
Revelations from Financial Reporting

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A company's financial problems can typically be detected by a thorough examination of its financial statements. Most problems are caused by four "diseases": changes in competitive situation, bad acquisitions, aggressive accounting stances, and general financial deterioration. These problems are reflected in the diagnostics of investment quality, cash flow quality, earnings quality, and balance sheet quality. Although detecting these problems is not easy, various techniques and resources exist to help portfolio managers and analysts uncover them.

Most analysts—equity and debt—have been humbled recently by market and corporate events. Unfortunately, the financial analysis techniques that I will describe in my presentation cannot detect every instance of corporate fraud that might exist. Nonetheless, for those who know where (and how) to look, information in the basic financial statements can reveal a number of company problems.

First, I will share with you three of the mistakes that I have made in the past and what I learned from these mistakes. Next, I will briefly describe the elements of problem identification that I used in creating the research techniques that we use at Jefferson Research & Management. I will then discuss the four corporate financial "diseases" and the "symptoms" of these diseases. Finally, I will explain several examples of how to find these problems using the "diagnostics" we have developed for ourselves and our clients as a tool for uncovering the true story presented in a company's financial statements.

The examples I highlight in my presentation do not imply fraud or any illegal activity on the part of the companies involved; they are simply illustrations of the points that I am making and are drawn from my own work. Other analysts have their own equally interesting examples from other companies.

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Learning from Prior Mistakes

The first (and biggest) mistake I made was not working with all three financial statements in depth. The income statement was my primary resource, and I made only cursory examination of both the cash flow statement and the balance sheet. Occasionally, this practice resulted in a high ranking for companies that showed high earnings growth even though their balance sheets were deteriorating.

My second mistake was to believe that the basic ratios (such as P/E, price to sales, and price to cash flow) based on "as reported" data were reliable indicators of a company's health. I have found the easily accessible cash flow from operations (CFFO), reported earnings per share (EPS), and bond ratings to be unreliable.

Under U.S. GAAP, companies are given great latitude in how they report CFFO and EPS. Some of the prescribed ways of reporting do not truly reflect how much cash flow or earnings are generated from the company's "real" business. Likewise, bond ratings are well known for lagging the realities of a company's financial situation and are seldom helpful in determining equity risk.

A third mistake that I made was to fall in love with a stock. In a world of matchmakers—Wall Street analysts, public relations firms, and media stock experts—I (along with perhaps other analysts) found myself emotionally committed to a stock long after I should have removed it from my portfolio. Comptronix Corporation is an example of my misguided

loyalty to a stock in my portfolio whose income statement told partial truths. In the late 1980s, Comptronix overstated its revenues by boosting inventories and then later converted these inventories into fixed assets in a way that never hit the income statement. A complete examination of the balance sheet and cash flow statement would have raised questions about the income statement. I remember the Comptronix blow-up vividly. It occurred while I was traveling from the West Coast to the East Coast on the day before Thanksgiving. In the time it took me to make that trip, the stock fell about 70 percent after the first news of potential financial irregularities was reported.

Developing Our Rating System

In 1997, I began conducting research with the goal of developing a rating system that would identify the causes of a stock's potential underperformance. This is the system we now use at Jefferson Research & Management. I looked at many sources of information, such as U.S. SEC fraud cases, books,¹ academic studies, and of course, the CFA candidate curriculum. From among the more than 20 SEC fraud cases I studied, which I highly recommend to those who have a serious interest in financial statement analysis, two of these cases stand out.

Livent was a company in the entertainment production business. It hid advertising costs in the capitalized expenses of new theater openings. For example, when the company advertised a new play in New York, it would record the New York marketing expenses as a capitalized cost associated with the opening of a new theater in Chicago.

My personal SEC fraud favorite is the Sensormatic Electronics Corporation "clock-stopping" case. Any sports fan can appreciate the advantage of stopping the clock near the end of the game when your team is trailing. This company literally stopped the clock at the end of the quarter and kept it running until it could record the desired additional revenues in that quarter.

Interestingly, academic studies of earnings quality are found mostly in the accounting journals, not in the traditional finance journals and typically not in the journals that a CFA charterholder is likely to read. Salient articles that I found beneficial include Richard G. Sloan's seminal 1996 piece, P.M. DeChow's 1994

¹Thornton L. O'Glove, *Earnings Quality* (New York: Free Press, 1987); Howard Schilit, *Financial Shenanigans: How to Detect Accounting Gimmicks & Fraud in Financial Reports*, 2nd ed. (New York: The McGraw-Hill Companies, 2002); and Kathryn Staley, *The Art of Short Selling* (New York: John Wiley & Sons, Inc., 1997).

article, M.D. Beneish's 1997 study, and Kathryn Schipper's 1989 commentary.

