



PENSION VALUATION NEEDS MORE DISCLOSURE, NOT A NEW FORMULA

By Eric J. Klieber •

Actuaries and accountants need to explore better ways to present DB pension plans on corporate financial statements, but wrapping them in a package labeled “non-operating assets” is not the answer.

LARRY BADER POINTS OUT REAL PROBLEMS with corporate valuations used by financial analysts to make judgments about publicly traded companies. However, the problems go far deeper than his analysis implies. Revamping the methodology for taking defined benefit pension plans into account in corporate valuations addresses only a symptom of the underlying problems.

The price-earnings multiple is itself a deeply flawed methodology for valuing companies. Bader notes that “[t]he price-earnings (P/E) multiple is the most familiar valuation tool. . . .” But he offers no other reason for making the use of this tool the centerpiece of his analysis. This seems rather surprising given the iconoclasm of the rest of his thesis. It’s unfortunate Bader didn’t paddle further upriver before departing from the mainstream

of actuarial thought regarding the valuation of defined benefit (DB) pension plans.

Artificial Designation

Bader claims DB pension plans should be accounted for separately, in part because they’re “financial assets that aren’t an integral part of the operating business and could be sold without disturbing them.” However, this description could apply to many parts of a company’s business.

Take real estate, for example. Owning and maintaining buildings isn’t an integral part of the business of your typical widget manufacturer. The company could just as well lease the space it needs for its administrative and manufacturing operations. Suppose Company AR, instead of owning an investment portfolio of

\$100 million like Bader's Company AI, owns real estate, comprising the buildings it uses for conducting its business, valued at \$100 million. Company AR thereby avoids \$20 million in rental costs each year. The table below shows this company's implied equity treating the avoided rental cost the same as other earnings.

Like Bader's Company AI, blind application of the P/E multiple to Company AR places a value of a half billion dollars on AR's real estate worth only \$100 million. This problem can be fixed by removing real estate assets and expenses from the analysis and adding AR's real estate assets at market value at the end

TABLE 5. Valuing a Company with Real Estate Assets

	COMPANY A	COMPANY AR
Earnings before rental costs	\$120 million	\$120 million
Rental costs	\$20 million	
Earnings after rental costs	\$100 million	\$120 million
Equity value	\$2.5 billion	
P/E	25	
Implied P/E		25
Implied equity		\$3 billion

of the calculation; that is, by using earnings before interest, taxes, depreciation, amortization, and real estate, or EDITDAR.

Of course, a company may have other assets that aren't an integral part of the operating business. Examples include assets associated with employee training, billing customers, site operations, and internal accounting. Many companies even farm out research and development, given its hit-or-miss nature. One might, therefore, imagine an "earnings before interest, taxes, depreciation, amortization, real estate, training, billing, operations, accounting, research and development," or EBITDARTBOARD.

The point is that separating operating from non-operating assets is an artificial designation. The presentation of a part of a company's business on the company's financial statements should be based on the potential for that part of the business to affect the company's financial results, not on artificial distinctions such as financial/non-financial or core/non-core. The Enron debacle surely makes this point abundantly clear, since the transactions that ultimately brought Enron down involved non-operating assets.

Accountants Should Facilitate Others' Judgments

The board and management of a company make the decisions about what the company should consist of and how it should be operated, and the investors make the decisions about whether to invest. The job of accountants is to present the company to the investors so they can make informed investment decisions.

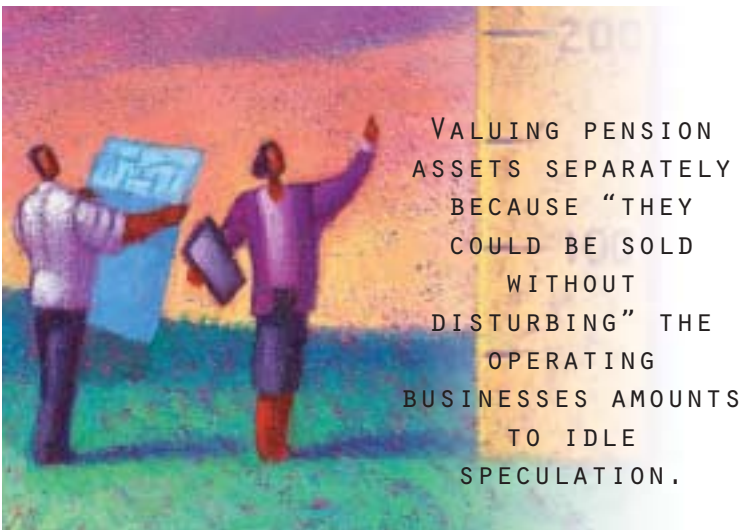
The assets held by a DB pension plan are similar to the assets held by a closed-end mutual fund or real estate investment trust (REIT). Entities of both types report their assets at market value, but the market value investors place on the closed-end fund or REIT may differ significantly from the composite market value of the underlying assets. Unless there's good reason to believe the company's board or management is about to terminate a DB plan or change investment strategy, the plan's assets should be presented on the balance sheet in a format similar to that used for a closed-end mutual fund or REIT. Let the investors judge their worth and potential contribution to the company's financial results.

