

**PENSION  
PLANS**



# GET READY!

AS FINANCIAL PROFESSIONALS, YOU'LL  
NEED TO EXPLAIN PENSION ISSUES AND  
REPORTING TO EXECUTIVES AND DIRECTORS

BY ROBERT N. WEST, CPA

WITH THE SARBANES-OXLEY ACT and other regulations calling for executives and directors to become more financially sophisticated, controllers and CFOs will be expected to educate the nonfinancial officers in their companies. Getting these individuals up to speed on certain aspects of the financials will be a challenge for you—and pensions will be one of the biggest. But these officers really need to understand them because pensions can have a significant impact on operating earnings, stock price, solvency, and various important ratio measures.

In the late 1990s, pension plans of many companies contributed positively to operating income and may have contributed to overvalued stock prices, according to many reports in the business press. The tide turned somewhat in the past few years, and now companies are experiencing the more “normal” pension expense rather than pension income. To help you explain the pension situation, I’ll first discuss the real economics of pensions and then tackle the more complicated GAAP pension disclosures and reporting. GAAP is difficult to understand because certain “real” liabilities are recognized on a delayed basis. Then I’ll describe how pensions can be manipulated to make a company look better than it really is.

### “REAL” PENSION LIABILITY AND EXPENSE

Pensions can be reasonably straightforward if viewed from an economic perspective. The pension liability equals the present value of future expected benefit payments (called the PBO, projected benefit obligation). A pension plan has assets, usually bonds, stocks, and some real estate. The difference between the fair value of plan assets (FVPA) and the PBO is the amount the plan is overfunded or underfunded. Even though the pension plan’s assets are set up in a trust, the sponsoring company may ultimately be liable if the plan is underfunded.

Since the assets and liabilities of a pension plan could be viewed as part of a company’s assets and liabilities, some analysts recommend adding the PBO to the company’s liabilities and adding the FVPA to the company’s assets. What would that do to your debt-to-equity ratio? Does that put you in violation of your loan covenants? That may be extreme for a healthy company, but it may be appropriate for analysis of an airline company, steel manufacturer, automaker, or telecommunications company. Liabilities to employees, including wages and pensions, have a high priority in a liquidation, so creditors should seriously consider this type of analysis.

Pensions include many technical terms. Before reading the rest of this article, you may want to review the sidebar on pension terminology on page 59. To facilitate the pension discussion, I have included footnote information from a

**Table 1: Footnote Information from Sample Company**

<b>PENSION EXPENSE</b>	<b>2002</b>	<b>2001</b>	<b>2000</b>
Service cost	18,926	15,054	13,713
Interest cost	48,210	44,523	42,315
Expected return on plan assets	(59,443)	(62,748)	(69,361)
Amortization of net transition obligation	552	(302)	(384)
Amortization of prior service cost	1,674	1,576	1,635
Amortization of net actuarial (gain) loss	8,674	504	(3,335)
Special termination benefit cost	3,276	5,180	979
Acquisitions		48	
Effect of curtailment			348
Net periodic benefit cost (income)	21,239	3,835	(14,090)

### CHANGE IN BENEFIT OBLIGATION

Beginning balance (PBO)	678,822	610,875
Service cost	18,296	15,054
Interest cost	48,210	44,523
Plan participant contributions	1,049	1,066
Plan amendments	1,798	359
Actuarial loss	75,178	29,344
Benefits paid	(44,342)	(36,185)
Special termination benefit cost	3,276	5,180
Acquisitions		5,316
Other		3,290
Ending balance (PBO)	782,287	678,822

### CHANGE IN PLAN ASSETS

Beginning balance, fair value of assets	629,188	693,749
Actual return on plan assets	(50,446)	(52,110)
Company contributions	115,082	19,250
Plan participant contributions	1,049	1,066
Benefits paid	(44,342)	(36,185)
Acquisitions		6,467
Other	(1,859)	(3,049)
Ending balance, FV of assets	648,672	629,188

### RECONCILIATION OF FUNDED STATUS

Funded status of plan	(133,615)	(49,634)
Unrecognized net actuarial loss	342,887	163,652
Unrecognized PSC	9,820	9,663
Unrecognized net transition obligation	6,421	6,579
Net amount recognized	225,513	130,260

### TOTAL RECOGNIZED AMOUNTS IN B/S

Prepaid benefit cost (in other assets)	244,240	153,469
Accrued benefit liability	(98,432)	(54,606)
Intangible asset	6,734	2,727
Accumulated other comprehensive loss	72,971	28,670
Net amount recognized	225,513	130,260

