded using the equity method of accounting under the Accounting Principles Board Opinion No. 18 (APB 18). In addition, transactions between the SPE and its investors are recorded in the financial statements as if between independent parties.

Under APB 18, the equity method of accounting is appropriate when an investor exercises “significant influence over operating and financial policies of an investee even though the investor holds 50% or less of the voting stock.” Under the equity method of accounting, the investor records its initial investment in the investee at cost and the carrying amount of the investment is adjusted to recognize the investor’s share of the investee’s earnings or losses after the date of the investment. The investment is shown on the investor’s balance sheet as a single amount; the investor’s share of earnings and losses from the investment is shown on its income statement as a single amount.

C. Issuance of Stock for Notes

Many of Enron’s SPEs held Enron stock. In some cases, stock was issued by the corporation to the SPE in exchange for notes. The regula-

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16. See id.
17. See id.
18. Id.
20. Id. § 17.
21. See id. § 19.
22. See id. (describing generally equity method of accounting as applied to common stock investments).
tory opinion EITF 85-1 addresses the recording of such stock issuances by the corporation.23 The task force concluded that recording the note as an asset is generally not appropriate.24 Instead, the note should be offset against the stock in the equity section of the balance sheet.25 The treatment of this transaction in EITF 85-1 is consistent with the SEC’s Staff Accounting Bulletin 40 (SAB 40), applicable to public companies.26

IV. ENRON’S MANIPULATION OF EARNINGS AND EQUITY

As previously illustrated in Table 2, Enron’s performance measures appear to have “uncoupled” beginning in 1997. Clearly, “aggressive” accounting may have played a role in the increased volatility witnessed among IBE, CFO, CI and FCF subsequent to 1996.27 This section reviews Enron’s failure to comply with the provisions of EITF 90-15 as it relates to the consolidation of its SPEs, which ultimately distorted financial performance between 1997 and 2000. Enron’s practice of recording equity for stock issuances to its SPEs is also discussed.

A. Non-Consolidation of SPEs

1. Joint Energy Development Investments LP (JEDI) and the Chewco SPE

Between 1993 and 1996, Enron and the California Public Employees’ Retirement System (CalPERS) were fifty percent joint-venture partners in the Joint Energy Development Investments (JEDI) limited partnership.28 Enron (the general partner) and CalPERS (the limited partner) each ini-

24. See id.
25. See id.
27. See Floyd Norris & Kurt Eichenwald, Enron’s Many Strands: The Accounting; Fuzzy Rules of Accounting & Enron, N.Y. TIMES, Jan. 30, 2002, at C1 (suggesting Enron may have complied with GAAP in even some of its most widely questioned accounting practices). In fact, Enron’s financial reporting recently has been criticized in a number of areas that may have actually complied with GAAP: revenue recognition on energy trading contracts and securitized asset sales (e.g., the Braveheart partnership). In such cases, which often involved complex financial structured transactions, it appears that earnings were recorded incorrectly either because of inadequate accounting regulation (i.e., vague accounting and reporting guidance), poor management estimates or a combination of the two. See id. (explaining that “when accounting rules are written very specifically, clever accountants find ways to get around them . . . [, but w]hen, as in this case, they are written far more generally, proper accounting can be overtly reliant on the good faith of companies and auditors in applying the rules”). For purposes of a more meaningful analysis, therefore, this Article focuses only on those transactions where the accounting rules were clear and where the role of management judgment or interpretation was small.
tially contributed $250 million to JEDI to fund a variety of investment transactions. 29 Because Enron did not have a controlling interest (greater than fifty percent) in the limited partnership during this three year period, JEDI's assets and liabilities were not required to be included in the company's balance sheet. 30 Additionally, Enron recognized income (or loss) for JEDI only to the extent of its ownership percentage (fifty percent) as required by APB 18.

