

Earnings Management with Accruals and Financial Engineering

Bala G. Dharan, Ph.D., CPA

J. Howard Creekmore Professor of Accounting
Jesse H. Jones Graduate School of Management
Rice University, Houston, USA

January 2003

When a business suffers from unsuccessful competitive strategies, poor products, or pricing disadvantages, it generally tends to suffer a steady erosion of corporate value and credit quality, but no abrupt death. By contrast, revelation of large-scale earnings manipulation usually results in a quick and abrupt failure of the corporation, often in a span of just weeks or months. Thus the sudden and spectacular failures of once-admired and powerful companies like Enron Corp. and WorldCom, Inc. clearly point to large-scale earnings manipulation and fraud rather than business causes as the culprit.

In the wake of these corporate disasters, investors and managers are trying to understand whether there is widespread Enron-like manipulation of financial results among corporations or whether the recent corporate scandals are just an aberration. A related issue for financial analysts, investors and corporate executives is how to distinguish between earnings manipulation that ultimately proves to be fraudulent and the day-to-day struggles of managers to keep costs within budgets or to get revenues to meet desired sales targets. A closer examination of the types of financial engineering techniques used by Enron and others in recent accounting scandals gives us several useful pointers and lessons to understand the differences between fraud and earnings management. In particular, the financial engineering techniques used by the Enron and other companies are fundamentally different and more complex with respect to their impact on financial statements than the traditional earnings management techniques observed in past

scandals. An understanding of the financial statement effects of financial engineering transactions will thus help managers try to avoid future Enrons and help to improve the climate for corporate governance.

Traditional Earnings Management with Accruals

In what I like to call “garden-variety” earnings management, an activity found in almost any major corporation, a manager may increase or decrease the levels of accounting accruals (such as accounts receivables, inventory, accounts payable, deferred revenue, accrued liabilities, and prepaid expenses) in order to reach a desired profit. As an example of such an accruals management, let us assume that a manager reports a cash expenditure of, say, \$90,000 on a marketing campaign as an asset called “deferred subscriber acquisition cost” instead of an expense. (For illustration, let us assume that this is not in legal violation of the applicable accounting and disclosure rules.) The result of this accounting decision is to boost the bottom line of the division by \$90,000.

Generally accepted accounting principles define assets as economic resources that provide *future* benefits to the company. It may well be that the above manager is convinced that the marketing expenditure will result in future benefits, and is simply trying to report the transaction properly as an asset. On the other hand, it maybe that the manager is really trying to manipulate reported earnings using an accounting decision. Perhaps he or she is trying to meet a quarterly earnings target for the division, and the capitalization of the marketing expenditure is just the boost in earnings needed to tip the reported earnings from a deficit to a surplus relative to the division’s target. The investor, and often the external auditor of the company, is usually not in a position to distinguish between the two alternative scenarios because doing so requires second-

guessing the manager's business judgment as to whether the expenditure will result in future benefits.

But there is good news for the investor. While the above earnings management decision increased reported earnings, it also resulted in a very visible balance sheet "accrual" item, specifically, an asset item called "deferred subscriber acquisition cost". Moreover, unfortunately for the manager, this accrual is not a permanent item. Over time, this accrual item will be amortized and will result in expenses in future periods, thus reversing the beneficial income effect realized in the current period. In fact, the above accrual will reverse completely over time in a predictable way. We know from recent research findings in accounting and finance that this reversal of accruals over time is in fact a general property of all "operating" accrual items, such as inventory, accounts receivable, accounts payable, capitalized costs, and so on.

More generally, we can define accruals as the difference between cash flow from operations and net income. A fundamental property of accruals is that they will reverse over time, causing any planned or unplanned earnings management to be completely ineffective when viewed in the aggregate over a period of time. This means that managers who employ accruals manipulation cannot rely on accruals alone to report strong earnings. Justice is ultimately meted out to the unsuspecting manager who builds up accruals, when the built-up accrual items invariably start to unwind over time, suppressing future earnings and thus stock prices. Over time, managers would be forced to make up earnings shortfalls with real cash earnings.