**Table 2: Reformatted Footnote Information**

	PBO (ACTUARY)	PLAN ASSETS (TRUSTEE)	UNRECOG. PENS. COST	PENSION EXPENSE	PREPAID PENS. COST	ACCRUED PENS. LIAB.
Beginning balance	678,822	629,188	179,894		153,459	(54,606)
Service cost	18,296			18,296		
Interest cost	48,210			48,210		
Expected return				(59,443)		
<b>UNRECOGNIZED PSC:</b>						
Beginning balance			9,663			
Plan amendments	1,798		1,798			
Current year amortization			(1,674)	1,674		
Other			33			
Ending balance			9,820			
<b>UNRECOGNIZED LOSS:</b>						
Beginning balance			163,652			
Current year amortization			(8,674)	8,674		
Change from assets			109,889			
Experience (gain)/loss	75,178		75,178			
Other			2,842			
Ending balance			342,887			
<b>UNRECOGNIZED TRANSITION LIABILITY:</b>						
Beginning balance			6,579			
Current year amortization			(552)	552		
Other			394			
Ending balance			6,421			
Special termination ben. cost	3,276			3,276	(21,239)	
Actual return		(50,446)				(4,007)
Other		(1,859)				(44,301)
Employee contributions	1,049	1,049			(3,062)	4,482
Contributions		115,082			115,082	
Benefits paid	(44,342)	(44,342)				
<b>Ending balances:</b>	<b>782,287</b>	<b>648,672</b>	<b>359,128</b>	<b>21,239</b>	<b>244,240</b>	<b>(98,432)</b>



medium-size manufacturing company as Table 1. It may appear overwhelming at first, but, by the end of the article, it should seem less daunting.

The first thing I would do is reformat the information in a worksheet as shown in Table 2.

Okay, let's examine the numbers I was just referring to: the PBO and the FVPA.

	PBO	FVPA	Difference
Beginning balance	678,822	629,188	(49,634)
<b>Ending balances:</b>	<b>782,287</b>	<b>648,672</b>	<b>(133,615)</b>

Analysts might argue that this company has a \$133.615 million pension liability (PBO > FVPA) at year-end even with a \$115 million contribution to the pension plan this year. But if you look at the balance sheet amounts highlighted in green in Table 1, you'll see four amounts that net out to a \$225 million **asset balance**: 244 + 7 - 98 + 73; prepaid asset plus intangible asset minus accrued liability plus other comprehensive loss. (It's actually a net debit balance; the \$73 million is a debit to OCI/stockholders' equity, \$251 is an asset, and \$98 is a liability/credit.) The difference between GAAP and reality is \$359 million (\$225 net asset vs. \$134 net liability). This amount is reflected in the column in Table 2 titled **Unrecognized Pension Cost**.

You know the term "off-balance-sheet financing," and your executives have undoubtedly heard about it. When a very real economic liability isn't shown on the balance sheet, it is referred to as off-balance-sheet financing. GAAP pension accounting results in just that (a pension plan could have an off-balance-sheet asset as well if the plan is overfunded). What would this company's balance sheet look like if the pension plan assets and liabilities were added to it?

	Assets	Liabilities	Equity
Before	2,390 (100%)	1,523 (64%)	867 (36%)
After	2,788 (100%)	2,207 (79%)	581 (21%)
Calculations	(2,390-244-7+649)	(1,523-98+782)	(2,788-2,207)

After eliminating the off-balance-sheet financing, net assets decline by \$286 million—the \$359 million unrecognized pension cost less the \$73 million other comprehensive loss—and the debt ratio of this company deteriorates significantly. But it isn't just the balance sheet that is in error—the income statement is misstated as well.

In accounting, as you need to explain to your nonfinancial officers, liabilities typically decrease when paid and increase as expenses are incurred. Using that rationale, let's derive the pension expense for this company.

Beginning (underfunded) net liability	49.634	50 (rounded)
Less: contribution paid to the pension plan (highlighted in green on Table 2)	-115.082	-115
Plus: pension expense	+???	+199
Ending (underfunded) net liability	133.615	134

You could easily argue that the "reality" of the situation is a pension expense of \$199 million. Despite a contribution of \$115 million (highlighted in green), the funded status of the plan deteriorated by approximately \$84 million. Yet the GAAP pension expense column shows an amount of only \$21.239 million. What would this "real" expense do to your operating income, your interest coverage ratio, your various profitability ratios, your compounded growth rate models, and ultimately your stock price? For this company, pre-tax operating income was \$251 million, which was a healthy 9% of sales. Operating income, however, would be slashed significantly if we replaced the \$21 million now included as pension expense with the "real" \$199 million. (Note that taxes paid wouldn't be reduced by the increase in the pension expense from \$21 million to \$199 million. The tax deduction for pensions is based on the dollar amount contributed to the pension plan.)