In 1997, CalPERS sought to liquidate its investment in JEDI in order to pursue another investment opportunity. 31 To accommodate CalPERS's wishes, Enron created a new investment partnership to purchase CalPERS' fifty percent limited partner investment. 32 Enron funded this new partnership, Chewco Investments LP (Chewco), with $383.5 million from the following sources: a $240 million unsecured subordinated loan to Chewco from Barclays Bank PLC (guaranteed by Enron), a $132 million advance from JEDI to Chewco under a revolving credit agreement and $11.5 million in equity from Chewco's general and limited partners (Big River LLC and Little River LLC). 33 Chewco subsequently purchased CalPERS's interest using these funds. 34

JEDI continued to be reported as an unconsolidated entity at the end of 1997. 35 This treatment was based on the assertion that Chewco owned fifty percent of JEDI, thus precluding Enron from having a "controlling interest" which would trigger consolidation of JEDI. Accordingly, Enron continued to record fifty percent of JEDI's income and losses in its income statement. 36

However, several Enron-related loan guarantees associated with the initial funding of Chewco made this treatment inappropriate. When Chewco was initially formed as an SPE, Enron carefully crafted its capitalization such that it would not have to be consolidated into Enron's finan-

29. See id. (explaining Enron contributed $250 million in Enron stock and CalPERS contributed $250 million in cash).
30. See id.
31. See id. at 43-44 (describing circumstances under which Enron bought out CalPERS's interest in JEDI).
32. See id. (recounting Enron's creation of Chewco to purchase interest in JEDI).
33. See id. at 49-50 (explaining Chewco's capital structure).
34. See id. at 45 ("Enron . . . put together a bridge financing agreement, under which Chewco and its members would borrow $383 million from two banks on an unsecured basis to buy CalPERS'[s] interest from JEDI.").
36. See Powers Report, supra note 28, at 59-60 (discussing Enron's repurchase and consolidation of Jedi). It should be noted that JEDI also owned Enron stock and recognized gains on its appreciation. By using the equity method of accounting, Enron was able to report revenues related to the price appreciation of its own stock. See id. at 60 (providing reasons for Enron's repurchase of Jedi from Chewco).
cial statements either. Enron made sure that Chewco’s investors (Big River LLC and Little River LLC) appeared to meet the three percent “at risk” provisions of EITF 90-15. However, the investors’ entire $11.5 million investment was funded by Barclays Bank PLC, which required that $16.6 million of the loan be secured by a reserve provided by JEDI. Because Enron owned fifty percent of JEDI, Enron effectively guaranteed $3.3 million of the Chewco investors’ contribution. This meant that the investors in reality had less than three percent of their monies “at risk”—thus failing EITF 90-15’s test. Moreover, since Enron guaranteed most of Chewco’s debt and also shared in substantially all of Chewco’s risks and rewards, EITF 90-15 required that Chewco be consolidated into Enron’s financial statements. Requiring Chewco’s consolidation resulted in Enron (the consolidated entity) effectively owning (and controlling) 100 percent of JEDI. Enron, therefore, should have also consolidated JEDI.

The effects on Enron’s balance sheets and income statements were dramatic. As indicated in Table 6, Enron overstated net income and stockholders’ equity by a total of $405 million between 1997 and 2000 because of its failure to properly consolidate both JEDI and Chewco in its financial statements. Furthermore, failure to correctly apply EITF 90-15 resulted in an understatement of liabilities on Enron’s balance sheet by amounts ranging from $561 million to $711 million during the same period.

2. The Rhythms Hedging SPE

In March 1998, Enron purchased a $10 million investment in Rhythms NetConnections, Inc. (Rhythms), a privately-held internet service provider (ISP) for businesses using digital subscriber line (DSL) technology. In April 1999, Rhythms went public and within a month, Enron’s investment in Rhythms had soared to $300 million. However, logistical problems prohibited Enron from selling its shares before year end. Since the Rhythms investment was carried at market value in Enron’s balance sheet, changes in the price of Rhythms stock were reported in En-

37. See id. at 50-51 (“In order to fund the reserve accounts, JEDI made a special $16.6 million distribution to Chewco.”).

