

Issue Commentary

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Pension Issue Commentary #4

Pension asset returns generally underperformed management assumptions in 2011, and the current low-interest-rate environment has caused the balances of pension benefit obligations to increase materially, leaving many plans significantly underfunded.

Unfortunately, the arcane rules related to pension accounting and the discretion allowed in the choice of actuarial assumptions can result in companies understating the magnitude of their pension shortfalls. We systematically analyzed 2011 fiscal year-end pension disclosures for hundreds of U.S. firms with material pension-plan obligations.

The six firms reviewed in this *Issue Commentary* disclosed pension-accounting assumptions that are out of line with the rest of the publicly traded universe. As a result, their balance sheets may not provide an accurate portrayal of their financial position, while their future earnings and cash-flow streams may be at risk for unexpected declines. Our analysis also identifies companies with the highest accounting-related risk should IFRS pension accounting standards be adopted.

Allegheny Technologies Inc. (NYSE:ATI)

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ATI uses an 8.5% assumed rate of return on plan assets, which we believe is biasing the company's pension expense downward relative to the true economic expense. We estimate that the company's sustainable expense may be closer to \$121 million, as compared to the \$56 million recognized in 2011.

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Consolidated Edison Inc. (NYSE:ED)

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ED's industry-specific accounting allows actuarial losses to be recorded as assets, thereby potentially causing earnings and shareholders' equity to be overstated relative to economic reality. We also estimate that the company's sustainable pension expense may be closer to \$783 million, or 156% more than the amount recognized in earnings.

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Northrop Grumman Corp. (NYSE:NOC)

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We estimate that NOC's PBO may be closer to \$34.8 billion, as compared to the company's as-presented figure of \$24.1 billion. The company's PBO may be biased lower as a result of the use of a 5.03% discount rate, which ranks in the 84th percentile of all companies analyzed. Additional concerns are raised regarding the contribution of returns from Level 3-valued assets.

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Potlatch Corp. (NasdaqGS:PCH)

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We believe that PCH's adjusted funding deficit may be closer to \$257 million, equivalent to 34% of total assets at the end of 2011. Additionally, the company's 8.5% assumed rate of return on plan assets, which ranks in the 88th percentile of all companies studied, may be biasing net periodic pension benefit costs lower.

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R.R. Donnelley & Sons Co. (NasdaqGS:RRD)

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Despite poor performance of plan assets relative to expectations, RRD actually increased its assumed rate of return on plan assets from 8.3% to 8.4% in 2011. The company also is using a smoothing mechanism for actuarial losses that may be causing reported net periodic benefit expense to diverge materially from economic reality.

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Weyerhaeuser Co. (NYSE:WY)

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Our concerns regarding WY primarily revolve around 1) the company's 9.0% assumed rate of return on plan assets, 2) the fact that 88.7% of plan assets are valued using a Level 3 approach, and 3) the plan is running a derivatives book with 8:1 notional leverage.

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Pension Issue Commentary **Three Years of Recovery Have Yet to Offset Losses Recorded in 2008**

INTRODUCTION

Following the significant market downturn in 2008, a number of companies with defined-benefit plans were left with precarious funding positions. Despite three years of positive returns on plan assets (for most firms) and significant increases in contributions, many defined-benefit plans remain significantly underfunded. In fact, the problem worsened in 2011, as most funds severely underperformed their assumed rate of return used in computing their pension funding liability, while the discount rate used to measure obligations continued to decline. For the companies examined in our 2011 study, plan assets generated an average return of 4.0%, compared to an expected return of 8.0% assumed by plan managers. Additionally, the average pension utilized a discount rate of 4.74% at the end of 2011, compared to 6.25% at the end of 2008.

Our 2012 pension study examines 354 publically traded companies with as-presented pension liabilities of approximately \$1.68 trillion and plan assets of \$1.31 trillion at the end of 2011. Similar to our previous studies, we continue to focus on the variation in the key assumptions used to estimate both the cost and carrying value of a firm’s pension liability for financial-reporting purposes. Our goal is to identify firms that we believe may face obligations that are substantially greater than the liability reported on their balance sheets. Additionally, our goal is to identify a subset of firms in which we believe that the periodic cost of servicing pension liabilities may be significantly higher than reported in the statement of operations.

The selection process yielded five new companies and one previously featured company that we believe may have the greatest disparity between the economic value of their pension obligations and the net liability (including amounts stored in “accumulated other comprehensive income” or AOCI) reported on their balance sheet and/or whose net periodic-benefit expense may be understated relative to our standardized accounting methodology. Our methodology places all firms on equal footing. As a result, the firms selected for analysis tend to be those that have set their expected return on plan assets and/or discount rate applied to measure plan liabilities at levels well above that of the median sample firm.¹

The remainder of the report is organized as follows: The next two sections provide a brief introduction to pension accounting under U.S. GAAP and discuss the primary valuation assumptions that may be used to cosmetically reduce the carrying value of the firm’s pension liability relative to economic reality. The third section describes the statistical methodology used to identify firms exhibiting outsized pension-accounting risks.