The new operating income would be \$73 million, or 2.6% of sales. Since interest expense on the company's long-term debt is \$54 million, the interest coverage ratio would drop from 4.6 to 1.4. Analysts and bankers are undoubtedly running these "what-if" scenarios, so executives and directors should also be aware of these numbers. While the figures may be alarming, recall that in the late 1990s the numbers may have been nearly as alarming in the opposite direction. The volatility in operating earnings caused by pensions was what business people feared when Statement of Financial Accounting Standards (SFAS) No. 87, "Employers Accounting for Pensions," was being considered for adoption.

## GAAP PENSION REPORTING

Even though GAAP doesn't represent economic reality, nonfinancial executives need to have a fundamental understanding of what the numbers in the annual report represent. Determining a pension plan's impact on company financial statements is difficult because the numbers are typically combined with other amounts. Pensions can impact the balance sheet in four places: prepaid pension cost (assets), accrued pension cost (liabilities), intangible assets, and unrealized gain or loss in other comprehensive income (stockholders' equity). Pensions may represent the

## Glossary

**Projected Benefit Obligation (PBO)** – The actuarial present value of benefits (whether vested or nonvested) determined by the pension benefit formula for employee service earned to date using projected salary levels.

**Accumulated Benefit Obligation (ABO)** – The actuarial present value of benefits (whether vested or not vested) determined by the pension benefit formula for employee service earned to date using current salary levels.

**Pension Expense** – the sum of the next six items listed below. Technically, pension expense is referred to as net periodic pension cost.

**Service Cost** – The increase in the PBO resulting from services rendered by employees in the current period.

**Interest Cost** – The increase in the PBO due to the passage of time. It is calculated by multiplying the discount rate to the PBO at the beginning of the year.

**Return on Plan Assets** (generally decreases pension expense)

**Expected return** – The fair value of plan assets as of the beginning of the year multiplied by the expected rate of return on plan assets.

**Actual return** – The change in the fair value of plan assets (FVPA) during the period (ending FVPA – beginning FVPA – contributions + benefits paid).

*Note: The next three items are the “delayed recognition” (smoothing) items.*

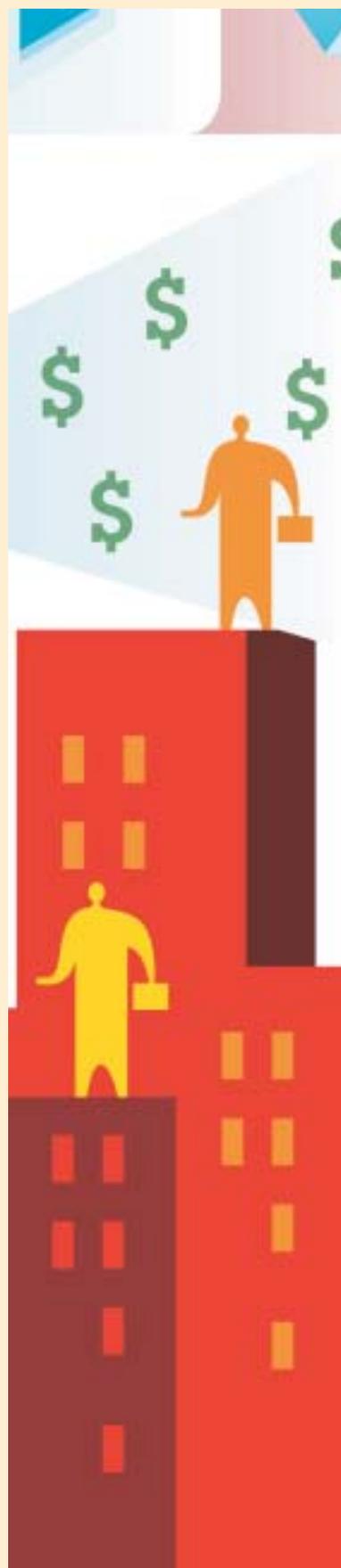
**Amortization of Prior Service Cost** – The amount allocated to the current period resulting from retroactive amendments to the pension plan (increases net periodic cost).

