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FEATURE ARTICLE

# Pension Roulette: Have You Bet Too Much on Equities?

**With the stock market down, many pension funds are in trouble, and employees and fund managers are scared. Companies should have realized – and had better learn – that they can never get ahead by putting retirement funds in stocks.**

**by G. Bennett Stewart III**

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On July 16, 2002, General Motors disclosed that most of the \$3.5 billion in cash flow it had generated in the previous quarter had to be handed over to its pension fund to make up for dramatic losses in equity investments. It further warned that it would have to pump an additional \$6 billion to \$9 billion into the fund over the next five years to meet regulatory requirements. Investors quickly unloaded GM's shares, shaving 4.3% off the company's market value. As the year progressed and the stock market slide continued, the bad news got worse. GM ended 2002 with a pension-funding gap of \$19.3 billion, more than double what it had been at the end of the previous year. Its annual pension expense, which had been running at about \$1 billion, was expected to triple in 2003.

GM's problems are hardly unique. More than two-thirds of the 360 companies in the *Fortune* 500 that have defined-benefit pension plans are having to prop up their funds. In 2002 alone, IBM sank \$4 billion into its pension plan, Johnson & Johnson pumped in \$750 million, and 3M diverted \$1.1 billion. With corporate profits and share prices under pressure, the timing of these unexpected expenses couldn't be worse. Plunging pension funds are draining corporate coffers of cash just when companies are most in need of financial flexibility. And the pension losses are themselves adding to the downward pressure on stock prices. Investors' skepticism and skittishness will only deepen as fund losses work their way through corporate earnings reports over the next several years.

Corporate executives will take the blame for the pension debacle. But they're not the real source of the problem. Indeed, they were only following the rules. Current accounting guidelines are so biased in favor of putting pension assets into speculative investments that they've pushed executives to fill their pension portfolios with inherently risky stocks. Pouring money into equities seemed smart during the bull market of the 1990s, but the economic doldrums of the past several years have revealed just how foolhardy it really is.

Board members and top executives need to look beyond the distorted accounting numbers to

the economic realities of pension plans. Once they do, they may be surprised to find that equities have little place in a corporate pension fund. A company would reap far greater value and flexibility by passively investing its entire fund in bonds.

Many executives will recoil from such an idea. Stocks, they'll say, earn a higher return in the long run than bonds, thus reducing the cash a company must contribute to meet its future pension obligations. But the return on stocks is higher only because the risk is higher. In an efficient market, the *risk-adjusted* returns of stocks and bonds are equivalent.

Bonds, however, have significant advantages when it comes to funding defined-benefit pensions. A bond fund, first of all, is considerably cheaper to operate than an equity fund; transaction costs and management fees are orders of magnitude lower. More important, a bond portfolio can be designed to match the risk profile of a pension liability precisely, thus eliminating the chance of a funding gap. The predictability of bond investments, moreover, stabilizes reported earnings and cash flow. That, in turn, expands corporate debt capacity, which management can use to fuel profitable growth or to buy back shares and reduce the firm's overall cost of capital. Even without an overhaul of today's misguided accounting rules, companies have little reason to hold anything other than bonds in a pension fund.

### **The Off-Balance-Sheet Fantasy**

Years ago, the Financial Accounting Standards Board decided that companies should not record pension liabilities and associated pension fund assets on their balance sheets. The FASB mandarins ordained instead that pension accounts would be disclosed only in the footnotes of annual (not even quarterly) financial statements. By in effect forcing companies to hide their pension assets and liabilities off the books and report them infrequently, the accounting authorities have coaxed corporate managers into grossly underestimating their exposure to pension plan risk.

## GM's Balance Sheet Risk

If GM had accounted for its pension liabilities on its year-end 2001 balance sheet, it would have been easy to see how leveraged, and how much at risk, the company's assets really were. The figures in bold in the right column reflect GM's true assets and liabilities after its off-balance-sheet pension assets and liabilities have been consolidated on the balance sheet.