The fourth section provides an update on companies previously covered with NEGATIVE views as of our last pension-related *Issue Commentary* (published

¹ To be clear, we do not attempt to identify firms that may have violated generally accepted accounting principles (GAAP) in computing pension expense, pension assets, or pension liabilities. Our sole focus is determining whether the reported obligation and pension expense (or income) appears consistent with a standardized estimate of the underlying obligation.





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08/08/11). The fifth section focuses on companies that we believe may be currently mispriced by the market as a result of the mismatch between the pension liability reported in the financial statements and our estimate of the true economic value of the obligation.

In the final section of our study we discuss the implications of U.S. firms adopting international financial reporting standards (IFRS)—as may occur as early as 2015—and the resultant financial-reporting risks that may be faced by companies that are currently in net deficit funding positions.

A Brief Primer on Pension Accounting

The following discussion reprises an overview of salient features of pension accounting under U.S. GAAP, as originally published in our 07/07/09 *Issue Commentary*. Note that because the SEC continues to move toward requiring U.S. accounting standards to converge with IFRS (which could begin as early as 2015), the final section of our report also provides a discussion of several key differences between international and U.S. pension accounting standards. We also briefly review the impact of companies that began to recognize actuarial-adjustment activity, which is no longer consistent with existing IFRS accounting standards.

DEFINED-BENEFIT PLANS VERSUS DEFINED-CONTRIBUTION PLANS

There are two general types of pension plans commonly employed by U.S. firms: defined contribution and defined benefit. The primary difference between the two types of plans is how the company's obligation is defined. In a defined-contribution plan (such as a 401K plan), the firm provides funds (or matches contributions) that employees invest themselves. Since the employees bear all future risks on the investment (including whether the resulting asset is sufficient for retirement), the company's obligation is limited to the amount of contributions it has committed to provide. In contrast, in a defined-benefit plan, the firm invests money itself to provide for future payments it has promised to employees when they retire. Thus, the company's obligation is the actual (but uncertain) stream of future payments it must ultimately provide to employees when they retire. Given their relatively less complicated nature, the accounting for defined-contribution plans is simple. The contributions are expensed as incurred (i.e., as employees earn the contributions), and the company faces no liability beyond any contributions currently payable to the plan. In contrast, the accounting for defined-benefit plans is much more complicated, as the company must estimate the present value of its future obligation, the cash contributions required to fund the obligation, and the economic cost of providing the pension benefit.

ACCOUNTING FOR DEFINED-BENEFIT PLANS

The accounting rules for defined-benefit pensions under U.S. GAAP are specified in ASC 715 Compensation—Retirement Benefits (formerly Statements of Financial Accounting Standards (SFAS) 87 and 158). The accounting for pensions is convoluted, due in large part to a desire to shield net income from large year-to-





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year changes in pension asset values, but also as a result of the use of actuarial assumptions in making predictions that in turn directly affect financial-statement presentation.

There are two basic components that must be valued in determining the net asset or liability associated with a firm's defined-benefit plan. The first component, the projected benefit obligation (PBO), is an estimate of the present value of all future benefits that the company is obligated to provide to past and present employees as a consequence of services *already* provided by those employees.² The second component, plan assets, consists of all funds contributed to the plan plus (minus) any gains (losses) on related investments.

The accounting for plan assets is, in principle, straightforward since the assets are fair valued. However, the PBO is difficult to measure, as it involves payouts decades into the future, with a high degree of uncertainty regarding how much will actually be owed (due to uncertain life expectancy, retirement salary levels, etc.). On top of this uncertainty, there is ambiguity about how to discount the expected future cash outlays to determine their present value. Though the final payments are not entirely known, in theory the obligations are fixed by criteria established in the plan.

The Financial Accounting Standards Board (FASB) does not specify how firms should select an appropriate discount rate. As a result there is significant variation across firms. Even firms that claim to use essentially the same methodology show substantial variation in their chosen discount rates. In our research we have found that companies that use relatively higher discount rates (and thereby report relatively lower PBO values) state that they base their rate on some average of corporate bond yields. Others appear to discount their obligations at rates that approximate the risk free rate.

INCOME-STATEMENT AND BALANCE-SHEET PRESENTATIONS

The computation of pension expense is complex because of a variety of smoothing effects meant to limit the year-to-year variability in pension expense. The most prominent smoothing effect is the use of an expected return rather than the actual return to calculate income on plan assets (which is netted against pension expense). Thus, a fund that loses \$1 billion on \$3 billion in investments during 2008 could still have reported a net pension gain of, say, \$240 million if it expects the plan's investments to earn 8% over the long term. In theory, fluctuations between actual and expected returns should even out over time. But this will occur only if the company has consistently used a realistic, long-term expected rate of return.

Unfortunately, the FASB offers little guidance in the selection of an appropriate expected return on plan assets. Not surprisingly, public companies also vary

² In theory, this amount reflects what the company would owe if the existing plan were curtailed and the present value of all benefits were paid out to employees today.