While amendments relate to the past, they benefit the future (improved morale). They are recognized only as they are amortized.

**Amortization of Unrecognized Gains or Losses** – The amount added to or subtracted from pension expense when the actual return on plan assets is materially different from the expected return. The difference is deferred and amortized when the cumulative unrecognized gain or loss exceeds 10% of the greater of beginning-of-year balances of either the fair value of plan assets or PBO; this amount is referred to as the “corridor” amount.

**Amortization of Net Transition Liability/Asset** – The current pension accounting rules were passed in the mid-1980s and differed from the previous rules. The difference in the pension asset/liability between the two rules wasn’t expensed immediately; the amount is amortized over the average service life of the employees.

**Prepaid Pension Cost** – The excess of employer contributions to the pension plan above pension expense (an asset on the company’s balance sheet).



only instance where a company can be *prepaid and owe money* (e.g., have an accrued liability) at the same time. Even some accountants may wonder how that's possible!

The focus of GAAP pension reporting is really on the pension (and post-retirement benefits) footnote disclosures. I'm going to focus only on the pension disclosures. SFAS No. 132, "Employers' Disclosures about Pensions and Other Postretirement Benefits," is the standard that guides disclosures. SFAS No. 132 was issued in 1998 and modified in December 2003, and it supersedes the portions of SFAS No. 87 regarding the information that needs to be disclosed in the financial statements.

## PENSION CONCEPTS

The most important concept to understand is **delayed recognition**. Delayed recognition of certain liabilities was the compromise made when SFAS No. 87 was adopted. Back in 1985 when this accounting rule was being debated, business people (that's you) didn't want "reality." Specifically, they didn't want to have to show the projected benefit obligation as a liability because it would have decimated their balance sheets. Also, they didn't want the volatility associated with swings in the markets to show up in pension expense, which is part of operating income. By adopting "delayed recognition," various expenses could be recognized over many years rather than all at once—income smoothing. Let's look at some common examples.

When a **pension plan amendment** is adopted, the pension plan's liability increases if the union/employees have negotiated a retroactive increase in benefits. In pension lingo, that's called the prior service cost (PSC). But the entire liability (and related expense) doesn't have to be recorded at this time—it can be amortized (expensed) over time. The prior service cost is a "real" liability even though GAAP doesn't recognize the whole amount at that time. PSC is recognized over a longer time period, usually the remaining average employment years of the employees in the plan, but the bottom line is the debt isn't shown on the balance sheet—that's off-balance-sheet financing.

Typically, the most significant dollar amount subject to delayed recognition is the difference between the *expected* return on plan assets and the *actual* return on plan assets. One additional concept needs explanation. Over the long haul, it is expected that pension plan assets for most companies will return approximately 7% to 12% depending on how risky the investment portfolio is. That may be a reasonable assumption, but the past six years have shown

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huge volatility—from well-above-average returns to significant investment losses. The example footnote in Table 2 shows that this company expected a *positive* return on plan assets of \$59.433 million, yet the actual return was a *loss* of \$50.446 million—a difference of \$109.889 million (amounts are highlighted in blue).

The accounting logic behind delayed recognition (called offset) for this item is as follows: The market will have its ups and downs, but, over a long period of time, the market has historically returned 7% to 12% for the typical pension plan asset portfolio. Above-average returns in one year will be *offset* by below-average returns in a subsequent year. In the long run, the portfolio will return the expected rate. Companies that had expected a return on the high side may have invested in riskier assets and recently suffered larger losses. This company, for example, reported an expected return of 9.5%, which is slightly above the average expected return reported in *Accounting Trends and Techniques*, an annual publication of the AICPA that describes financial reporting practices of 600 major companies. In any given year, a surprising number of companies change their expected rate of return—about half increase it, and half decrease it. This may be a reflection of a change in the asset portfolio to more risky or less risky investments.

Another example of delayed recognition occurs with **experience gains and losses**. For the sample company, this year's loss was fairly large at \$75.178 million. Experience losses could occur, for example, if employee turnover is less than expected. Low turnover is a good thing for the company, but it will result in larger pension payouts because employees will earn higher pension benefits. Actuarial/experience gains and losses also result from compensation levels, inflation, final retirement age, life expectancy, and many other factors. The experience gain or loss amount is calculated by the actuary.