38. See id. at 41-44 (discussing Enron’s motivation for forming Chewco and subsequent accounting mistakes it made when it chose not to consolidate Chewco).

39. See id. at 52 (“Chewco should have been consolidated into Enron’s consolidated financial statements from the outset . . . .”).

40. See id. at 42 (describing financial impact of failure to properly consolidate JEDI and Chewco).

41. See id. (describing impact of non-consolidation on Enron liabilities).

42. See id. at 77 (describing Enron’s investment in Rhythms).

43. See id. (“By May 1999, Enron’s investment in Rhythms was worth approximately $300 million . . . .”).

44. See id. (explaining that Enron was prohibited from selling its shares due to lock-up agreement).
### Table 6

**SUMMARY OF ENRON'S ACCOUNTING AND REPORTING ADJUSTMENTS (000'S)**

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Assets</th>
<th>Liabilities</th>
<th>Stockholders' Equity</th>
<th>Net Income</th>
<th>Return on Assets</th>
<th>Debt to Equity</th>
<th>EPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997 Reported Balances Chewco &amp; Jedi</td>
<td>22,552,000 16,954,000</td>
<td>5,618,000 (28,000)</td>
<td>105,000 (28,000)</td>
<td>0.47%</td>
<td>3.01</td>
<td>0.19</td>
<td></td>
</tr>
<tr>
<td>1997 Corrected Balances Chewco &amp; Jedi</td>
<td>23,255,000 17,645,000</td>
<td>5,590,000 77,000</td>
<td>0.33%</td>
<td>3.16</td>
<td>0.14</td>
<td>-26.67%</td>
<td></td>
</tr>
<tr>
<td>1998 Reported Balances</td>
<td>29,350,000 22,302,000</td>
<td>7,048,000 703,000</td>
<td>2.40%</td>
<td>3.16</td>
<td>1.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior period corrections Chewco &amp; Jedi</td>
<td>(28,000)</td>
<td>(28,000)</td>
<td>(133,000)</td>
<td>5,590,000 0.47%</td>
<td>0.33%</td>
<td>3.16</td>
<td>1.10</td>
</tr>
<tr>
<td>1998 Corrected Balances</td>
<td>29,750,000 22,863,000</td>
<td>6,887,000 570,000</td>
<td>1.92%</td>
<td>3.32</td>
<td>0.89</td>
<td>-18.92%</td>
<td></td>
</tr>
<tr>
<td>1999 Reported Balances</td>
<td>33,381,000 23,811,000</td>
<td>9,570,000 893,000</td>
<td>2.68%</td>
<td>2.49</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior period corrections Chewco &amp; Jedi</td>
<td>(161,000)</td>
<td>(161,000)</td>
<td>(153,000)</td>
<td>5,590,000 0.47%</td>
<td>0.33%</td>
<td>3.16</td>
<td>1.10</td>
</tr>
<tr>
<td>Rhythms</td>
<td>532,000 685,000</td>
<td>(153,000)</td>
<td>(95,000)</td>
<td>5,590,000 0.47%</td>
<td>0.33%</td>
<td>3.16</td>
<td>1.10</td>
</tr>
<tr>
<td>1999 Corrected Balances</td>
<td>33,657,000 24,496,000</td>
<td>9,161,000 645,000</td>
<td>1.92%</td>
<td>2.67</td>
<td>0.91</td>
<td>-27.77%</td>
<td></td>
</tr>
<tr>
<td>2000 Reported Balances</td>
<td>65,503,000 54,033,000</td>
<td>11,470,000 979,000</td>
<td>1.49%</td>
<td>4.71</td>
<td>1.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior period corrections Chewco &amp; Jedi</td>
<td>(409,000)</td>
<td>(409,000)</td>
<td>(91,000)</td>
<td>5,590,000 0.47%</td>
<td>0.33%</td>
<td>3.16</td>
<td>1.10</td>
</tr>
<tr>
<td>Rhythms</td>
<td>537,000 628,000</td>
<td>(91,000)</td>
<td>(8,000)</td>
<td>5,590,000 0.47%</td>
<td>0.33%</td>
<td>3.16</td>
<td>1.10</td>
</tr>
<tr>
<td>Raptors: Consolidation Effects Stock for Note Effects</td>
<td>(532,000)</td>
<td>(532,000)</td>
<td>(532,000)</td>
<td>5,590,000 0.47%</td>
<td>0.33%</td>
<td>3.16</td>
<td>1.10</td>
</tr>
<tr>
<td>(172,000)</td>
<td>(172,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000 Corrected Balances</td>
<td>64,919,000 54,661,000</td>
<td>10,258,000 348,000</td>
<td>0.54%</td>
<td>5.33</td>
<td>0.47</td>
<td>-64.45%</td>
<td></td>
</tr>
</tbody>
</table>