The CFA candidate curriculum also provided some foundation for our development of a company financial rating system. In addition to the normal ratio analysis taught in the CFA program, I drew on the DuPont analysis—now more than 60 years old—and on the work of Ben Graham on balance sheets and cash flow. Edward Altman's Z-score—the bankruptcy predictor that was first published in 1961—also provided some insights on balance sheet items.

Four Diseases of Corporate Performance

Based on my research, I identified four diseases that can debilitate companies and their stock prices. Importantly, we have found that these diseases do not necessarily occur independently of each other.

The first disease is a competitive change either in the industry at large or in a particular company's competitive situation within that industry. For industries, such change occurs because of economic cycles and changed industry competitive factors (for example, when Japanese automakers entered the U.S. automobile market). For companies, such change can occur as a result of a transition in the company's product cycle, the introduction of new technology, or a shift in the company's competitive position within the industry. For example, a competitor may introduce a lower-cost product with better features.

The second disease involves bad acquisitions. A bad acquisition happens when a company's management assures an eventual deterioration in the company's performance (and eventually the stock price) by paying too much for an acquired company. Bad acquisitions became an epidemic by the end of the 1990s. Some of these acquisitions were initially described as being "earnings accretive," but later, when they obviously were not earnings accretive, they were described as being "revenue accretive." Finally, by the year 2000, when the prior justifications no longer could be applied to support the prices paid, these acquisitions were more often called "strategic initiatives."

The third disease is aggressive accounting. Although this disease is headline news today, it was not uncommon in the 1990s. The most noteworthy difference between then and now is that aggressive accounting, and especially fraud, recently has been practiced by much larger companies than in the past. In the past, the SEC typically investigated 15–20 fraud cases every year, but the problems at Enron Corporation and WorldCom involved unusually large, widely held companies. Enron's case (with its

myriad hidden entities that generated both earnings and cash flow in mysterious ways) was quite different from the typical cases that the SEC reviews.

Finally, the fourth disease is financial deterioration, which can easily be hidden behind the appearance of a very strong income statement if analysts fail to critically examine the underlying cash flow statement and balance sheet.

Diagnosing the Diseases

To identify these four diseases, we look at four diagnostics: efficiency of operations (or investment quality), cash flow quality, earnings quality, and balance sheet quality. Each of these diagnostics can identify the symptoms of one or more of the four diseases and help focus our analytical efforts to increase our understanding of how they can affect a company and its stock price.

Efficiency of Operations. Three types of information extractable from the financial statements are worth evaluating to determine how efficient a company is in its operations. The first category is turnover, or how productively a company uses its various assets. These assets can range from inventory to receivables to plant and equipment—any asset the analyst finds helpful in ascertaining the efficiency of a business.

The second efficiency category concerns the ratios used to measure the various operating margins. Each margin can tell a different story or a different part of the story about a company's potential diseases. For example, the gross margin speaks eloquently of the company's competitive position, whereas the net margin indicates management's discipline in managing costs and a company's tax position. Another margin indicator is SG&A (sales, general, and administration) as a percentage of sales, which tells how much of a company's revenue is devoted to overhead costs.

The third category of efficiency indicators is return on capital, or how much profit a company makes on the capital that it has invested in its business. Such measures include return on investment, return on assets, and cash flow return.

These categories are all measures of the efficiency of operations. Noting that these efficiencies are managed as a way to improve the "yield" of a business, we sometimes call them investment quality measures.

Cash Flow Quality. Cash flow is often described as the ultimate litmus test of a business. Analysts often focus on CFFO, which can be deceptive. The key to identifying cash flow quality lies in

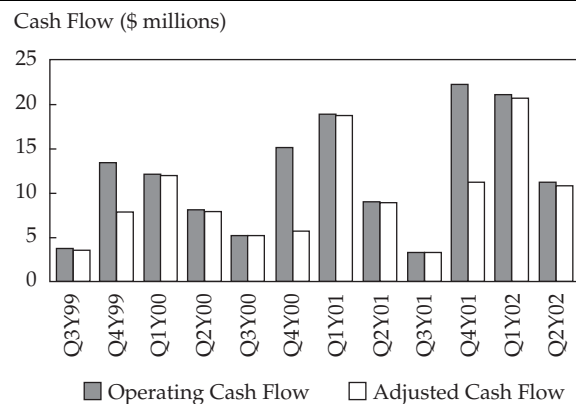
isolating the cash generated from a company's business activities from the extraordinary and discontinued items that are distinct from the company's ongoing business. The fairly broad definition under GAAP of what can be included in CFFO makes this identification more important.

A good example of the need to adjust CFFO to find true cash flow is found in the financial statements of Corporate Executive Board. Over the period from third quarter 1999 to second quarter 2002, nearly 35 percent of Corporate Executive Board's CFFO was attributable to the tax benefit gained by expensing the issuance of stock options on the company's tax return. Companies are not presently required to expense newly issued stock options on their income statements, but the issuance can generate a tax credit, which occurred for many other companies as well. This tax credit is reported as a CFFO item under GAAP.