The fact that accruals do reverse predictably over time is thus a boon to both investors trying to identify earnings management situations and corporate managers interested in regulating accruals behavior within companies. By carefully studying the level of accruals reported by

companies and the changes in them over time, analysts and corporate leaders can hope to identify companies that are building up accruals.

Accruals versus Financial Engineering

The simple case of accruals management through capitalization of expenditures illustrates several common characteristics of traditional earnings management practiced in many companies. First, the goal of accruals management is the management of the income statement. Any additional effect on other financial statements, such as the effect on assets and liabilities, is viewed by the manager as secondary or irrelevant. Second, accruals management is done easily through accounting decisions, and does not require the creation of a new business transaction. In the capitalization case, one could assume that the \$90,000 expenditure would have been made anyway for business reasons, and that the capitalization decision was additionally made to manage earnings. Third, and most important, accruals management is usually done by a lone manager or a small group of managers.

By contrast, the structure of financial engineering transactions of the kind employed by Enron is inherently complex, requiring the formation of legal entities, and creation of financing arrangements between the company, its lenders and new outside investors. These financial arrangements are sometimes referred to as “structured finance.” For example, consider a complex structured finance arrangement for a “special purpose entity” (SPE) undertaken by Enron apparently to book a large gain from the “sale” of an unprofitable start-up venture. In the venture with Blockbuster, Inc., digitized video entertainment from Blockbuster would be piped to customers’ television sets over a Enron-provided broadband fiber network. By late 2000, this venture had neither paying customers nor profits. But Enron nevertheless apparently wanted to

report the venture as a success. It formed an SPE called “Braveheart”, with a \$115 million financing from CIBC, a Canadian investment bank, and a \$10 million equity from two small entities, one of which was a 72%-owned subsidiary of Enron. The funds were then channeled to a second SPE, which then paid the funds to Enron in exchange for the Braveheart venture. The bottom line from these very complex set of transactions was that Enron “sold” a revenue-less and profit-less venture to an SPE controlled by itself for \$125.8 million and booked a \$111 million profit.

Unlike accrual decisions which can be planned and executed by small groups of individuals, financial engineering transactions like the one above require significant legal planning, including the proper creation of legal entities, and additionally often requires raising new long-term capital in the form of loans or equity. A comparison of the simplicity of accruals management with the complexity found in financial engineering arrangements thus shows that financial engineering requires an *organizational commitment* to earnings management. In other words, in addition to middle managers desiring higher earnings etc., financial engineering requires the commitment of senior management and the company board of directors in the decisions to create the needed financial commitments and structures.

Financial Analysis of Financial Engineering

As noted earlier, accruals generally reverse over time, providing the analyst with tell-tale signs of earnings management. By contrast, financial engineering is often designed specifically with the goal of hiding and removing accruals (such as operating assets and liabilities) from financial reports forever. Once taken off the balance sheet, these accruals are impossible for the investor to track. There would be no expectation that the accruals will reappear or reverse in a future period.

For example, if debt is held off-balance sheet, there is not much an investor or even a corporate manager can do to predict when and whether the debt will affect the reported financial performance of the company. There is also no assurance that the income effects will reverse in some definite time frame. For example, off-balance sheet debt can be refinanced indefinitely through the creation of additional SPEs.

Where Do We Go From Here

To summarize, the financial reporting management opportunities presented by financial engineering potentially fall in a different class altogether from the traditional accounting accruals-based earnings management. Moreover, there are currently few developed tools of financial analysis currently available to senior managers and investors to monitor the income and balance sheet effects financial engineering. Financial engineering, of course, is good for the company if it achieves any of the standard goals of corporate finance – raise capital at the lowest cost, reduce the risk exposure and manage or spread risk, and make funds available for value-creating projects – just as accounting accruals management is supposed to convey information to investors about managers’ expectations of future cash flows. Still, the lack of transparency inherent in financial engineering means that the potential to misuse it as a powerful tool of earnings management is high, especially where an organizational commitment to earnings management exists. It is thus imperative for corporations now, more than ever, to recommit to developing and enforcing corporate governance systems that create a corporate climate of transparency and full disclosure to investors. Any structural weakness in corporate controls and governance could easily lead to large-scale management of earnings through financial engineering, and ultimately to shareholder value destruction. This is the main lesson of Enron.