	Reported	Actual
<b>Reported Assets (in \$ billions)</b>	<b>\$324.0</b>	
Less: prepaid benefit cost		-\$7.5
Less: intangible assets		-\$6.2
Plus: pension fund asset		+\$73.7
Plus: unrecognized prior service cost		+\$7.9
<b>Adjusted Assets</b>		<b>\$391.9</b>
		Assets increase \$67.9 billion.
<b>Reported Total Liabilities</b>	<b>\$303.5</b>	
Less: accrued benefit liability		-\$10.8
Plus: deferred tax on minimum pension liability adjustment		+\$5.8
Plus: pension fund liability		+\$86.3
<b>Adjusted Total Liabilities</b>		<b>\$384.8</b>
		Liabilities increase \$81.3 billion.
<b>Reported Net Worth (including minority interest)</b>	<b>\$20.5</b>	
Plus: minimum pension liability adjustment		+\$9.6
Less: unrecognized actuarial loss		-\$23.0
<b>Adjusted Net Worth</b>		<b>\$7.1</b>
		Net worth falls \$13.4 billion.
<b>Net Worth as a Percentage of Total Assets</b>	<b>6.3%</b>	<b>1.8%</b>

The reality, however, is that pension liabilities have real teeth. To ensure that employees receive the pension benefits promised by their employers, the Employee Retirement Income Security Act (ERISA) of 1974 requires companies to maintain adequate funding of their future pension liabilities out of ongoing cash flows or face stiff penalties – hence GM's urgency in bumping up its pension contributions. If a company is caught short and goes belly-up without a fully funded plan, ERISA requires that the shortfall be covered by the Pension Benefit Guaranty Corporation, a federally run insurance fund. PBGC is empowered to recover the pension deficit by filing a claim against the company's assets that can amount to as much as 30% of the firm's net worth. This claim has the status of a tax lien: In other words, ERISA secures employees' golden years by giving them preference over a company's lenders and shareholders.

Whether paid out of cash flow or bankruptcy proceeds, a company's pension liability is senior even to its most senior lenders. It is not a vague contingent claim that deserves to be relegated

to the footnotes, the bookkeeper's equivalent of banishment to Siberia. It is in fact the exact opposite – a liability so binding it should be boldly printed on a company's balance sheet at the very top of its list of debts. And because pension assets, although legally segregated and under the control of a trustee, directly offset the firm's pension liability, they are effectively corporate assets that belong on the corporate balance sheet as well.

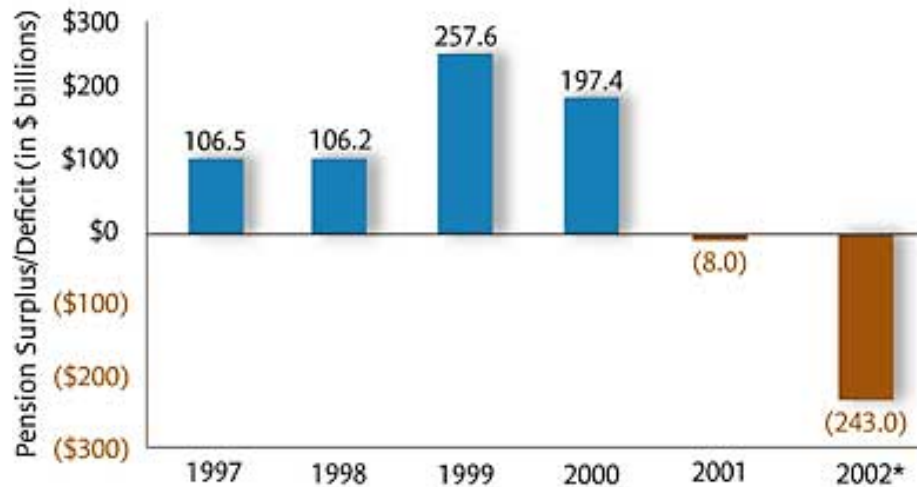
The surest indication that pension assets are real is their direct and measurable effect on corporate cash flow, debt, earnings, and market value. GM's experiences prove that deteriorating pension fund values can and do lead to wholly unpleasant consequences – a drain on capital, a surge in debt, and a sharp drop in earnings and stock price. But pension assets also function as corporate assets when they appreciate in value. If nothing else, those excess assets may reduce the amount of cash a company has to contribute to its pension fund. During flush times, a company can also exploit an off-balance-sheet pension asset by hiring more workers and offering them attractive retirement benefits or by expanding pension benefits in exchange for reductions in current wages without having to contribute any more cash to the pension plan. The surplus pension asset will simply absorb the increase in the pension liability. A pension asset is real, in short, because it has genuine costs and benefits for the company and its shareholders.