This treatment tends to overstate the cash generated from a company's business and is true of most companies with significant stock option programs. We contend that an appropriate measure of cash flow return would separate these transient events from the ongoing core cash flow a company can generate. The downward adjustment to Corporate Executive Board's CFFO in the fourth quarters of 1999, 2000, and 2001, as shown in **Figure 1**, largely reflects the elimination of this tax benefit as a source of CFFO. This adjustment to arrive at an alternative measure of cash flow may or may not change the investment decision, but it is information that should be considered.

Earnings Quality. To ascertain a company's earnings quality, an analyst needs to look at several elements affecting reported earnings, including

Figure 1. Cash Flow Quality Example: Corporate Executive Board, Third Quarter 1999–Second Quarter 2002



(1) the accrual rate, which is the change in the current asset section of the balance sheet compared with the sales growth rate; (2) one-time items, which can positively boost current reported earnings; (3) pension plan gains, which may inflate current earnings; (4) supporting cash flow, the measure of the amount of cash flow actually underpinning the earnings; and (5) the tax rate, particularly if the reductions have contributed to higher earnings but may not be sustainable in the long term.

Balance Sheet Quality. A company's balance sheet quality is primarily a function of its liquidity, a company's ability to meet its obligations, and its inventory and accounts receivable levels. Inventory and accounts receivable compared with sales and cost of goods sold on a day-sales-outstanding (DSO) basis can give the analyst a better understanding of how a company uses its balance sheet. This analysis is important because an increase in sales is typically associated with higher levels of inventory and accounts receivable and thus may not immediately generate cash. This analysis can also provide an indication of a lack of interest in a company's products by consumers.

Next on the balance sheet are the other accrual items, such as prepaid or deferred charges, tax valuation accounts, and prepaid taxes. These can mask or elucidate underlying changes occurring at a company. An analysis of these accounts can highlight the degree to which income is not simultaneous with cash inflow.

The symptoms of two financial problems, those arising from changes in competitive conditions and those from aggressive accounting, often show up first on the balance sheet because of GAAP's double-entry bookkeeping system. Each dollar of earnings can be attributed to either cash flow or a balance sheet item. For this reason, Enron had to go to elaborate lengths to disguise its financial deterioration. Thus, the interplay of the balance sheet with the earnings statement

is essential in discovering the sustainability of earnings and potentially the survival of a company itself.

Uncovering Financial Problems

The problems that the market is dealing with today can be attributed to two predominant corporate financial diseases—changes in competitive positions and aggressive accounting practices. The “bubble” conditions of strong growth and capital flows that supported these diseases burst a while ago, but a number of companies tried to disguise this in their financial reports; Enron and Worldcom are the best-known examples of these types of deceptive practices.

Changes in Competitive Position. Lucent Technologies and Cisco Systems are two high-profile companies whose problems resulted from both industry- and company-specific competitive issues. Their stories exemplify how an observant analyst could have noticed the symptoms that would have revealed the underlying problem. All of these symptoms existed in advance, sometimes significantly in advance, of the drop in each company's stock price.

■ *Lucent.* Lucent is an example of a company operating in a sector that fell on the worst of times after enjoying the best of times. The equipment sector of the telecommunications industry had been financed heavily by extensive new investment through huge infusions of capital and was growing at an unsustainable rate. Lucent was carried along with the rest of the sector on the path to financial demise. This downward path for Lucent was evident in its financial statements, if an analyst knew where to look.

As shown in **Table 1**, by 1999, deterioration in earnings quality and investment quality had appeared as symptoms of the problems soon to overtake Lucent. Deterioration in cash flow quality followed in 2000.

One of the components of investment quality, gross margins, had fallen from approximately 55

Table 1. Lucent: Torpedo Alert Indicators, Fourth Quarter 1998–Third Quarter 2000

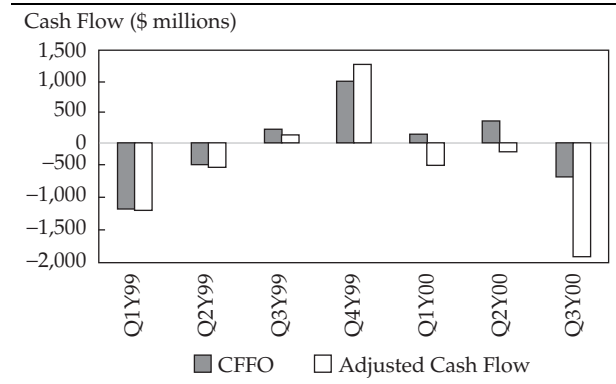
Indicators	1998	1999				2000		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Earnings quality	W	SA	A	W	SA	SA	SA	A
Investment quality	W	SA	SA	SA	SA	SA	SA	A
Cash flow quality	SA	W	W	A	W	A	SA	SA
Valuation	W	W	W	NA	NA	NA	NA	NA
Balance sheet quality	W	A	A	W	W	W	W	W