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considerably in the expected rates of return they use. For those firms that chose an unattainably high expected return, economic reality generally catches up with them over time. Ultimately, these firms are likely to be forced to make sizable contributions to offset their growing pension deficit. Their pension losses must also be recognized against net income over time, which can lead to periodic earnings shortfalls.

Losses on pension assets flow through pension expense (and net income) in two ways. First, when pension assets decline in value, the amount of accounting-based “pension income” (i.e., not the real amount of investment income) will decline because the expected *rate* of return is multiplied against a smaller base of assets. Second, if actual pension income deviates too far from what has been recognized in income previously, the “excess loss” is gradually amortized as additional pension expense under what the FASB refers to as the “corridor approach.”³

For balance-sheet reporting purposes, plan assets are netted against the PBO to determine the funding status of the plan. If the PBO is larger, there is a funding deficit, which is reflected as a net liability on the balance sheet. If plan assets are larger, there is a funding surplus, which is reported as a net asset on the balance sheet.⁴ In addition, the “excess loss” resulting from application of the corridor approach may be stored in other accumulated comprehensive income (i.e., it is reported as a reduction of stockholders’ equity).

STATISTICAL EVIDENCE ON THE FACTORS THAT DETERMINE PENSION-ACCOUNTING ASSUMPTIONS

In our 2009 *Issue Commentary* (07/07/09), we tested two hypotheses about how companies select the discount rate and the expected rate of return used in accounting for their pension plans. Our analysis demonstrated that firms with higher “true” pension deficits (per our standardized estimate) were more likely to select high discount rates, leading to a downward bias in as-reported pension liabilities. Also, firms with especially poor actual returns were more likely to increase their expected returns going forward. Both findings were statistically and economically significant. These findings are also consistent with the hypothesis that, on average, firms with pension-funding problems or poor investment returns strategically choose more lenient assumptions, presumably to obscure the magnitude of their shortfalls. The results of these tests also underlie our decision to focus on firms with relatively larger pension deficiencies and unusual pension accounting assumptions.

³ For example, if a firm lost 28% of its plan assets in 2008 (the median loss reported for our sample of publicly traded domestic firms for CY2008), pension income for 2009 would only be 72% of the amount reported in 2008 (assuming the expected rate remains the same). Furthermore, if the company fails the test required under the corridor approach, additional losses may be amortized to pension expense each quarter. Either one of these mechanisms (or worse yet, both of these mechanisms) could cause a nasty earnings surprise for many firms in 2009 and beyond.

⁴ This is only true in recent years (since SFAS 158 was promulgated in 2006) and is still not necessarily the case for firms using international financial reporting standards (IFRS). For various reasons, before SFAS 158, the balance-sheet numbers could be different from the funding deficit/surplus reported in the footnotes. Even now, the real economic deficit could deviate substantially from the balance-sheet liability if the PBO is mismeasured as a result of the many assumptions involved.





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Research Methodology

GOALS OF THE ANALYSIS

Our goal is to eliminate differences in pension accounting caused by firms' accounting assumptions, as there is little reason to expect that the assumptions should vary considerably across companies. With a consistent methodology for pension analysis we aim to estimate the following:

- How large the real economic deficits in companies' pensions are. This affects the likely cash-flow consequences in future years.
- How much of these real economic deficits are excluded from the balance sheet. This is the amount that investors may be unaware of.
- How much the sustainable long-term pension expense is likely to be, relative to the as-reported expense for 2011. This is also clearly relevant to firm valuation.
- How much as-reported pension expense is likely to increase in the future. This could cause significant earnings surprises.

STEP 1: SELECTION OF COMPARABLE FIRMS

First, we need to establish a set of firms to compare. Our goal is to have as large a set as possible while having complete detailed pension data and fully comparable companies. We began by eliminating all companies below \$800 million in market capitalization from our study. We further removed all ADRs from consideration and only included companies that closed their fiscal year between 11/15/11 and 03/15/12.

We focus on both active and inactive defined-benefit plans. However, we exclude companies with plans that have a reported PBO that is less than 10% of market capitalization and/or total assets at the end of the last fiscal year in order to concentrate on plans that are material relative to the company's valuation and/or asset size.

Our primary source of pension plan data was Capital IQ. However, for companies that maintained multiple plans with multiple assumptions or had disclosed discount-rate and expected return-rate assumptions as a range, data was hand-collected from 10K statements. For companies that maintain multiple plans, discount and expected return-rate assumptions were averaged using the PBO and assets of each plan, respectively, as weights. For companies that provided a range of assumed rates, we used the median.

STEP 2: ESTIMATING THE ECONOMIC VALUE OF THE PBO

There are a number of critical assumptions that go into the calculation of the PBO. However, while assumptions about underlying variables, such as salary





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growth, are important, we are not in a position to assess these assumptions in a large scale, cross-sectional comparison. The only assumption we can assess on a large scale is the discount rate.