An analysis of GM's year-end 2001 balance sheet illustrates just how jarring the addition of pension accounts can be to a company's financials. Look at the exhibit "GM's Balance Sheet Risk." The company's reported results appear in the left column, and the right column displays what the results would look like if they took into account pension assets and liabilities. The restated figures clearly reveal a more highly leveraged balance sheet and greater asset risk. Total liabilities surge from \$304 billion to \$385 billion – more than 25% – while net worth plummets from \$21 billion to \$7 billion – more than 65%. GM's \$74 billion in pension investments – at least half of which are in equities – accounts for nearly 20% of all assets and is more than ten times greater than the company's revised net worth.

GM is just the tip of the iceberg. At the end of 2001 (the latest year for which data are available), off-balance-sheet pension liabilities for the S&P 500 totaled more than \$1 trillion. The market value of pension assets, less pension liabilities, reached a peak surplus of \$260 billion at the end of 1999, only to plunge to an \$8 billion deficit by the end of 2001. As the stock market dropped an additional 13% in 2002, aggregate unfunded pension liabilities ballooned to an estimated \$243 billion by year's end, according to Credit Suisse First Boston. (See the graph "What the Bear Market Has Done to the S&P 500's Pension Funds.") Fully including pension assets and liabilities on corporate balance sheets would give a very different – indeed, far more worrisome – picture of corporate America's current creditworthiness.

## What the Bear Market Has Done to the S&P 500's Pension Funds

The volatility of the stock market from 1997 to 2002 shows just how speculative stocks are as a source of pension funding. During the bull market, equities buoyed pension asset levels, but see how quickly, and how far, they've dropped in the current bear market.



\*Estimated by Credit Suisse First Boston

Truth be told, most companies' pension plans today differ only in degree from Enron's reviled Raptor partnerships. Both can be considered special-purpose entities using off-balance-sheet debt to finance the acquisition of risky assets that are also kept off the balance sheet. In both cases, the accounting treatment hides losses and disguises the riskiness of investments.

### The Mismeasure of Pension Expense

The balance sheet is not the only place where pension accounting gives a false impression of a company's true financial health. The income statement misrepresents pension expenses as well. A company's real pension cost is simple to measure and understand. It is the present value of the retirement benefits workers have earned during the accounting period in question. Put another way, the true pension cost is equal to the amount of cash that would have to be set aside and invested in a bond fund that reliably compounds in value to meet the additional retiree payments. This "service cost," as it is known, directly increases the firm's pension liability, and by doing so it decreases the firm's market value – dollar for dollar. Service cost is the amount that should be subtracted as the periodic pension expense on the income statement. Under present bookkeeping rules it is not.

Rather than follow that straightforward approach, accountants and actuaries have devised a complicated formula for measuring pension expense. They reduce the cost by the excess income the fund is expected to earn over the amount needed to pay future benefits. This formula suggests that earning a higher return on pension fund assets reduces a company's pension cost. But that is not so. The pension expense is the period-to-period increase in the pension liability – that is, in the present value of the promised retirement payments. That increase has nothing to do with the returns actually earned from the pension plan assets.

