CFOs: Don’t forget pension funds
Merton finds plan assets, liabilities ignored in measuring cost of capital

By Joel Chernoff
December 11, 2006

Robert Merton said pension assets, liabilities should be integrated into balance sheets.

BOSTON — Take more risk in capital projects and less in the company pension fund.

That’s the underlying message of new research by Robert C. Merton, 1997 winner of the Nobel Memorial Prize in Economic Sciences and the John and Natty McArthur University Professor at the Harvard Business School, Boston.

Mr. Merton found that many chief financial officers have been overestimating their companies’ cost of capital by ignoring the bottom-line impact of their hefty pension assets and liabilities. That overly high hurdle rate, in turn, may have led them to reject capital projects.

For example, Boeing Co.’s estimated cost of capital was 8.8% in 2001, measured conventionally. But when Boeing’s $33.8 billion in defined benefit assets and $32.7 billion in pension liabilities are integrated into the company’s balance sheet, the company’s cost of capital plunges to 6.09%, a 271 basis-point drop, according to a Journal of Financial Economics paper co-authored by Mr. Merton; Li Jin, an assistant professor at the Harvard Business School; and Zvi Bodie, a professor at Boston University. Messrs. Merton and Bodie also are senior officers at Integrated Finance Ltd., New York, a consulting firm.

Analysts, in turn, are “likely to be underestimating the multiples of the companies they cover,” Mr. Merton said in a transcribed speech that appeared in the Winter 2006 issue of the Journal of Applied Corporate Finance, a Morgan Stanley publication.

In his research, Mr. Merton said companies should integrate pension assets and liabilities into the balance sheet because they are corporate obligations. “Most firms don’t quite think of it this way,” he said in an interview. Typically, such off-balance sheet items are ignored.
Better bang for buck

CFOs might find they not only should invest more in capital projects, but they also would get a better bang for their buck by reducing equity exposure in the pension plan, he observed.

Lowering equity allocations will reduce expected returns, and thus increase pension contributions, Mr. Merton said in the Journal of Applied Corporate Finance.

“And that sounds like a bad thing, a value-reducing proposition — until one begins to consider the effect on risk. When you look at the whole picture, lowering the expected returns on the assets also lowers the risk of the entire firm. And by lowering risk, you create the capacity for the firm to take other risks — core operating risks, if you will, that are likely to add more value than passive equity investments in other companies,” Mr. Merton said.

Explained Michael Peskin, managing director and head of Morgan Stanley’s global pensions solution group, New York: “For strong companies, they’re better off getting the (risk) exposure in the corporation, not in the pension plan.”

Until now, how much risk to take in the pension fund was nebulous, and companies largely have stuck with high equity allocations, explained Barton Waring, managing director at Barclays Global Investors, San Francisco.

“For companies where the pension plan is dominating part of the organization, this may provide an argument (in favor of) reducing that equity exposure,” he said.

“It’s hard to imagine that 75% equity is comfortably within the risk tolerance of most sponsors, remembering the reaction to 2001-2002 experience,” Mr. Waring said. “It would be easy to see the average dropping to 40% to 50% equities and to see more dispersion” in asset allocations, he said.

Risk mismatch

In the article, Mr. Merton said analysts, rating agencies and regulators mistakenly have focused on funding shortfalls when evaluating pension funds.

Instead, the “biggest pension problem facing corporate American and its investors is not shortfall, but the risk mismatch between pension assets and liabilities,” he said.

A company that is 105% funded but is 85% invested in equities carries far more risk than one that is 100% funded but is completely invested in bonds, he explained. That lesson was brought home from 2000 to 2002, when the stock market and interest rates both declined, sharply decreasing funding levels, he said.

The misplaced focus on funding levels has been driven by accounting and actuarial rules. Companies discounted their pension obligations with expected returns for stocks and bonds. That led pension executives to erroneously “think that the liability is less today if I put my investment in a stock portfolio than if I put it in a bond portfolio,” said John O’Brien, director of the Masters in Financial Engineering program at the Haas School of Business at the University of California at Berkeley.

In effect, they would “argue that $1 today in a stock portfolio is worth more than $1 in a bond
portfolio,” Mr. O’Brien said.

The risk mismatch is particularly troubling for companies whose defined benefit plans dwarf their market capitalization. In January, General Motors Corp.’s $93 billion pension fund was more than six times the company’s $13 billion market capitalization. The GM pension fund’s equity exposure was roughly $60 billion, Mr. Merton said.

“If you’re holding $60 billion in equities, even a 10% standard deviation — way at the low end for equities historically — is a $6 billion swing in value,” Mr. Merton said in the interview.

For large, healthy companies with sizable pension obligations, this type of mismatch might not make sense. Distressed companies, however, might do well to “maintain and even enlarge the risk mismatch” because they can pawn off the pension debt to the Pension Benefit Guaranty Corp., he said in the article.

Need for communication

Mr. Merton is not arguing in favor of immunization of pension liabilities. “Our analysis says only that you should understand how much risk your shareholders are bearing as a result of the mismatch, how much capital you are using to support it, and how your cost of capital is affected by it,” he said in the Journal of Applied Corporate Finance article.

Even if companies were to make radical changes in their capital structure and pension fund allocations, they still would have to communicate that policy to rating agencies, shareholders and others, Mr. Merton noted.

And the rating agencies are not ready to look at the risk mismatch when evaluating companies.

“It’s something we’d like to be able to do in the future, but we have not done it to date,” said Solomon Samson, chief rating officer for corporate issues at Standard & Poor’s, New York.