

# Commentary

BUFFIN PARTNERS INC.

INVESTMENT AND ACTUARIAL RESEARCH

## Reinventing Accounting

A guest editorial by ERIC J. KLIEBER, FSA  
Consulting Actuary, Buck Consultants, Inc.

Accounting developed in an information-poor age. A Renaissance businessman may have had data about his business, e.g., inventories of raw materials and their value in the local currency, the labor and raw materials required to produce a finished product, the value of the finished product and annual sales of that product, but before the development of accounting principles, this data told him little about his business. Accounting provided the businessman with useful information about his business—was it profitable, how much was it worth.

The basic accounting principles used today were codified by the late fifteenth century. While these principles have been extended to cover financial entities and transactions undreamed of back then, accountants still structure their financial reports around a balance sheet, income and expense statement and cash flow statement that have changed little in the past 500 years. As a result, the complexities of modern business practice are still boiled down to a few “bottom line” numbers, such as net worth and profit or loss.

One need not look far to find business practices that severely challenge this model. A good example is employee stock options. Many firms in emerging high technology fields, which must often rely for operating funds on new investments rather than product sales, have routinely attracted and retained employees by providing a portion of their compensation in stock options to avoid paying the entire market value of their employees’ services in cash. The ultimate value of these stock options depends on the future financial performance of the company issuing the options, which may range from total fail-

ure to market dominance in its field. While formulas exist for determining a fair value for stock options, the formulas cannot predict the future. Formulas may produce the same value for the options of companies whose ultimate financial performance diverges widely.

Another example is life insurance company accounting. In the US, life insurance companies must report their financial results on three bases, one for public reporting of financial results, one for reporting financial results to tax authorities, and one for determining the amount of statutory reserves. The three methods differ principally in their manner of measuring the financial impact of future contingencies, relating both to an insurer’s insurance liabilities and to the assets set aside to fund those liabilities. That the results on these three bases can differ significantly illustrates the uncertainty inherent in life insurance accounting.

Much the same problem plagues accounting for defined benefit (DB) pension plans. The company-specific risk associated with a DB pension plan depends on future contingencies relating to the benefit liabilities, the trust fund assets and the performance of the sponsoring company. Many methods have been used for measuring the net liability and expense associated with DB pension plans, and these methods can give widely varying results.

As a final example, some economists want companies to include in their annual statements the financial effects of their environmental practices, e.g., use of limited resources such as oil, fresh water and tropical forests; degradation or enhancement of the quality of air and water; etc. These economists have devel-

oped elaborate models for placing economic value on these environmental factors. However, most mainstream economists reject these models as too speculative to employ in determining economic value in the marketplace.

Two characteristics of current accounting methods contribute to the problems described above. First, accounting is a retrospective process: accountants look back to see what happened, not forward to see what might happen. As a result, accounting deals poorly with items, such as described in the examples above, whose current value depends on future events. Second, accounting was designed to deal with tangible assets. Each of the examples described above includes an intangible element. Pension plans provide financial security to employees during retirement. Thus, a pension plan has value beyond its monetary liabilities for benefits and the assets invested to fund those liabilities. Economic models designed to capture this additional value can be as speculative as models for placing an economic value on biodiversity.

We live in an information-rich age. Accounting practice should be updated to take full advantage of the resulting possibilities. Bottom line numbers, such as net worth and profit or loss, which provided valuable information about a business in the Renaissance, now serve only to hide information by compressing the complexities of a modern business into a few figures. The primary goal of accounting, rather than tying up corporate financial results in a neat little package, should be publishing the greatest possible volume of audited financial information about companies. Rather than imposing a single economic model on the financial community,

*(continued)*

the accounting profession should provide the information necessary to allow financial analysts to apply competing economic models. Failure to modernize accounting practice has several consequences:

By reducing the amount of financial information available about companies and imposing a single "certified" economic model on the information actually published, current accounting practice suppresses innovation in the field of financial analysis. For example, if companies were required to publish in their annual reports the financial effects of their environmental practices, analysts would be free to ignore the information; but if those analysts who used the information proved more successful in predicting companies' long-term financial performance, incorporating this information into financial analysis would likely become standard practice. Current accounting rules make such a change in practice nearly impossible to bring about.