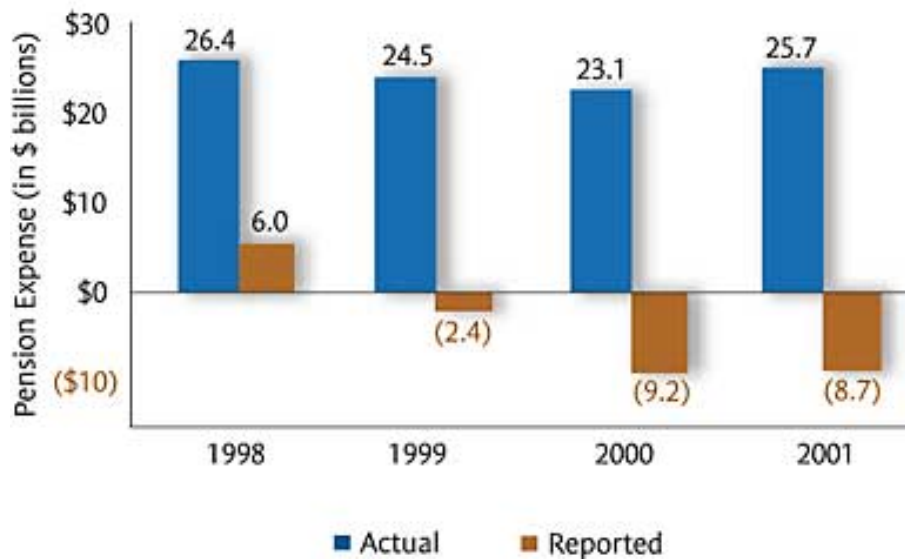
By their failure to separate the liability cost and the investment returns, accountants have lured many an unsuspecting CFO into gambling shareholders' equity on speculative investments. After all, if the pension fund's expected returns and market value are high enough, a company can report *negative* pension costs – in other words, it can record income from its pension plan. In



2001, the S&P 500 companies as a group booked pension income of almost \$9 billion, even though their ongoing service costs were actually running at nearly \$26 billion. (See the graph “Reported Pension Expenses Are Not Real.”)

## Reported Pension Expenses Are Not Real

Accounting practices grossly misrepresent actual pension costs. Had the S&P 500 companies recorded the true, risk-adjusted service cost of their pension obligations, investors could see that, far from enjoying a \$9 billion earnings surplus in 2001, they actually faced an ongoing \$26 billion pension-funding bill that year.



Further clouding the picture, the figure for pension fund return that appears in current pension cost calculations is not the actual return on fund assets. It is an *assumption* about long-run future returns, expressed as a constant annual percentage rate. Actual pension fund returns may be gyrating up and down, giving shareholders a bumpy ride, yet the recorded pension cost blithely assumes away the short-term fluctuations. Here, again, real risk is masked by accounting fantasy.

Worse yet, managers are allowed to change the assumed return on the pension assets, which provides an incentive – and a cover – for malfeasance. When executives foresee good times immediately ahead, they must surely be tempted to lower the assumed return, inflating their reported pension cost to build up an unreported cookie jar of potential earnings for the future. Then, when the lean years arrive, they can draw down that reserve by ginning up the assumed return and reducing the reported pension cost.

The accounting rules, which include a circuit breaker to prevent pension fund assets from substantially exceeding or falling short of fund liabilities, make this possible. When the gap is greater than 10%, FASB rules require the cost or gain to be metered into earnings over the remaining service life of the firm’s current employees (typically, a period of five to 15 years). In 2001, these rules and GM’s assumption that its pension fund returns would exceed its pension service costs excused the company from recognizing \$11.1 billion in fund losses. These rules do more than smooth reported earnings; they introduce a further measurement distortion by masking the inevitable year-to-year volatility of pension investments in equities.

### Ending the Gamble

The only way a company can be sure it will meet its pension commitments on schedule is to

invest its pension fund assets in a diversified bond portfolio that matches the risk profile of its pension liability. Suppose a company has a pension liability of \$1 billion – the result of discounting retiree commitments at the prevailing AA bond yield of 5%. To neutralize the risk to its shareholders and align portfolio returns with pension commitments, the firm could invest its pension fund assets in a \$1 billion AA-rated bond fund that yields an identical 5% return. Only then could it be certain that its pension fund would grow in value in lockstep with the increase in present-value cost of its existing pension commitments.