Note: 2001 adjustments for Raptors' consolidation reduced net income and stockholders' equity by $545,000,000. 2001 adjustments for Raptors' stock/note exchanges reduced assets and stockholders equity by $828,000,000.

* EPS signifies earnings per share. Numbers differ from reported EPS as net income has not been reduced for preferred stock dividends not available to common shareholders.

The company wanted to "lock in" its gains on the Rhythms stock and protect itself from any price depreciation, while hedging a position that large and commercially illiquid was considered too costly. In June 1999, therefore, Enron decided to hedge against the po-

45. See id. (noting effect of value of Rhythms stock on Enron's income statement).
46. See id. at 78 ("Given the size of Enron's position, the relative illiquidity of Rhythms stock, and the lack of comparable securities in the marks, it would have been virtually impossible (or prohibitively expensive) to hedge Rhythms commercially.").
tential price volatility of its Rhythms investment using an SPE named LJM Swap Sub, LP (Swab Sub). This was the first of many SPEs that Enron allegedly created for hedging purposes.

Enron contributed 3.4 million shares of its own stock to Swap Sub's limited partner, who in turn used 1.6 million shares of Enron's stock (and $3.75 million in cash) to provide the three percent outside equity "at risk" required by EITF 90-15 to prevent consolidation. Swap Sub subsequently gave Enron a put option on 5.4 million shares of Rhythms stock. If the Rhythms stock declined in value, the put option would increase in value, thus protecting Enron from price volatility of the Rhythms stock. Given the structure of the Swap Sub SPE (i.e., Enron stock was its principal asset), Enron was using its own stock to hedge its Rhythms investment. Enron hoped that price appreciation in its own stock would generate sufficient funds to allow Swap Sub to make good on Enron's put option should the price of Rhythms stock decline.

For reasons that remain unknown, at its formation in June 1999, Swap Sub's liability (the $104 million Enron put option) greatly exceeded its assets ($3.75 million in cash and $80 million in Enron stock). Swap Sub, therefore, had no equity and failed EITF 90-15's three percent "at risk" equity test. Enron should have consolidated Swap Sub, but it did not.

As Table 6 indicates, Enron's failure to consolidate Swap Sub (the correct application of EITF 90-15 in the Rhythms hedge transaction) overstated net income (and stockholders' equity) by a total of $103 million in 1999 and 2000. These income declines essentially reflect "unhedged" price decreases in the value of Rhythms stock during this two-year period.

3. The Raptors Hedging SPEs

In April 2000, Enron extended the hedging methodology used for its Rhythms investment to its merchant investment portfolio. As in the case of the Rhythms securities, the merchant investments (primarily high-technology and energy stocks) had increased in value dramatically and price changes were reflected quarterly in the company's financial statements.