Since the discount rate is used to adjust for the time value of money in valuing future cash obligations, it should, in principle, be roughly the same for all firms. Moreover, because the amount of the obligation is fixed by specific plan parameters, one could argue that the appropriate discount rate is the long-term risk-free rate.⁵ Accordingly, in our analysis we impose a uniform rate of 2.96%, which is an average of the trailing 30 day rates on 30-year Treasury Bonds.⁶ Since the median pension assumes a higher rate of 4.75% (down from 5.40% in 2010), our estimate of the true economic PBO is generally much higher than the figure reported by sample firms. The key point, however, is that we use a method that puts all companies on an equal basis and does not reward firms for choosing an abnormally high discount rate.⁷ Note also that the use of an alternative discount rate (such as the median sample rate) is unlikely to have an appreciable effect on the selection of firms for review. (It would, however, affect the absolute dollar magnitude of estimated funding deficits.)

Since we do not know the year-by-year cash-flow projections that are being discounted to derive the PBO, we adjust for the difference in discount rates indirectly. Specifically, we assume a uniform pattern of future obligations starting at the current level of cash outflows, which is based on the company-provided disclosure of estimated cash payments over the next five years. We further assume that the obligation continues to grow for 15 years, flattens out for the next 10 years, then gradually declines to zero over the next 50 years. We use Microsoft Excel's GOALSEEK function to find the appropriate growth rate—applied to Years 6 through 20—that forces the sum of the entire 80 years of discounted cash flows to equal the company's total PBO. Additionally, the rate of decline used in the final 50 years is equal to $1 - (\text{year\#} - 30)/50$, where year# ranges from 31 to 80. This adjusted PBO allows a largely discretion-neutral metric for comparing firms. In addition, this procedure ensures that the exact pattern of cash flows we assume has a minimal effect on our final estimates.

STEP 3: SUSTAINABLE LONG-TERM PENSION BENEFIT EXPENSE

While the discount rate applied to the PBO is a major driver of the firm's pension liability, the discount rate has only a modest impact on the income statement in the short term. In contrast, the expected return on plan assets has a much more significant impact on the pension-expense calculation for each period.

In this report we focus primarily on potential longer-term earnings effects of pension assumptions that may be misaligned with economic reality. To assess the longer-run earnings effects, we construct a measure of sustainable pension

⁵ Contrariwise, one could also argue that the discount rate should be higher for firms that may be unable to fully honor their pension obligations.

⁶ Measured through 06/01/12.

⁷ As an alternative, we could have chosen the median rate for our sample firms. However, that would not have affected the selection of firms for presentation in our report. It would only affect the dollar amount of the estimated economic PBO.





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expense using a set of uniform assumptions for all companies. This includes the discount rate as discussed above, as well as the expected return, which we set at 6.0% for the typical pension asset allocation.

Our uniform expected return assumption is much lower than the median assumed rate of return for sample firms, which was 7.75% for 2011, down from 8.00% in 2010. Thus, other things equal, our estimate of income earned on plan assets (pension expense) will tend to be lower (higher), on average, than as-reported values. However, our method of estimating interest costs (i.e., the cost of financing the pension obligation) will tend to offset the potential understatement of pension income. Specifically, we compute interest costs based on our adjusted PBO multiplied by our discount-rate assumption (which, as noted earlier, is lower than the median as-reported discount rate). Thus, the resulting net value (average pension assets * 6.0% - PBO * 2.96%) is not likely to differ significantly from the as-reported net value for firms with return and discount-rate assumptions that are close to the median. Additionally, it is important to note that our goal is to identify relative outliers, or those firms that appear likely to have understated their pension expense or liability relative to the median firm.

One possible reason why the expected return values used by sample firms differ from our standardized value is that the pension-plan managers may be increasingly exposing their portfolios to non-equity and non-debt securities in a reach for additional yield. In this context, a 2012 study conducted by Milliman⁸ found that pension-asset allocation has shifted from roughly 60% equities, 30% fixed income securities, and 10% allocation to other asset classes in 2005 to 38% equities, 41% in fixed income securities, and 21% in other asset classes in 2011.

We also note that the implied market risk premiums associated with equity assets may have been adjusted higher by pension-fund managers over time in order to support their assumed rate of return on plan assets. According to an article published by PIMCO,⁹ the implied market risk premium for equities, given the current low-interest-rate environment, may have increased to 12% in 2010, which is significantly higher than what has been found in prior academic research. In this regard, Strambaugh and Pastor (2000) found that the equity risk premium has ranged from 3.9% to 6.0%, historically (over the period 1834 to 2000 covered in their study).¹⁰

SELECTION OF FIRMS THAT MAY BE MISPRICED BECAUSE OF A FAILURE OF THE MARKET TO REFLECT THEIR TRUE ECONOMIC PENSION OBLIGATION

Using the data developed in the prior section, we examine firms that have especially large pension deficiencies, abnormally high assumptions (and unusual increases in them), and are likely to see material increases in their pension

⁸ Milliman 2012 Pension Funding Study: <http://www.milliman.com/expertise/employee-benefits/products-tools/pension-funding-study/>.

⁹ <http://www.pimco.com/EN/Insights/Pages/Prediction-Pain.aspx>.

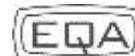
¹⁰ http://papers.ssrn.com/sol3/papers.cfm?abstract_id=130208.