Any deviation from this risk-neutral investment strategy represents a decision by management to enter into a separate, nonoperating line of business – namely, investment speculation (a business line that is highly unlikely to increase corporate value). Any returns from such speculation, to the extent that they deviate from the AA-rated return, should not be counted together with pension liability costs, as doing so would be to mix operating and financing decisions. Truth-in-labeling requires that any excess or shortfall in returns be separately broken out on corporate earnings reports and labeled “Pension Fund Speculation Gain (Loss)” or the equivalent. Investors could then readily discern the value (or discount) they’d want to assign to such a volatile earnings stream.

The current accounting rules, however, fail to impose such basic financial discipline. Indeed, as we’ve seen, they force companies to confuse speculative and unreliable returns with fixed and unavoidable liabilities. They actively encourage corporate finance managers to gamble with pension funds – to try to earn a return exceeding future obligations in order to boost corporate earnings. But in the end – and regardless of the accounting treatment – that’s a fool’s game. Higher returns can be gained only by taking on more risks – the risk of having to divert corporate cash flow to the fund, the risk of incurring more debt and sustaining a lower bond rating, and the risk of reporting lower earnings and driving down the stock price. All these risks must, of course, be passed on to the firm’s shareholders, who will respond (eventually, if not immediately) by stepping up the cost-of-capital rate they use to discount the firm’s earnings and cash flow to a present value or (in what amounts to the same thing) by cutting the price-to-earnings multiple they will pay. Adopting a risky strategy will not, therefore, move the stock price – unless, of course, the speculative investments go sour.



### **A Pension Primer for Directors**



Sidebar **R0306G\_A** (Located at the end of this article)

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Unfortunately, today’s accounting rules make it difficult for companies to reallocate their pension assets from unpredictable equities into stable bonds: Such a shift would reduce reported earnings in many cases. Should GM swap all its pension fund stocks for bonds, for instance, it would have to forgo what amounts to a pension fund expense subsidy that has been running at around \$2.2 billion (the difference between the expected return on its equity pension assets and the lower return from bonds). Book earnings and earnings per share would be hit hard.



### **The Tax Advantages of Bonds**



Sidebar **R0306G\_B** (Located at the end of this article)

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But these book earnings are not real earnings. And even without changes in the current pension rules, wise executives will see that funding pension liabilities with efficient, passive investments in bonds is the best course for their businesses. By securing the pension liability with a diversified bond portfolio that closely matches the liability’s risk profile, the liability is very unlikely to become underfunded and trigger a call on corporate cash flow. An off-balance-sheet pension liability is just as unlikely to elbow its way onto the corporate balance sheet in some

other way and startle lenders. The reduced risk will lead to a lower cost of capital and a higher debt capacity, which a company can use to fund growth or buy back some of its common shares.

Yes, the company's reported earnings may be lower, but they would be far more reliable. And because investors value the quality as well as the quantity of earnings – particularly in the aftermath of all the recent business scandals – more reliable earnings bring a higher price-to-earnings multiple and a higher stock price overall. Making the switch to bonds would, moreover, portray the company's management team as proponents of sound governance and of transparent, genuine earnings at a time when investors are clamoring for such leadership. It's the right thing to do, whatever the vagaries of the accounting numbers.

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## **A Pension Primer for Directors**

Sidebar **R0306G\_A**

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Boards of directors rarely pay enough attention to pension plans. But given the amount of money involved – and the very real financial and legal risks – the review of pension funds should be a key item on the board's agenda. Here's what directors should do to ensure that they have a real understanding of their company's pension plans.