47. See id. at 79 (stating purposes for using Swap Sub).
48. See id. at 80 (reporting finance transactions involved with use of Swap Sub).
49. See id. at 81 (stating that put option was valued at approximately $104 million).
50. See id. at 83 (noting that on June 30, 1999, Swap Sub had negative equity).
51. See id. (explaining Arthur Andersen's initial error in calculating percentage of residual equity level to qualify for non-consolidation). Apparently, Arthur Andersen erroneously approved Swap Sub for non-consolidation. See id. (stating that accounting mistake made Enron's net earnings for 1999 $95 million too high).
52. See id. at 84 (posing effect of restating prior period financial statements to reflect consolidation).
53. See id. at 97 ("Expanding on the concepts underlying the Rhythms transaction . . . , Enron sought to use the 'embedded' value of its merchant investments.")
Again, commercial hedging vehicles were not considered practical by Enron management. Thus, over the next several months, Enron created four new, much larger SPEs (Talon, Timberwolf, Porcupine and Bobcat, referred to collectively as the Raptors) to handle its hedging transactions.\textsuperscript{54} The general structure of each transaction is outlined in Table 7.

**Table 7**

**Common Structure of SPE Transaction**

For all the Raptors, the three percent outside "at risk" investment needed to avoid consolidation was provided by LJM2 Co-Investment, LP (LJM2), a partnership run by Andrew Fastow, Enron's Chief Financial Officer.\textsuperscript{55} LJM2 transferred $30 million to each Raptor SPE as its initial investment.\textsuperscript{56} For each SPE (except Porcupine, also known as Raptor III), Enron contributed its own stock and a promissory note via a 100 percent Enron-owned subsidiary.\textsuperscript{57} Each of these three Raptors (Talon, Timberwolf and Bobcat) delivered a put option to Enron.\textsuperscript{58} As in the Rhythms transaction, Enron attempted to hedge value declines in its merchant portfolio with its own stock's appreciation. In Porcupine's case,

\textsuperscript{54} See id. (discussing circumstances surrounding creation of Raptors).

\textsuperscript{55} See K. Kranhold et al., Following the Trail: As Enron Inquiry Intensifies, Midlevel Players Face Spotlight—They Could Help Prosecutors Build a Criminal Case Against Top Executives—Seven Areas of Vulnerability, WALL ST. J., Apr. 30, 2002, at A1 (describing fashion in which partnership supplied Raptors with money).

\textsuperscript{56} See POWERS REPORT, supra note 28, at 100, 117, 128.

\textsuperscript{57} See id. at 100, 111.

\textsuperscript{58} See id. at 103, 113.
Enron contributed TNPC stock (a residential and commercial power delivery company created by Enron), rather than Enron stock, to hedge its investment in The New Power Company (TNPC) stock.\(^{59}\) Clearly, the put option Enron received from Porcupine was not a "true" economic hedge as price movements of the put option (secured by TNPC stock) would parallel that of the hedged asset (also TNPC stock).\(^{60}\)

Shortly after the four Raptors were formed, each transferred approximately $40 million back to LJM2.\(^{61}\) Enron contended these transfers, made within weeks of each SPE's initial formation, were simply a return on LJM2's initial $30 million "at risk" investment.\(^{62}\) However, statements by Mr. Fastow to his limited partners in LJM2 in April 2001 suggest that these transfers may have been both a "return of and return on capital."\(^{63}\) In fact, he indicated to these investors that LJM2's investment was "not at risk" anymore.\(^{64}\) If accurate, then all of the Raptor SPEs failed EITF 90-15's three percent "at risk" test and should have been consolidated into Enron's financial statements. The effects of not consolidating the Raptors on Enron's balance sheets and income statements were awesome. As indicated in Table 6, net income and stockholders' equity were overstated by a total of $1.077 billion in 2000 and 2001 by Enron's failure to properly consolidate the Raptors in its financial statements.\(^{65}\)

4. Stock for Note Exchange Transactions

The accounting treatment accorded the "stock for note exchanges" that took place when three of the Raptor SPEs (Talon, Timberwolf and Bobcat) were formed also violated GAAP. The exchanges occurred between 100 percent owned Enron subsidiaries and the three Raptor SPEs, resulting in the same outcome as if Enron itself had executed the transaction. Enron accounted for the "sale" of its own shares to the three SPEs in 2000 and the first quarter of 2001 by increasing its notes receivable and shareholders' equity.\(^{66}\) This treatment was inconsistent with the guidance provided in the accounting literature, both EITF 85-1 and SAB 40, which require that notes received in payment for stock be reported as a deduction from shareholders' equity. According to Table 6, this GAAP violation

\(^{59}\) See id. at 114.