Note: NA = no alert; W = warning; A = alert; and SA = strong alert.

percent to 45 percent even before the company hit its peak stock price in fiscal fourth quarter 1999. This was a sure indication that Lucent was facing higher costs with less ability to dictate higher prices to its customers. Return on invested capital (ROIC), a component of investment quality, started to decline later than the gross margins but fell by about half (from more than 20 percent to roughly 10 percent) in the one-year period from 1999 to 2000.

Neither cash flow quality nor cash flow generation was strong in 1999 and 2000. As **Figure 2** illustrates, beginning in the first quarter of 2000, the inconsistency in cash flow quality (the difference between reported cash flow and adjusted cash flow) was apparent. By the third quarter of 2000, CFFO was very negative, having swiftly deteriorated from a peak in the first quarter of 2000.

Figure 2. Lucent: Cash Flow Quality, First Quarter 1999–Third Quarter 2000



Likewise, in 1999 and 2000, Lucent’s earnings quality was poor. Of its \$4.8 billion of reported net income in 1999, nearly one-third, or \$1.3 billion, was attributable to the cumulative effect of a pension plan accounting change. For analysts who were keeping a keen eye on earnings quality, Lucent’s financial problems were identifiable. While its stock price was mov-

ing to all-time highs, its basic measures of health were declining.

■ *Cisco*. Even Cisco, a growth “darling,” could not avoid the downturn in industry conditions and resulting competitive pressures in the technology industry. As shown in **Table 2**, the first symptom that financial disease existed at Cisco was a cash flow quality problem that surfaced in the third quarter of 1999. In the fourth quarter of 2000, the additional symptoms of poor investment quality and balance sheet quality were noticeable.

Cash flow quality was always an issue for Cisco in the nearly two-year period between the second quarter of 1999 and the first quarter of 2001, but it significantly worsened in the fourth quarter of fiscal 2000. As with Lucent, a large part of the difference between CFFO and actual cash flow was the tax benefit associated with the issuance of stock options. The company was less able to generate cash from its business and more reliant on its stock option plan.

During 1999, Cisco’s ROIC, an indicator of investment quality, hovered around 20 percent but gradually fell to less than 15 percent by the first quarter of 2001. And Cisco’s inventories on a DSO basis doubled over the four-quarter period ending with the first quarter of 2001. Historically, inventory levels had been running at less than 60 days; suddenly, they increased to about 100 days. This development, reported on Cisco’s balance sheet, was an obvious deterioration in balance sheet quality that the astute analyst would have noted.

Aggressive Accounting. A range of reporting stances could be described as aggressive, but many of these aggressive accounting practices are acceptable under GAAP and become fraudulent only when company management pushes them to the extreme. We look for the following aggressive accounting practices:

- booking revenues early or without actually earning them;
- failing to record normal expenses;

Table 2. Cisco: Torpedo Alert Indicators, First Quarter 1999–First Quarter 2001

Indicators	1999				2000				2001
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Earnings quality	NA	NA	NA	NA	NA	NA	NA	NA	NA
Investment quality	A	W	W	W	W	W	A	SA	SA
Cash flow quality	W	A	SA	A	SA	A	A	SA	SA
Valuation	SA	A	A	W	W	W	W	W	SA
Balance sheet quality	NA	NA	NA	NA	NA	NA	NA	W	SA

Note: NA = no alert; W = warning; A = alert; and SA = strong alert.

- maintaining inadequate reserves for inventory or bad debts;
- using a low depreciation rate for assets;
- using balance sheet accounts, such as reserves and allowance for deferred taxes;
- taking write-offs for so called “big bath” pre-merger and in-process R&D items;
- using employee pension plan gains to inflate reported earnings;
- misstating the amounts of liabilities or expenses; and
- using related-party or off-balance-sheet transactions to fund operations or generate income.

Where to Find Them? These aggressive accounting practices can be uncovered in two places. The first place is in the financial statements and in the ratios and time series that can be calculated from the information in them. The second place is in the footnotes to the financial statements. The footnotes can be useful elaborations on the numbers reported in the financial statements. The following are some examples of aggressive accounting practices and how to detect them.

■ *Booking revenues early without earning them.* Often, a company’s practice of booking revenues early or without earning them will show up either in accounts receivable or in the company’s margins. An example of a company following this practice was Safeskin Corporation, which was a classic 30 percent annual growth company in 1995, 1996, 1997, and into 1998. Safeskin stuffed its inventory channel to make revenue targets, which caused accounts receivable (on a DSO basis) to nearly double from the second to the third quarter of 1998.