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expense and cash outflows in the years to come. These are firms that we believe investors should be wary of, as their pension obligations could consume a significant portion of future cash flows. For many of these companies, their deficits are so vast that even a strong bull market might not be enough to cover the shortfall.

While there may be a perception that after the 2008 crash, all companies had fairly significant pension problems, this is not entirely true. First, not all firms have large defined-benefit plans, and those with defined-contribution plans are fine (though their employees may not be). Those with small defined-benefit plans or less-optimistic assumptions are also unlikely to be facing severe deficiencies—certainly nothing of the magnitude of the companies highlighted below.

On the other hand, for those firms that faced large shortfalls following the decline in 2008, the recovery in asset values seen in 2009–2011 was insufficient in magnitude to mend the gaps that developed. By and large these are the firms we focus on in this *Issue Commentary*.

Our analysis is presented in two parts. The first part of the analysis provides a summary update of our current view on the companies we had a Negative view of in our 2009–2011 *Issue Commentaries*. The second part of the analysis introduces six new companies that we believe may be overvalued due to a failure of the market to consider their true pension obligations and their long-run sustainable pension expense.

Revisiting Firms Covered in 2009–2011

MATERIAL DEVELOPMENTS REGARDING TWO PREVIOUSLY FEATURED COMPANIES

In late 2011 and early 2012, two companies featured in our 2010 *Issue Commentary* (published 07/15/10) filed for bankruptcy protection. On 01/19/12, Eastman Kodak (OTCPK:EKDK.Q) filed under Chapter 11, citing the company's significant legacy obligations and deficit position on its pension as contributing factors. In what may likely be the clearest demonstration of the flaws in U.S. GAAP pension accounting standards, EK still reported pension *income* of \$33 million for its U.S. plans in 2011, despite the fact that actuarial losses on plan assets stored in AOCI had ballooned to \$2.1 billion by year end. Even after accounting for non-U.S. plans, the company recognized a total expense of just \$37 million in 2011, which was materially below our estimated sustainable expense estimate (computed as of 2010) of \$78 million.

On 11/29/11, AMR (OTCPK:AAMR.Q) filed for Chapter 11 protection, citing the costs associated with its retirement plans as one of the main drivers of its financial distress. During 2011, AMR reported a net periodic pension cost of \$653 million, notably below our estimated sustainable expense estimate of \$773 million (computed as of the end of 2010).

REVIEW OF OTHER COMPANIES COVERED FROM 2009–2011 STUDIES

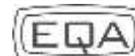
Companies from 2009 *Issue Commentary* (07/07/09): Of the companies





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originally featured in our 2009 *Issue Commentary*, we are maintaining our negative view on The AES Corp. (NYSE:AES) and United Parcel Service Inc. (NYSE:UPS).

AES continues to rank in the 100th percentile relative to all companies in our study for both an unusually high discount rate used to measure its PBO (8.78%) and similarly outsized assumed rate of return on plan assets (10.55%). We estimate that the company's sustainable pension expense may be closer to \$282 million after adjusting for a lower discount-rate assumption and a lower assumed rate of return on plan assets, or 121% higher than the as-reported figure of \$128 million in 2011. After adjusting the company's PBO to reflect a lower discount rate, we estimate that the economic value of the company's PBO may be closer to \$17.7 billion (versus a reported value of \$6.8 billion) and the company's adjusted funding deficit may be closer to \$12.6 billion (compared to a reported value of \$1.7 billion). Our adjusted funding deficit was equivalent to 27.7% of total assets and 1,855.4% of retained earnings at 12/31/11.

UPS also continues to utilize assumptions that appear outsized compared to other firms in the large-cap and mid-cap domestic universe. The company's discount-rate assumption of 5.61% ranks in the 99th percentile and the company's assumed rate of return on plan assets of 8.71% ranks in the 97th percentile for all companies analyzed in connection with our study. We believe that the company's sustainable pension expense may be closer to \$943 million after adjusting for a lower discount-rate assumption and a lower assumed rate of return on plan assets, or 83% higher than the as-reported figure of \$515 million in 2011, excluding actuarial adjustments. In Q4 2011 UPS elected to recognize a portion of actuarial adjustments during the year, after applying a 10% corridor, which totaled \$736 million. After adjusting for a lower discount rate, we estimate that the economic value of the company's PBO may be closer to \$43.8 billion (versus a reported value of \$25.2 billion) and the company's adjusted funding deficit may be closer to \$20.5 billion (compared to a reported value of \$2.0 billion). Our adjusted funding deficit was equivalent to 59.2% of total assets and 202.7% of retained earnings at 12/31/11.

Companies from 2010 *Issue Commentary* (07/15/10): Aside from EK and AMR, we are maintaining our negative view of the pension accounting assumptions utilized by Lockheed Martin Corp. (NYSE:LMT) and revising our opinion to neutral for ITT Corp. (NYSE:ITT).