\(^{60}\) See id. Unlike the other Raptor transactions, Porcupine was not presented to the Board or to any of its Committees. See id. at 116.

\(^{61}\) See id. at 104, 113, 117.

\(^{62}\) See Kranhold et al., supra note 55, at A1; see also Powers Report, supra note 28, at 128-29.

\(^{63}\) Powers Report, supra note 28, at 130.

\(^{64}\) See Kranhold et al., supra note 55, at A1.

\(^{65}\) See Powers Report, supra note 28, at 132.

\(^{66}\) See id. at 125. Enron's 2001 second quarter 10Q filing reports the increase in notes receivable in "[i]nvestments in and advances to unconsolidated equity affiliates." Id. Enron's no par, common stock reflects a similar increase. See id.
alone overstated assets and shareholders' equity by $1 billion: $172 million in 2000 and $828 million in the first half of 2001.67

5. Cumulative Impact of Financial Statement Errors

In all of the transactions described in the preceding section, Enron's financial reporting treatment failed to comply with existing accounting standards. Table 8 summarizes all of Enron's major GAAP violations. The impact of these failures on Enron's financial statements is summarized in Table 6. Over the four years from 1997 through 2000, Enron overstated reported net income in total by $1.577 billion. Furthermore, Enron overstated reported shareholders' equity in total by $2.585 billion. Although Enron declared bankruptcy prior to year-end 2001, reports indicate that its quarterly reports for 2001 overstated net income and shareholders' equity by $545 million and $828 million, respectively.68

These overstatements impacted measures of Enron's financial health in important respects. Restatement of Enron's net income decreased its earnings per share (EPS) by amounts ranging from nineteen percent of reported EPS in 1998 to sixty-four percent of reported EPS in 2000.69 In addition, these restatements increased Enron's debt-to-equity ratios in all four years, with a high of 5.33 in 2000. Finally, the restatements decreased Enron's return-on-assets (ROA) in every year, with a reduction of nearly two-thirds in 2000.70

V. IMPLICATIONS AND CONCLUSIONS

While the implications of Enron's accounting errors for its financial position are clear, conclusions regarding the adequacy of existing accounting standards are less apparent. In each of the cases discussed above, Enron violated existing financial reporting standards and SEC reporting regulations. Following the collapse of Enron, many argued that inadequate accounting principles were at fault.71 Yet, Enron's financial statements did not conform to existing accounting standards, suggesting that the standards themselves were not at fault. While the recent focus on financial reporting requirements may bring about needed changes and improvements in the quality of financial information provided to investors, current standards should not be blamed for Enron's failure.

Had existing standards been correctly applied, particularly with respect to consolidation of the SPEs, Enron's financial statements would

67. See id.
68. See Powers Report, supra note 28, at 125, 127.
69. For a further explanation, see Table 6.
70. EPS, ROA and debt-to-equity ratios were recalculated by the authors using Enron's publicly available financial reports.
TABLE 8
SUMMARY OF MAJOR ENRON GAAP VIOLATIONS

CONSOLIDATION RULES

EITF 90-15 required consolidated reporting of SPEs when “the owner(s) of record of the SPE has not made an initial substantive residual equity capital investment that is at risk.” In applying this test, the EITF indicated that three percent was the minimum acceptable investment by outside owners.