■ *Failing to record normal expenses.* A company may fail to record normal expenses, capitalizing them instead. Such a practice could be discovered by a review of either the company’s margins or its accrual rate.

Rainbow Technologies provides an example of how this can work. Its reported R&D as a percentage of sales fell from about 10 percent to 6 percent from the first quarter of 1999 to the second quarter of 2000, and reported earnings increased as a result. If the R&D that was capitalized over this time period were added to the R&D expenses for the same period, the actual expenditures for R&D were fairly constant, while the earnings were higher than if all the R&D had been expensed currently. Management justified this treatment as legitimate capitalization of software development costs for a product not yet being sold. This option is acceptable under GAAP under certain circumstances but could be interpreted as an example of aggressive accounting that could have misled some analysts measuring Rainbow’s margins.

■ *Maintaining inadequate reserves for inventory or bad debts.* This practice can show up in either of two easily calculated financial ratios: the ratio of bad debt expense to the allowance for bad debts and the ratio of inventory obsolescence expense to the allowance for inventory obsolescence.

Paradyne Networks is an example of a company that used this practice. Paradyne Networks’ allowance for bad debts ranged from \$3 million to \$4 million during the 1997–99 period, but its actual bad debt expense ranged from \$6 million to \$12 million in the same period. The ratio of Paradyne’s allowance for bad debts to receivables fell from the low teens to about 8.7 percent. Paradyne accommodated this difference by reducing revenues rather than increasing bad debt expense or the allowance for bad debts. This accommodation is an unusual treatment but is not unknown and could have masked the problem from a cursory analysis of the accounts as reported.

■ *Using a low depreciation rate for assets.* A company can lower its depreciation rate for assets by lengthening the number of years over which an asset is depreciated. A longer depreciation term means lower depreciation expense and thus higher reported earnings. Cash is not affected. GAAP no longer requires that companies write off their intangibles, but they must test annually the value of intangibles that is reported on the balance sheet. If the asset is no longer worth its value on the balance sheet, the asset must be written down.

King Pharmaceuticals provides an example of how a company’s use of a long depreciation life can be used to improve reported earnings. The bulk of King’s intangibles is related to the rights to patented drugs that the company buys from other pharmaceutical companies. Although these patents typically have 3–10 years of remaining patent protection, the company claims a longer competitive life and amortization period, often 15–25 years. This claim tends to increase reported earnings, particularly when compared with a 5- or 10-year amortization period.

■ *Balance sheet accounts—reserves and deferred taxes.* The use of certain balance sheet accounts—reserves and deferred taxes—can be a fairly complex accounting strategy. A change in the deferred tax valuation charge, which allows companies the flexibility to either generate current earnings or “store” earnings for some future period can indicate earnings manipulation. For example, a company can take a charge in one period (an expense) to increase its deferred tax valuation account and reverse that charge in later periods, thereby effectively increasing earnings in the latter period.

LaCrosse Footwear serves as a good example of this practice. In 1998 and 1999, LaCrosse recorded no

valuation allowance, but in 2000, it recorded a valuation allowance of \$22.7 million. By boosting its valuation allowance in 2000 when earnings were strong, the company was able to “save” a portion of those earnings to be reported in future periods.

■ *Taking write-offs—big bath, premerger, in-process R&D.* Taking write-offs can be an aggressive accounting practice and could be the subject of an entire conference. Analysts need to be on the lookout for companies that are “serial chargers”—companies that consistently have large one-time charges. For example, Qwest recently announced a \$40-plus billion “big bath” write-down for a significant part of its business, which could potentially boost future earnings. The observant analyst will question any backward-looking comparisons following these kinds of write-downs.

■ *Using employee pension plan gains.* Investment gains earned in employee pension plans in excess of the amount required for funding purposes can be used to increase a company’s income and, hence, reported earnings. Verizon Communications, IBM, and General Motors Corporation are three high-profile examples that are discussed by David Zion.² Fortunately, this particularly aggressive accounting practice is increasingly being recognized and highlighted by analysts.

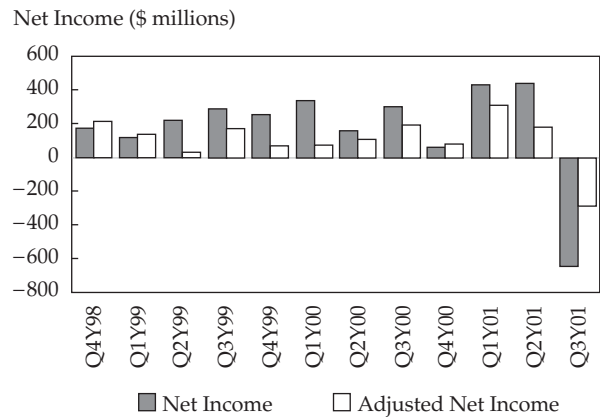
■ *Misstating the amounts of liabilities or expenses and using related-party transactions or off-balance-sheet deals.* Finding these practices involves looking at the sources of both income and cash flow in a company’s financial statements and reading the disclosures in the financial statement footnotes. Enron’s antics provide a classic example, and the diagnosis is discussed in the next section.