Of the previously featured companies in which we are reiterating a negative view, LMT's discount rate (4.75%) ranks in the 50th percentile of all companies analyzed in our study. However, the company's assumed rate of return on plan assets of 8.50% was in the 88th percentile for 2011, suggesting that the company's pension expense may be unsustainable. Specifically, we estimate that the company's sustainable pension expense may be closer to \$2.2 billion after adjusting for a lower discount-rate assumption and a lower assumed rate of return on plan assets, or 20% higher than the as-reported figure of \$1.8 billion in 2011. After adjusting for our standardized discount rate, we estimate that the true value of the company's PBO may be closer to \$56.9 billion (versus a reported





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value of \$40.6 billion), and the company's adjusted funding deficit may be closer to \$29.6 billion (compared to a reported value of \$13.3 billion). Our adjusted funding deficit was equivalent to 78.2% of total assets and 248.3% of retained earnings at 12/31/11.

ITT experienced a business transformation in 2011 that led to a significant reduction of the company's pension liabilities. Specifically, on 10/31/11 the company spun off its defense and information solutions business, Exelis Inc. (NYSE: XLS) and its water-related business, Xylem Inc. (NYSE:XYL). As a result, \$5.2 billion of pension benefits transferred from ITT to XLS, thereby lowering ITT's PBO to just \$330 million. We note that while XLS uses a fairly conservative discount rate (4.75%, which ranks in the 50th percentile amongst of all companies in our study), the company's assumed rate of return on plan assets of 9.00% ranks in the 99th percentile and may be causing the company's net periodic benefit expense to be understated relative to economic reality. However, because the firm's PBO is now significantly lower, our overall opinion has been moderated.

Companies from 2011 *Issue Commentary* (published 08/08/11): Of the companies featured in our 2011 *Issue Commentary*, we are reiterating our negative view regarding the pension accounting assumptions utilized by Alcoa Inc. (NYSE:AA), Delta Air Lines (NYSE:DAL), General Dynamics (NYSE:GD), Timken Co. (NYSE:TKR), and Unisys Corp. (UIS) and are revising our opinion to neutral for Textron Inc. (NYSE:TXT).

For TXT, our revision to a neutral opinion was based on the company's significant revisions to its discount-rate assumption (reduced from 5.71% to 4.95%) and the company's assumed rate of return on plan assets (reduced from 8.26% to 7.84%).

We remain negative in our outlook for AA, even though the firm significantly revised its discount rate in 2011 from 5.75% (ranking in the 89th percentile last year) to 4.90% (which ranks in the 66th percentile this year). The company's assumed rate of return on plan assets of 8.50% continues to rank high (88th percentile). We estimate that the company's sustainable pension expense may be closer to \$521 million after adjusting for a lower discount-rate assumption and a lower assumed rate of return on plan assets, or 76% higher than the as-reported figure of \$296 million in 2011. Additionally, after adjusting the company's PBO to reflect a lower discount rate, we estimate that the economic value of the company's PBO may be closer to \$18.6 billion (versus a reported value of \$13.5 billion), and the company's adjusted funding deficit may be closer to \$8.3 billion (compared to a reported value of \$3.2 billion). Our adjusted funding deficit was equivalent to 20.7% of total assets and 71.3% of retained earnings at 12/31/11.

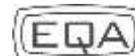
Our outlook for DAL also remains negative. The company's discount-rate assumption of 4.94% ranks in the 72nd percentile of all companies analyzed, while its assumed rate of return of 8.93% ranked in the 99th percentile. While the company recognized \$300 million in net periodic benefit expense in 2011, we believe that the company's sustainable pension expense may be closer to \$504





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million (+68% higher) after adjusting for a lower discount-rate assumption and a lower assumed rate of return on plan assets. Additionally, after adjusting the company's PBO to reflect a lower discount rate, we estimate that the economic value of the company's PBO may be closer to \$27.3 billion (versus a reported value of \$19.3 billion), and the company's adjusted funding deficit may be closer to \$19.5 billion (compared to a reported value of \$11.5 billion). Our adjusted funding deficit was equivalent to 44.9% of total assets and equated to 232.5% of the company's accumulated loss at 12/31/11.

GD continued to utilize some of the most outsized pension accounting assumptions among our sample firms. The company's discount-rate assumption of 5.22% ranks in the 95th percentile of all companies examined in our study, and the company's assumed rate of return on plan assets of 8.37% ranked in the 86th percentile of all companies examined. We estimate that the company's sustainable pension expense may be closer to \$555 million after adjusting for a lower discount-rate assumption and a lower assumed rate of return on plan assets, or 68% higher than the as-reported figure of \$293 million in 2011. Furthermore, after adjusting the company's PBO to reflect a lower discount rate, we estimate that the economic value of the company's PBO may be closer to \$15.6 billion (versus a reported value of \$10.2 billion), and the company's adjusted funding deficit may be closer to \$9.4 billion (compared to a reported value of \$4.0 billion). Our adjusted funding deficit was equivalent to 26.9% of total assets and 49.7% of retained earnings at 12/31/11.