Enron failed the three percent “at risk” threshold in five separate cases:

<table>
<thead>
<tr>
<th>Case</th>
<th>Violation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chewco and JEDI</td>
<td>Over half of Chewco’s three percent partners’ investment was secured by JEDI, which was 50 percent owned by Enron. This meant that the outside investors did not have the entire three percent “at risk.” Enron did not consolidate either Chewco or JEDI.</td>
</tr>
<tr>
<td>Rhythms</td>
<td>At the date of formation, the SPE’s liabilities exceeded its assets. Thus, the entity had no equity and it was impossible for the investors to have any investment “at risk.” Nevertheless, Enron reported the Rhythms SPE as an unconsolidated entity.</td>
</tr>
<tr>
<td>Talon (Raptor I)</td>
<td>In each of these transactions, investors received a return on and of their capital within weeks of the SPE’s formation. This meant that outside investors did not have any of their three percent “at risk” once the entity began its hedging activities. Nonetheless, Enron continued to report these SPEs as unconsolidated entities.</td>
</tr>
<tr>
<td>Timberwolf (Raptor II)</td>
<td></td>
</tr>
<tr>
<td>Porcupine (Raptor III)</td>
<td></td>
</tr>
<tr>
<td>Bobcat (Raptor IV)</td>
<td></td>
</tr>
</tbody>
</table>

ISSUANCE OF STOCK FOR NOTES RECEIVABLE

EITF 85-1 and SAB 40 require that notes received in payment for stock be reported as a deduction from shareholders’ equity.

<table>
<thead>
<tr>
<th>Case</th>
<th>Violation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talon (Raptor I)</td>
<td>In each of these transactions, Enron used a wholly owned subsidiary to exchange Enron stock for an SPE’s note receivable. Furthermore, Enron accounted for these transactions by increasing both notes receivable and shareholders’ equity.</td>
</tr>
<tr>
<td>Timberwolf (Raptor II)</td>
<td></td>
</tr>
<tr>
<td>Bobcat (Raptor IV)</td>
<td></td>
</tr>
</tbody>
</table>

have more accurately reflected the underlying economic substance of its activities. Alternatively, had Enron legitimately secured a three percent outside equity investment that was at risk for the entire term of the SPE, existing accounting standards would not have required consolidation. One must ask, however, whether the three percent outside equity investors would have permitted Enron to engage in the transactions that occurred in these SPEs. In total, the required three percent equity investment in Chewco and the Raptors totaled $131.5 million.\(^\text{72}\) It is unlikely that inde-

72. See generally K. Kranhold et al., *supra* note 55, at A1. Because of valuation issues and Swap Sub’s negative equity at formation, it is unclear what investment
pendent outside investors would have been willing to risk these dollars in investments that were purely speculative, did not represent true economic hedges and were created only to remove assets and debt from Enron’s balance sheet while inflating Enron’s reported net income.

Enron’s financial reporting failures attempted to create an erroneous image of financial health. Yet, this Article’s analysis illustrates that Enron’s incorrect financial statements signaled serious problems regarding Enron’s financial condition. Why were these signals largely ignored? The collapse of Enron has implications for the functioning of business and capital markets far beyond financial reporting standards and accountants’ responsibilities. In particular, it raises questions regarding: (1) the oversight responsibilities of Enron’s board of directors, (2) the financial advisers that assisted the company in structuring its SPEs, (3) the banks and other lenders that provided “off balance sheet” financing and (4) the brokers, analysts and other investment advisers that ignored the warning signs of trouble apparent in Enron’s financial reports. All of these parties actively assisted Enron’s management in its efforts to distort fair presentation of the company’s financial condition. Recent congressional investigations indicate that Citigroup Inc., J.P. Morgan Chase & Co. and federal regulators all share blame in facilitating Enron’s financial manipulations. Thus, non-accounting solutions are required as well. What policy, legal and regulatory changes are needed to ensure adequate oversight in monitoring the activities and reports of aggressive, cutting-edge businesses like Enron? Is the severity or enforcement of existing penalties sufficient? Or are additional professional, regulatory, civil and criminal sanctions and penalties needed to motivate all involved parties to act responsibly in the interest of all market participants? The failure of Enron, initially attributed to accounting and reporting inadequacies, continues to raise broader issues of corporate governance and regulation that will likely be the subject of much debate in years to come.

would have been required to meet the three percent equity rule in the Rhythms transaction. See Powers Report, supra note 28, at 84.