Enron

I could not give a presentation on financial reporting issues without talking about Enron. Enron is a prime example of aggressive accounting that lapsed into fraud. Beginning in the second quarter of 1999, the company showed deterioration in all four symptom areas: cash flow quality, balance sheet quality, investment quality, and earnings quality. After the first quarter of 1999 until the third quarter of 2001, the difference between reported and adjusted income (our measure of earnings quality) was substantial in most quarters, as shown in **Figure 3**. As the gap between reported and adjusted earnings grew, reported earnings were not consistently increasing. This fact, combined with the fact that true core earnings were falling, indicated that perhaps all was not well at Enron. The discrepancy between reported and

²Please see Mr. Zion’s presentation in this proceedings.

Figure 3. Earnings Quality: Enron, Fourth Quarter 1998–Third Quarter 2001

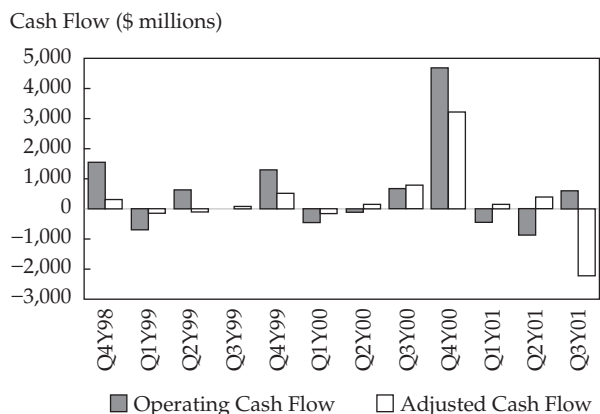


adjusted income that had existed for at least eight quarters increased significantly in the second quarter of 2001, providing a clue to the company’s earnings quality problem.

The decline in cash flow quality was also extreme over the same period, as illustrated in **Figure 4**. Notice the huge spike in CFFO in the fourth quarter of 2000; it was approximately 3.5–4.0 times larger than the amount of cash flow Enron had ever reported in one quarter. After that quarter, reported and actual cash flow turned negative. Enron included in operating cash such items as “the proceeds from the sale of merchant assets” and “the receipt of cash associated with the assumption of a contractual obligation.” Needless to say, Enron was not exactly Warren Buffett’s type of company, with businesses that could be easily understood or easily valued.

Enron’s margins, a sign of investment quality, also indicated that problems were brewing. In late

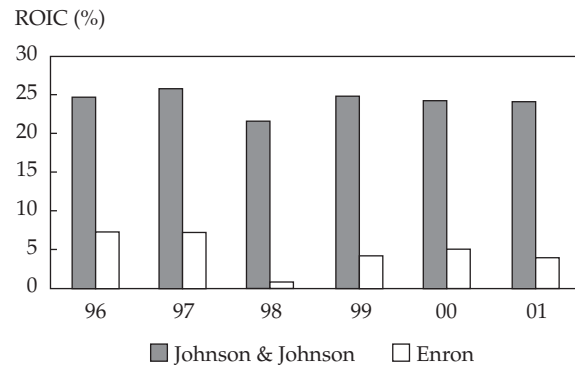
Figure 4. Cash Flow Quality: Enron, Fourth Quarter 1998–Third Quarter 2001



1998, Enron's gross margin was about 9 percent, as shown in **Figure 5**, but by the end of 2000, it was down to about 3 percent and fell rapidly thereafter. As for Enron's ROIC, after hitting a peak of close to 5 percent in the first quarter of 2000 (as shown in **Figure 6**), it fell to about 3.5 percent in the first quarter of 2001 and totally collapsed soon thereafter.

I have not yet discussed valuation, which I liken to taking the fever of a patient, and which is yet another symptom of a corporation's problems. Often, a high valuation of one company relative to another, without consistent supporting financial data to justify the relative valuations, can be a sign that "cult" status has been bestowed on the higher-rated company. Aggressive accounting often becomes the only way for a company's management to maintain the high valuation associated with cult status. Any investment manager comparing Enron and Johnson & Johnson in the 1996–2000 period (before Enron blew up) would have seen that Johnson & Johnson's ROIC was consistently around 25 percent, as shown in **Figure 7**, while Enron was producing an ROIC

Figure 7. ROIC: Enron and Johnson & Johnson, 1996–2001



between 3 percent and 7 percent. Yet at that time, Enron's P/E was about 80 and Johnson & Johnson's P/E was about 30. In valuation terms, Enron's valuation indicated cult status, and this high fever was a further symptom of internal problems.