The fact that a DB pension plan can be terminated and its assets and liabilities liquidated is no reason to value those assets and liabilities as if the plan were about to terminate. The logical extension would be that since the company could sell or liquidate every one of its components, all components should be valued at their sale or scrap value. Valuing pension assets separately because "they could be sold without disturbing" the operating businesses amounts to idle speculation.

Bader claims that "[c]orporate valuations commonly take no specific notice of pension plans; financial statements reflect pension plans under Financial Accounting Standard Number 87 (FAS 87), and most users of these statements apparently assume that the reported earnings correctly capture the effect of such plans." He also claims that financial analysts "lack the specialized knowledge needed to understand pension accounting . . ."

The reality is that, while these statements may have been true five or 10 years ago, today most analysts are sufficiently

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knowledgeable to understand the nature of pension accounting and do in fact consider the impact of FAS 87 (and FAS 106) expense or income in the process of valuing companies. Today's generation of investment analysts is trained to study each component of FAS 87, consider trends over a period of years, and identify material effects on earnings. No doubt some analysts don't use the available information consistently or correctly, but over time they'll either change their ways or be weeded out, since they'll achieve poorer results than those analysts who correctly incorporate DB plans into their forecasts.

Many companies today are extremely diverse. General Electric, for example, has major business operations in corporate finance, consumer goods, jet engines, and nuclear power plants, among other areas. It also sponsors several DB pension plans. Each of its operating units has a different potential for contributing to GE's overall profitability, as do its pension plans.

No financial analyst can claim expertise in all aspects of GE's business; a thorough analysis of GE must involve the analyses and opinions of many specialists, including specialists in DB pension plans. That DB plan specialists exist today in the financial community is proof of the serious attention being given to pension plans in today's market.

A single number, the P/E multiple, cannot capture all the information necessary to value a complex, multi-line business such as GE. Bader acknowledges that "[d]ifferent lines of business may call for different P/E multiples. . . ." But even for a single line of business, the P/E multiple is at best a black-and-white snapshot of the current status of that line of business.

A complete analysis of the profit potential of a line of business requires a great deal more information, and a company's financial statement should disclose this information as effectively as possible. If a DB pension plan is a significant enough part of a business to affect a company's future financial results, the company's financial statements should disclose enough information about the plan so its potential effect can be judged. Bare numbers representing the fair value of accruing benefits and of the plan's assets don't provide the necessary information.

Accountancy and financial analysis are evolving disciplines. As the ongoing investigation of Enron reveals, some corporate leaders will exploit weaknesses in existing accounting standards

to overstate the values of their companies. Undoubtedly, in the aftermath of Enron, accounting standards will be tightened and financial analysts will pay more attention to the types of transactions that got Enron into trouble.

Just as assuredly, some enterprising executives will find other loopholes to exploit in their efforts to pump up the values of their companies. The situation is not unlike campaign finance reform, an endless cycle of exploiting and closing loopholes in the rules. With each turn of the cycle come additional knowledge and tools that enhance financial analysts' ability to evaluate companies' profit potential. Summed over time, these have given rise to the sophisticated financial analysis modern financial markets have come to rely on.

It's time for actuaries and accountants to explore together more effective methods for including DB pension plans on corporate financial statements before public scandal compels them to act.

Overdetermination of Risk

Bader states that "[a] company's pension liabilities are similar to debt." While true, the differences are huge. Pension liabilities, for example, are covered by dedicated assets in a tax-favored trust fund; over 90 percent of DB pension plans have assets that exceed ABO.

Also, unlike most debt, pension liabilities afford companies considerable flexibility in making payments on a tax-favored basis, building up credits in flush times to reduce required payments in lean times.

There was a time in the not-so-distant past when companies issuing bonds were usually contractually obligated to contribute to a sinking fund, an internal fund dedicated to the repayment of the bonds at maturity. Today, sinking funds are rare, and most corporate debt is simply a general obligation of the company issuing the bonds. Needless to say, this change in practice has made corporate bonds less secure. Companies still have a legal obligation under ERISA to contribute to a fund dedicated to meeting their pension liabilities. This obligation, at the least, greatly reduces the risk associated with an ongoing DB plan.

Rational people invest in equities in the expectation of higher returns over long time periods than other types of investment. Given the long duration of pension liabilities in most cases (assuming no plan termination), returns in excess of those available on company debt, while not rising to the certainty of death and taxes, are a reasonable expectation, and rational people will take this expectation into account when valuing pension liabilities funded by equities.

Further, it's difficult to rationalize assigning different fair values to the same pension liabilities depending on short-term fluctuations in market interest rates, unless a plan is about to terminate and the liabilities must be purchased at market rates. Discounting pension liabilities based on a conservative judgment of the long-term expectation of earnings on plan assets makes sense for calculating a fair value for DB plan liabilities. Certainly, however, additional information would be necessary, perhaps through footnote disclosures, to enable analysts to incorporate the impact of pension liabilities on future profit expectations.