TKR's discount-rate assumption of 5.00% ranks in the 77th percentile, and the assumed rate of return on plan assets of 8.50% ranks in the 88th percentile. We estimate that the company's sustainable pension expense may be closer to \$92 million after adjusting for a lower discount rate assumption and a lower assumed rate of return on plan assets, or 122% higher than the as-reported figure of \$41 million in 2011. After adjusting for our standardized discount rate, we estimate that the true value of the company's PBO may be closer to \$4.2 billion (versus a reported value of \$3.1 billion), and the company's adjusted funding deficit may be closer to \$1.6 billion (compared to a reported value of \$493 million). Our adjusted funding deficit was equivalent to 36.8% of total assets and 79.9% of retained earnings at 12/31/11.

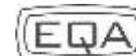
In our view, UIS continues to utilize some of the most concerning assumptions relative to all companies we have analyzed. On a combined basis, the company's discount-rate assumption of 4.86% ranks in the 63rd percentile. However, the company uses a 4.96% discount rate to measure its U.S. plans, which ranks above the 72nd percentile of all companies examined. Additionally, while the company's combined assumed rate of return of 7.94% ranks in the 60th percentile among all companies examined, the assumed rate of return on U.S. plan assets of 8.75% ranks in the 97th percentile. After adjusting the company's PBO to reflect a lower discount rate, we estimate that the economic value of the company's PBO may be closer to \$10.7 billion (versus a reported value of \$7.7 billion), and the company's adjusted funding deficit may be closer to \$5.0 billion (compared to a reported value of \$2.0 billion). Our adjusted funding deficit was equivalent to 192.7% of





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total assets and equated to 247.1% of accumulated losses as of 12/31/11. While the company reported a net periodic benefit cost of \$34 million last year, we believe that the company's sustainable pension expense may be closer to \$131 million (282% higher than the reported expense of \$34 million).

Table 1. Summary Review of Formerly Featured Companies

Ticker	Current View	Discount Rate	Percentile Rank	Assumed Rate of Return	Percentile Rank	Adjusted Funding Deficit/ Year-End Total Assets
AES	NEGATIVE	8.78%	100 th	10.55%	100 th	27.7%
UPS	NEGATIVE	5.61%	99 th	8.71%	97 th	59.2%
AMR	(1)	(1)	(1)	(1)	(1)	(1)
ITT	NEUTRAL	4.80%	56 th	8.95%	99 th	7.2%
LMT	NEGATIVE	4.75%	50 th	8.50%	88 th	78.2%
AA	NEGATIVE	4.90%	66 th	8.50%	88 th	20.7%
DAL	NEGATIVE	4.94%	72 nd	8.93%	99 th	44.9%
GD	NEGATIVE	5.22%	95 th	8.37%	86 th	26.9%
TKR	NEGATIVE	5.00%	77 th	8.50%	88 th	36.8%
TXT	NEUTRAL	4.95%	73 rd	7.84%	57 th	29.1%
UIS	NEGATIVE	4.86%	63 rd	7.94%	60 th	192.7%

Notes:

(1) AMR filed for bankruptcy protection on 11/29/11. As a result, the company has been removed from coverage.

Table 2. Summary Review of Currently Featured Companies and Summary Statistics

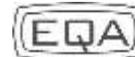
Ticker	Current View	Discount Rate	Percentile Rank	Assumed Rate of Return	Percentile Rank	Adjusted Funding Deficit/ Year-End Total Assets
ATI	NEGATIVE	5.00%	77 th	8.50%	88 th	26.3%
ED	NEGATIVE	4.70%	43 rd	8.50%	88 th	21.7%
NOC	NEGATIVE	5.03%	84 th	8.25%	80 th	52.9%
PCH	NEGATIVE	4.95%	73 rd	8.50%	88 th	34.4%
RRD	NEGATIVE	4.90%	66 th	8.40%	87 th	33.9%
WY	NEGATIVE	4.50%	20 th	9.00%	99 th	23.0%
Study Mean:		4.74%	-	7.61%	-	14.2%
Study Median:		4.75%	-	7.75%	-	10.5%





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Allegheny Technologies Inc.
 (NYSE:ATI)
 1000 Six PPG Pl.
 Pittsburgh, Pennsylvania 15222
 (412)-394-2800
 www.alleghenytechnologies.com

Company description: Allegheny Technologies Inc. (ATI) engages in the production of specialty metals worldwide.

Background: ATI was featured in our first *Issue Commentary* (07/07/09) as a result of the company's upward revision to its already outsized discount-rate assumption, combined with an equally high assumed rate of return on plan assets. While the company's assumptions continued to rank high among the companies analyzed in our follow-up *Issue Commentary* (07/15/10), we elected to move ATI to a Neutral primarily as a result of a reduction of the company's adjusted funding deficit relative to our initial observation (from 29.5% to 20.8%). Since our last update, it appears that ATI's adjusted deficit position has again turned upward thereby again raising concerns about the appropriateness of its pension-accounting assumptions.

INDUSTRY	Steel
PRICE	\$30.98 (06/20/12)
MARKET CAP	3.32 billion
ENT. VALUE	4.58 billion
P-E RATIO	16.02
EV/REVENUE	0.86
DEBT/EBITDA	2.10
SHORT INTEREST	3.6%
DAYS TO COVER	2.4
VIEW	NEG.