Another liability that's recognized on a delayed basis stems from the adoption of the pension accounting standard SFAS No. 87 back in 1986. The change in accounting from the previous APB Opinion 8 to SFAS No. 87 result-

ed in a one-time asset or liability called the net unrecognized transition obligation/asset. If a company was overfunded at the adoption of SFAS No. 87, then it had a transition asset; if underfunded, a transition liability. Once again, to smooth the impact of this one-time charge, pension plans were allowed to amortize this amount over time—typically the actuarially computed estimated remaining service lives of the current workforce at the company. This amount is also a “real” liability, but it is now a small amount for most companies (\$6.421 million for this company) as it has been over 15 years since the change in accounting. By and large, I wouldn’t spend much time explaining this item.

## JOURNAL ENTRIES

Let’s look at GAAP accounting for the example company. The company makes only two entries. One is for the contribution to the pension plan.

Prepaid pension cost	93,743	
Pension expense	21,239	
Cash		115,082

When funding is made in excess of the pension expense, it gives rise to a prepaid pension asset. Earlier I mentioned that it is unusual, to say the least, to be both prepaid and accrued (owe money) at the same time. You now know how the prepaid pension cost (asset) came about, but how did the accrued pension cost (liability) come about? In years in which the pension expense exceeds the amount funded, a liability called accrued pension liability is created. This entity has both a prepaid pension asset and an accrued pension liability because cumulative funding exceeded cumulative pension expense on some plans, and expense exceeded funding on others. SFAS No. 132 requires that both the prepaid and the accrued liability be disclosed separately. It’s important to recognize that the true funded status of the pension plan is determined by examining the footnote, not the net balance of the prepaid and accrued accounts. SFAS No. 132 requires a reconciliation of the funded status.

In a partial concession to “economic reality,” SFAS No. 132 states that if the fair value of the plan assets is less than the liability without considering future pay raises (formerly called the ABO), then the plan is considered severely underfunded, and a “minimum liability” must be calculated and recorded on the company’s balance sheet. The FASB felt that footnote disclosure alone was inadequate for severely underfunded plans. The plan described

in this article appears to have been severely underfunded this year. Under SFAS No. 132, the ABO is no longer reported in the footnote, and disclosure of the minimum liability was reduced, so it’s no longer possible to identify firms that are severely underfunded in the aggregate. From my analysis of the footnote, the following entry appears to have been made:

Intangible asset	4,007	
OCI/Stockholders’ equity	44,301	
Accrued pension liability		48,308

You may have noticed that there is no pension expense in this entry, so operating income is unscathed. Although a liability was brought onto the balance sheet, the company managed to avoid recording a corresponding expense (most of it goes to unrealized loss in stockholders’ equity). Not only that, but the company ended up with an intangible asset in the process. You may have thought of intangibles as things like trademarks, patents, and copyrights. Add having a significantly underfunded pension plan to your list of “intangible assets.” This intangible is small dollars, so I won’t give it too much attention. Part of the reason some companies are underfunded is that they have plan amendments in which they retroactively increase the pension benefits that will be paid to their employees.

What’s the logic behind recognizing an intangible asset? Companies believe that turnover will decrease and employees will work harder over their remaining time with the company because of these increased benefits. So the intangible assets will be amortized (expensed) over the average remaining service life of the workforce.

## WHY THE DISPARITY?

Why is there a disparity between pension expense and the pension contribution? GAAP pension expense is calculated as follows:

Service cost	18,926
Interest cost	48,210
Expected return on plan assets	(59,443)
Amtz. of net transition obligation	552
Amtz. of prior service cost (PSC)	1,674
Amtz. of net actuarial (gain) loss	8,674
Special termination benefit cost	3,276
Net periodic benefit cost	21,239

The pension expense for this company was a mere

\$21.239 million, but the cash contribution by the company to the pension plan was \$115.082 million. Although the company had a small expense, it had to make a large cash contribution to avoid being significantly underfunded. GAAP doesn't cover pension funding decisions—those are driven by tax rules and ERISA regulations. Briefly, if a plan is *overfunded*, contributions are NOT tax deductible and, in fact, can give rise to an excise tax. If a plan is *underfunded*, the company must at least contribute an amount equal to the pension expense. If a plan is significantly underfunded, then the company must make a larger contribution. The GAAP expense of \$21 million doesn't seem to be in line with either the contribution of \$115 million or the economic expense of \$199 million explained earlier.

### AN ALTERNATIVE METHOD OF REPORTING

Pension expense is included with operating expenses. As you can see from the schedule below, GAAP pension expense consists of many parts. The biggest portion is almost always the interest cost. Some analysts believe this should be included in nonoperating income along with other interest charges.