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Conclusion

Larry Bader's attempt to fix the method for calculating P/E multiples by reforming the methodology for taking into account defined benefit pension plans can never lead to improvement in corporate valuations, because the P/E model itself doesn't meet investors' information needs. Ample experience shows that financial assets can have a major impact on a company's bottom line.

To enable financial analysts to measure this potential impact requires the greatest possible degree of disclosure regarding the assets and liabilities of pension plans. Rather than using a formula for reducing these assets and liabilities to a few figures on the financial statements, actuaries and accountants should be working together to determine the most effective methods for making the details of these assets and liabilities available to the financial community. ●

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BADER RESPONDS

I AGREE WITH MUCH OF WHAT MR. KLIEBER SAYS about the flaws of P/E multiples as a valuation tool. Of course, no analyst would rely on a P/E multiple as the single measure of value; it likely would be one of several measures used to define a range of values. All such measures have their pros and cons and would serve to make my point equally well.

I use P/E and illustrative non-pension financial assets and li-

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abilities only as a steppingstone to the focus of the article—the valuation of pension plans as part of a corporate valuation. Accordingly, I will confine my response to my three main points:

(1) Pension plans should be valued separately from operating businesses, their value being the pension assets minus the pension liabilities.

(2) Pension assets should be valued at market.

(3) Pension liabilities should be valued using the market discount rates for debt with similar creditworthiness.

Separate valuation of pension plans. The basic principle of separate valuations for separate businesses is well established in theory and practice. Some businesses may be difficult to value separately, but the pension plan is not.

Market value of assets. Pension assets must be reported at market value, not because of a theoretical plan termination, but simply because assets can be bought and sold at market prices. Suppose you have to choose between buying shares of Companies A and B. They differ only in that B has an additional \$1 million of securities on its balance sheet. What increment would you pay for B relative to A (ignoring taxation and default risk)?

When you buy shares of a company, you acquire a fraction (say 100% in this illustration) of all its assets and liabilities. You can buy securities identical or similar to B's extra assets in the public markets. Owning those extra assets directly is the same as owning them indirectly through your ownership of B. So you could buy B, or you could buy A and replicate B's extra assets in your personal portfolio.

Why would you pay a higher increment for B than the \$1 million cost of buying its extra assets in the public markets? (An arbitrage argument can show that you shouldn't be able to buy them for less, either.)

Shifting those extra assets from B's balance sheet into its pension fund (again ignoring taxation and default risk) doesn't fundamentally change the risk/reward profile. You're still roughly neutral between (1) buying A plus \$1 million of securities and (2) buying B for the same total.

Market value of liabilities. As for the valuation of liabilities, I stated that the discount rate should reflect the rate on debt "with similar creditworthiness (factoring in the security provided by the pension fund)." I agree with Mr. Klieber that well-funded ERISA liabilities of strong sponsors are nearly riskless. Debt obligations of similarly low risk trade in the public markets. They provide a reference point for determining discount rates and the market value of the pension liabilities.

Suppose Company A owes a creditor \$1 million, while Company B owes its pensioners \$1 million. The timing and likelihood of payment are the same for both companies. Then the companies have identical obligations, and they must be accounted for identically, at market value. Earmarking some assets toward the debt or pension obligations (apart from the pos-

sible effect on the likelihood of meeting the obligations) doesn't change the liability value, no matter how well management expects those assets to perform.

When an investor buys stock in a company, he acquires a proportionate share of the company's pension surplus or deficit. The price he pays should reflect the price at which the relevant assets and liabilities would currently trade by themselves. When a buyer and seller transact at an off-market price, one party earns an unwarranted profit at the expense of the other. A defense of an off-market price for a marketable security would be risible to any serious investor. But the investor would be intensely interested in whether the defender was buying or selling!

This conclusion involves no rocket science. When market prices are available, buyer and seller need not, as Mr. Klieber would have them do, "study each component of FAS 87, consider trends over a period of years, and identify material effects on earnings." More information is fine, up to a point; but eventually the investor must condense the information into a single value to guide a decision.

To understand the damage caused by off-market valuations, we need look no further than Mr. Klieber's illustration of how standard P/E methodology can misvalue real estate. He uses this illustration to indict P/E valuations. His indictment is sound, but there's another lesson here. Misvaluation of real estate creates opportunities for financial engineering, such as sale-leasebacks, to realize the full market value of undervalued real estate. Such transactions are costly but serve only accounting and perhaps tax purposes. They're profitable for third parties but fundamentally uneconomic for the companies.

A more pertinent example for us is the rush of "settlements" to recognize pension surplus after FAS 87/88 became effective. Companies wouldn't have undertaken these costly transactions if investors and regulators were already recognizing the market value of pension surplus.

The smoothing inherent in the actuarial/accounting pension model mistakenly treats institutions (e.g., pension plans and their sponsors) rather than individuals (e.g., shareholders) as the bearers of risk and reapers of rewards. Mr. Klieber dismisses market valuation and short-term volatility as factors only in the event of plan termination. In fact, interests in corporate pension assets and liabilities trade minute by minute as shares of their sponsors change hands. Actuaries must provide shareholders the transparent pension reporting that will enable shareholders to transact at market value and be compensated correctly for their period of ownership. ●

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