By developing in the accounting profession, through training and long practice, a vested interest in published financial standards, current accounting practice discourages changes to those standards even when experience shows those standards to be deficient. The reluctance of the FASB to reevaluate the pension accounting standard despite criticism from many quarters illustrates the inertia built into current accounting practice. This inertia can only increase when accounting standards become international.

By focusing on a few bottom line figures, current accounting practice provides a road map for fraud, as the recent financial scandals demonstrate. Once financial results have been boiled down to a few figures, it is easy for those with fraudulent intent to design a scheme that reproduces those figures within expected ranges, making fraud detection through published financial results nearly impossible. Further, the inertia built into existing standards ensures opportunities for fraud will be exploited far more quickly than the standard setters can move to address them.

The accounting problems associated with DB pension plans provide an example of the possibilities for enhanced financial disclosure. With modern computer

technology, an actuary can churn out a great deal of information quickly and cheaply. There is no reason a company's audited financial statement cannot include all important components of a standard actuarial expense calculation at quarter point discount rate intervals from the riskless rate up to the long-term assumption, perhaps even extending a half point or so on either side of this interval. Further, the financial statement could give the address of a web site from which an audited list of the plan's assets can be downloaded in a standard format. This would enable a financial analyst to compute pension expense at any desired discount rate using any desired actuarial cost method and asset valuation technique. Thus, rather than imposing any one model for valuing DB pension plans on financial analysts, competing models could be tested in the marketplace. If one model ultimately proves more reliable for predicting future company performance, perhaps that model would become a de facto standard, although, given the wide variation in practice among analysts, it seems unlikely the necessary consensus would ever emerge.

Consider again the issue of accounting for the financial effects of environmental practices. It may seem inconceivable today, but during the Middle Ages those at the top of the economic heap treated labor the way accountants treat environmental practices today, i.e., as having little or no economic significance. Labor, in the form of armies of serfs, was just there. The triple-whammy of the Black Death, the Hundred Years War and crop failures due to the onset of the so-called Little Ice Age caused widespread labor shortages in Europe during the fourteenth century. It can be argued that the earlier adoption in England of the wage model for valuing labor set in motion the processes by which England ultimately became the superpower of the nineteenth century. No one can say whether environmental practices will some day affect companies' financial performance, but if and when this occurs, the doctrinaire refusal by the accounting community to consider incorporating environmental practices into financial statements will set back the financial world's adjustment to this new reality.

A primary goal of financial accounting has been to provide comparability between financial statements for the same company from year to year and among all companies for the same reporting period. Enhanced financial reporting would not only eliminate these types of comparability, it would even eliminate comparability for the same company for the same time period, since different financial analysts could publish different results based on their preferred financial models. Clearly, this would be a large pill for the accounting profession to swallow. However, in light of the performance of accountants and financial analysts during the recent stock market boom and bust, it's not at all clear that, in eliminating comparability, anything of value will be lost. It seems fatuous to claim that the panoply of companies in the world today can be meaningfully compared based on the few numbers which appear in their audited financial statements, no matter how those numbers are calculated.

Of course, many accountants and analysts will say not showing traditional bottom line figures on financial statements will cause chaos in the financial and investment communities. Experience shows that, if patriotism is the last refuge of the scoundrel, threatening impending chaos is the last refuge of the vested interest. Enhanced financial reporting would open opportunities for creative analysts to find new and more accurate ways for predicting companies' future financial performance, while consigning those who have grown comfortable with the old ways of doing things to the ash bin of history.

A common put-down today is to call something "so twentieth century." Of the accounting profession, it can legitimately be said it's "so fifteenth century." It's time for accountants to leap ahead six centuries to provide the information needed by investors of the twenty-first century.

## Buffin Partners Inc.

P.O. Box 1255  
Sparta, NJ 07871  
Phone: (973) 579-6371  
Fax: (973) 579-7067  
Email: k.g.buffin@worldnet.att.net