Yet BMW was recently criticized for doing exactly this. By moving the interest expense portion of pension expense (\$581 million) to the interest expense line of the income statement, operating income increased from 8% of sales to 9% of sales. BMW was criticized because that reporting isn't GAAP. If GM adopted this reporting, its operating income would increase by \$7 billion. (You can read more about this in an article from the February 19, 2004, edition of *The Wall Street Journal*, called "Outside Audit: BMW Hits Accounting Obstacles.")

Furthermore, some analysts believe the actual gain or loss on investments should be reported with other income/loss as well. The experience gains and losses should probably be included in operating expenses. This method of reporting would be quite volatile, but it might reflect reality better. It would look roughly as follows:

Service cost	Operating	19
Actuarial/experience (gain) loss	Operating	75
Interest cost	Financing/other	48
Actual (gain) loss on plan assets	Investing/other	50
Total		193*

\*The difference between this amount and \$199 million is because I left a few smaller items out for simplicity.

The downside of the "reality" view is that the expense

will be extremely volatile from year to year. Corporations fought hard for delayed recognition (i.e., expense smoothing) back in the mid-1980s. Because the last six years have had such wild market swings, GAAP and reality have diverged significantly.

### POTENTIAL FOR EARNINGS MANAGEMENT

Operating income is a very important performance measure to analysts. It had been propped up in recent years by the relatively unusual **pension income** due to the strong bull market of the late 1990s. In fact, some well-known companies were criticized in the media for not adequately disclosing how much of their operating income was due to the relatively fortuitous bull market. Look at Table 1, and you'll see that our sample company had pension "income" of \$14 million in 2000. As of 2002, virtually all companies once again had the more normal situation, a pension expense.

GAAP pension expense is influenced significantly by three key assumptions: the discount rate, the rate of return on plan assets, and the rate of increase in employee compensation. Minor variations in these rates can have huge impacts on the PBO. For example, a 1% change in the discount rate can increase or decrease the PBO by 10% to 15%. Analysts are now carefully following changes made by companies in these three areas. The rates used for the past three years must be disclosed in the pension footnote.

It isn't uncommon for companies to change these rates relatively frequently. In any given year, many companies make changes. Analysts are on the lookout for companies that increase the discount rate, increase the expected return on plan assets, or decrease the future compensation increases because each of these changes would increase operating income. Some companies may legitimately increase the expected return on plan assets because they have invested more pension assets in stocks or real estate, but you might challenge the risk-reward tradeoff of such a move. A move to riskier stock investments at the height of the bull market would have had disastrous effects on the funded status of the pension plan in 2000, 2001, and 2002. I want to stress that GAAP pension expense (and operating income) are NOT impacted by *actual* returns on plan assets. They are impacted by *expected* returns on plan assets. Critics believe GAAP accounting results in a misleading balance sheet and income statement.

Another area of possible earnings management is in the amortization period. GAAP doesn't specify a time

period for amortization of various deferred amounts, especially for the deferred gains and losses. Similar to depreciation of fixed assets, the longer the estimated useful life, the lower the expense charged to operating income. It isn't easy to determine the amortization period from the information published in the footnotes for any of the deferred items.

Another subtle move companies could make is to increase contributions to the pension plan, which has the effect of increasing operating earnings. How? Contributions increase assets, and the expected return on plan assets (ROPA) increases as assets increase. The higher the ROPA, the lower the pension expense. Since pension expense is an operating expense, operating income increases. For example, in 2003, GM contributed \$14 billion to its pension plan, which increased its operating income by more than \$1 billion.

If a company instead invested excess cash in marketable securities, that income would be shown in other income (not operating income), which analysts value less because it is considered nonrecurring. A control/limitation to this potential abuse is that excess pension funding is penalized by the IRS.

## ONE MORE COMPLICATION

Curtailments, settlements, and terminations are all included in our sample company's footnote and occur at many companies. Events such as plant closings and restructurings can have a reasonably significant impact on the pension liability. A curtailment often results in a gain for the pension plan because the expected retirement payments will be less since employees won't accumulate the previously expected years of service and higher wage rates. Because the dollars involved are small relative to the other issues I've discussed, that's all I will say about it. Just note that, in some cases, terminations and curtailments can have a significant impact on company earnings.

Pensions is a topic that can no longer be glossed over. The reality is that this area can have significant impact on a company's financial health whether GAAP accounting illustrates that fact or not. I hope the nonfinancial officers in your company will understand what you tell them about pension reality. ■

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