Achieving a Faster, Reliable Diagnosis.

First of all, to obtain accurate information from traditional ratio analysis, the data need to be clean. It is imperative that analysts be taught, or that we teach ourselves, techniques to add some new twists to traditional ratio analysis so that we can identify the symptoms of the diseases that are, more often than not, apparent somewhere in the financial statements.

At Jefferson Research & Management, we have our own ways to adjust traditional ratios to remove the effect of GAAP-sanctioned, but often obfuscating, reporting practices reflected in a company's financial statements. We adjust the traditional ratios and time-series indicators, including CFFO, EPS, EPS/CFFO, ROIC, cash flow ROIC, free cash flow, P/E, and price to cash flow. We consider our adjusted ratios to be better indicators than the traditional ratios of the health of a company.

Several resources are available to managers and researchers in their quest to uncover financial reporting problems. Two excellent books by Mulford and Comiskey on the topic are *The Financial Numbers Game* and *The Guide to Financial Reporting and Analysis*.³ Various data and information services can also be helpful. Standard & Poor's, for example, has a new method of reporting earnings that helps shine a light on some (but not all) aspects of earnings quality. S&P's method adjusts for some of the obfuscating accounting and reporting treatments I have

³Charles W. Mulford and Eugene E. Comiskey, *The Financial Numbers Game* (New York: John Wiley & Sons, Inc., 2002); Eugene E. Comiskey and Charles W. Mulford, *The Guide to Financial Reporting and Analysis* (New York: John Wiley & Sons, Inc., 2000).

Figure 5. Margins: Enron, Fourth Quarter 1998–Third Quarter 2001

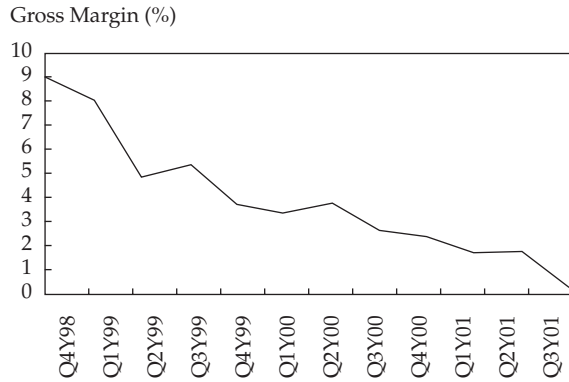
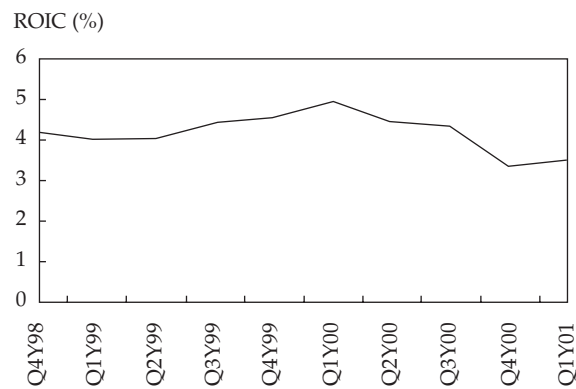


Figure 6. ROIC: Enron, Fourth Quarter 1998–First Quarter 2001



discussed. Some new data services, such as SimplyStocks, collect data from a company's financial statement footnotes and supporting schedules, which we use to further decipher a company's financial condition.

Conclusion

Detecting problems in the financial health of a company is not impossible. In fact, as I have described, four diseases are identifiable through a thorough analysis of a company's financial statements and the footnotes to its financial statements. In most cases, some adjustment to the reported numbers will reveal the true health of a company.

Resources exist to help portfolio managers and analysts detect corporate financial ill health, but the entire undertaking requires significant effort and an unwillingness to accept the numbers as reported in the financial statements. Several independent research firms (including our firm) specialize in providing alternative measures and ratings of a company's health that can reduce the effort required to uncover these problems. Whether the research is conducted in-house or outsourced, a disciplined approach to financial analysis should be integrated into the overall investment process to avoid some of the recent accounting and reporting problems that have hurt portfolio performance.

Question and Answer Session

Bruce A. Gulliver, CFA

Question: How do you resist the tendency to believe a company's explanation for why a ratio looks out of line?

Gulliver: Having fallen in love in a world of matchmakers once or twice, believe me, I've learned to rely on the numbers, not the explanation. It has been said that the more defensive a company is, the more likely they are trying to hide something. Remember, the company that was more defensive than any other about its reported numbers was Enron.

Question: Is there a general progression by which a company's financial statement deteriorates, such as starting with the gross margin and progressing to CFFO and then the balance sheet?