- Know the condition of your pension plan – funding status, funding ratio, investment guidelines, key assumptions, and projected expenses and cash contributions.
- Examine your assumptions about asset returns, discount rates, and wage inflation to be sure they're not unrealistic.
- For purposes of internal analysis, recast your balance sheet to consolidate off-balance-sheet pension assets and liabilities.
- Assess the true cost of your pension plan after eliminating the subsidy that arises from assuming asset returns will exceed the pension liability discount rate.
- Assess the risk of your plan by considering the historical impact of speculative pension fund asset gains and losses on the volatility of reported income.
- Exclude the "built-in" pension expense subsidy from the earnings measure that will drive your management team's bonuses. Track unexpected speculation returns and decide – in advance – whether they will influence management's bonuses.
- Disclose all relevant pension information quarterly, instead of just once a year.

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## **The Tax Advantages of Bonds**

Sidebar **R0306G\_B**



Investing corporate pension assets in bonds is not only safer than putting them in stock but can generate more value as well. Consider the tax savings that a company can derive from exploiting differences in how individual investors and its pension fund are taxed. Under normal circumstances, pension funds are exempt from tax on investment income – whether from stocks or bonds. Individual investors generally pay a far higher tax rate on bond interest than they effectively do on equity returns. Long-term capital gains, which normally make up the bulk of common-stock results, are taxed only when realized, only at a 20% federal rate, and then only after being offset by capital losses. Dividends, though fully taxed, tend to account for only a small portion of total stock returns over time. A tax-exempt pension plan filled with equities produces an after-tax return that isn't much better than an individual's own equity account would generate. Investors in corporate bonds, however, are taxed on the full interest yield at their ordinary income-tax rates. A tax-exempt pension plan holding such bonds can therefore offer significant tax savings.

Eliminating taxes on dividends, as President Bush has proposed, would narrow the already slim differential between the returns on equities held in pension funds and those held by individuals but would leave untouched the huge gap between returns from bonds in pension funds and those held by individuals. An even bigger shift of pension assets into bonds would result.

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A tax-exempt pension plan filled with equities produces an after-tax return that isn't much better than an individual's own equity account would generate. Investors in corporate bonds, however, are taxed on the full interest yield at their ordinary income-tax rates. A tax-exempt pension plan holding such bonds can therefore offer significant tax savings. Eliminating taxes on dividends, as President Bush has proposed, would narrow the already slim differential between the returns on equities held in pension funds and those held by individuals but would leave untouched the huge gap between returns. If that bet wins, continue to bet 9/6 for the next bet, if that wins you have then made a 1 unit profit. Once in profit go back to the basic bet of 3/2. Converting Four-in-a-row Losses to Winners We have found a secret that eliminates most four-in-a-row losses! Anytime one of the eight losing number shows up, switch to the opposite two bets for the next bet: (on the next bet after a loss, place 9 chips on 19-36 and 6 chips on the 1st Dozen). Then, switch back to your normal bets. It works most of the time. Try it, and tell me what you think. Keep the bets flat too. Make sure to set RX to single zero roulette, and set all of the inside number payouts to 36. Amazing BR Balance Trend 2.jpg (221.13 kB, 974x526 - viewed 749 times.)

How to Win at Roulette. Dating back hundreds of years, roulette is one of the oldest gambling games. While the game is based on chance, strict probabilities are at the core of the game's spinning wheel. There are ways of playing the game... Bet on the inside in moderation to increase your payout. Though they have the highest payout, straight bets on a single number are risky. The odds of the ball landing on the exact number you chose is 1 in 37 (2.7%) for European wheels and 1 in 38 (2.63%) for American wheels. The payout decreases with the more numbers you split. A straight bet (1 number) yields a 35:1 payout, while a 6 line bet offers a 5:1 payout. When you split your wager, the numbers must occur next to each other on the roulette board within a 12-cell block. If you have a pension, should you allocate less to bonds? Not always. Here are the other more important factors to consider. Most retirees should decide how to allocate their investments by first making a retirement income plan that shows the future job the money will need to accomplish. How the Bond Allocation Might Work. Retiree 2 could invest a portion of their retirement money in bonds by purchasing a series of bonds where a specific amount matures each year. This is called a bond ladder. As they need to withdraw \$10,000 a year, it would make sense to purchase \$10,000 of bonds maturing each year for the first ten years of retirement.