Gulliver: It depends on the cause of the deterioration. If several companies in the same industry are facing the same competitive issues, they would likely show the same progression. But if one of the companies decides to go the aggressive route—maybe the company didn't get that big order it expected this quarter—and decides to provide favorable financing to make its goals, the pattern would differ.

Question: What specific adjustments do you make to CFFO?

Gulliver: Cash flow quality should get as much attention as earnings quality, but it generally does not. We take out discontinued items because they are not part of the company's ongoing business. We also take out extraordinary items, which get wide latitude under GAAP, at least as far as the definition of includable items. Wide latitude is one of the reasons that CFFO can be deceptive. In addition, we take out some of the

nonoperating items, including the tax benefit from stock options.

Question: Enron was criticized for its poor earnings quality for several years before the company blew up. Why was the company awarded such a high P/E by the market?

Gulliver: I think Enron was a classic example of a company that people wanted to believe in. Analysts wanted to believe that Enron could do things that no company had ever done. Enron had management that people believed in—management that investors believed was smart. It became a cult stock, one of a number of such cult stocks that developed in the late 1990s. Some investors stopped paying attention to the numbers reported by the company and accepted the matchmakers' story that led to the overvaluation.

Question: What do you examine to determine whether an acquisition is likely to be helpful or harmful to a company?

Gulliver: It is particularly useful to look at ROIC and asset turnover to see whether the company is diluting its capital or whether the balance sheet is ballooning because of the acquisition. The numbers reported after the acquisition—after the company's financials have been consolidated—are often telling on this point.

Question: Is a sudden departure from past accounting practices always a red flag that needs to be investigated thoroughly?

Gulliver: Yes. Regardless of the particular change in accounting practice, a sudden departure from past practice is a good indicator that something has fundamentally changed in the company's business situation or its attitude about how

it wants to report its financial situation—either more conservatively or more aggressively.

Question: Have you looked at the predictive power of Altman's Z-score as a bankruptcy indicator?

Gulliver: Yes. Altman's Z-score is a reasonably good predictor when a company is right on the edge of bankruptcy. But in my experience, if a company is not in immediate danger of bankruptcy, Altman's Z-score is by itself not a reliable indicator.

Question: Can your approach work on a sector or industry level as opposed to on a one-by-one stock basis?

Gulliver: Yes, if one thinks of a sector as being a composite of many companies. In fact, we produce sector ratings that are a composite of companies within those sectors.

Question: How can you distinguish between margin declines that are symptomatic of the downturn in the economy as opposed to margin declines that are the result of previous aggressive accounting practices?

Gulliver: For the purpose of understanding where the company's stock price might be going and the company's fundamental strength, the source of margin declines doesn't matter. Regardless of what causes a company's margins to fall—a competitive situation or an aggressive accounting situation—it is still bad news for the company's fundamentals and its stock price. It is sometimes difficult to distinguish between the two diseases because the indicators overlap, but earnings quality problems are more likely to show up in cash flow and balance sheet measures.

Question: Will senior management's certification of the financial statements have a material effect on reporting practices?

Gulliver: We debated this question in-house and did not reach a consensus. I believe that a financial officer or a CEO of a company has to at least seriously consider whether he or she thinks the financial statements are accurate and not misleading. No empirical evidence at this point exists to support that conclusion, but I think the certification requirement will have a positive impact on reporting practices. Senior managers have to sign on the bottom line, knowing that they face potential legal consequences for a misleading or fraudulent representation.

Question: Could you go into more detail regarding the deferred tax valuation account?

Gulliver: The deferred tax valuation account issue is complicated. Look for changes that occur in the

deferred tax valuation account and how those changes flow through the income statement. Again, much of the treatment is totally legitimate from a GAAP perspective. Essentially, companies are making a forecast about the future and estimating whether or not they should be able to realize the anticipated tax benefits associated with those forecasts, which, in turn, involves forecasting a taxable earnings position.

Question: Does the lack of standardization of terms inhibit or impede analysts from making accurate valuations?

Gulliver: Yes, more standardization of accounting terms and treatments would make financial analysis much easier. The number of definitions that a company can use for the allowance for bad debts, for example, is significant, according to one expert I have consulted. Maybe 10 or 15 different possible definitions exist for the same accounting term, which makes

financial analysis complex. Similarly, companies have fairly wide latitude in accounting treatments for many items, including bad debt allowances and expenses and other items I mentioned in this presentation.

Question: If the U.S. accounting system had more of an emphasis on the principles (as in Europe), would we get less tripped up by the rules?

Gulliver: Whether emphasizing principles is better than emphasizing rules is an interesting argument. In both cases, a company's senior managers (and the accountants) still have to make judgments. We're probably not going to devise a prescription that will give us the perfect numbers all the time, even if we could all agree on the definition of "perfect" numbers. Using principles rather than rules could possibly better advance the cause, but I'm not sure.