Discount rate and adjusted PBO analysis: At the end of 2011, ATI's PBO had stood at \$2.8 billion. However, we believe that the company's PBO is biased lower as a result of the company's use of a 5.0% discount rate, which ranks in the 77th percentile among all companies analyzed in current study. After adjusting for the uniform discount rate applied throughout this analysis, we believe that the economic value of ATI's PBO may be closer to \$3.8 billion.

Plan assets and adjusted funding deficit analysis: Plan assets totaled \$2.2 billion, resulting in a funding shortfall of \$518 million. The company's funding position primarily resulted from a \$565 million (23.7%) loss on plan assets recorded in 2008. Cumulative returns since 2008 have totaled \$536 million, or \$29 million short of the prior recorded loss.

After adjusting the PBO to reflect the uniform discount rate applied throughout our analysis, we estimate that ATI's adjusted funding deficit may be closer to \$1.6 billion, equivalent to 26.3% (66.4%) of assets (retained earnings) at the end of 2011. Additionally, our estimate of the adjusted funding deficit was equal to 49.2% of the firm's current market capitalization.

Sustainable pension expense analysis: During 2011, ATI reported a net periodic benefit expense of \$56.4 million. However, we believe that the expense is biased lower as a result of the company's use of an 8.50% assumed rate of return on plan assets, which ranks in the 88th percentile of all companies analyzed in our study.

Our estimated sustainable pension expense for ATI is \$121 million, or 114% higher than the as-reported expense of \$56 million. Our estimate assumes that the \$30 million in service cost recognized in 2011 carries over to 2012. To that we added \$113 million to reflect the accretion of the adjusted PBO, minus \$134 million, reflecting our view of a sustainable return assumption, plus amortization expenses of \$105 million for actuarial losses and \$6 million for prior service costs. With \$1.3 billion in losses stored in AOCI, ATI may report similar levels of actuarial-loss amortization for the next 12.6 years.





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Consolidated Edison Inc. (NYSE:ED)

4 Irving Place
New York, New York 10003
(212)-460-4600
www.conedison.com

INDUSTRY	Multi-Utilities
PRICE	\$61.50 (06/20/12)
MARKET CAP	18.01 billion
ENT. VALUE	28.33 billion
P-E RATIO	17.82
EV/REVENUE	2.24
DEBT/EBITDA	3.36
SHORT INTEREST	2.4%
DAYS TO COVER	5.2
VIEW	NEG.

Company description: Consolidated Edison Inc. (ED) is a holding company that owns Consolidated Edison Company of New York Inc. (CECONY) and Orange and Rockland Utilities Inc. (O&R). Together, CECONY and O&R deliver electricity and natural gas to customers primarily located in southeastern New York, northern New Jersey, and northeastern Pennsylvania, and competitive energy businesses, which provide retail and wholesale electricity supply and energy services.

Industry-specific accounting background: As a regulated company, ED is afforded unique accounting that differs significantly from the accounting utilized by other non-regulated, U.S. companies. As a result, a significant portion of service costs incurred by the firm and actuarial adjustments may be recorded as a regulatory asset, which is subsequently amortized in future periods. According to ED’s critical accounting policy disclosures, “If regulation provides assurance that incurred costs will be recovered in the future, these costs would be recorded as deferred charges or ‘regulatory assets’ under the accounting rules for regulated options.”

Discount rate and adjusted PBO analysis: Compared to other companies featured in our current study, ED’s discount rate is relatively low at 4.7%, ranking in the 43rd percentile. At the end of 2011 the company’s PBO using this discount rate assumption was \$11.8 billion. However, after adjusting for the uniform discount rate applied throughout this analysis, we believe that the economic value of ED’s PBO may be closer to \$16.3 billion.

Plan assets and adjusted funding deficit analysis: Plan assets totaled \$7.8 billion at the end of 2011, thereby leading to a \$4.0 billion funding shortfall based on as-presented figures. The company’s current funding primarily resulted from a \$2.3 billion (26.9%) loss on plan assets recorded in 2008. Cumulative returns since 2008 have totaled \$2.1 billion, or \$118 million short of the prior recorded loss.

After adjusting the PBO to reflect the uniform discount rate applied throughout our analysis, we estimate that ED has an adjusted funding deficit of \$8.5 billion, equivalent to 46.3% of current market capitalization and 21.7% of total assets (112.6% of retained earnings) at the end of 2011.

Sustainable-pension-expense analysis: During 2011 ED incurred a total periodic-benefit cost of \$556 million. However, this was before \$185 million in costs were capitalized and \$65 million of costs were deferred, thereby recognizing only 55% of the total periodic costs incurred. Beyond the distortions caused by the cost capitalization and deferral mechanisms afforded to regulated companies, we further believe that pension expenses are biased lower as a result of the use of an 8.5% assumed rate of return on plan assets (which ranks in the 88th percentile of all companies analyzed in our current study).

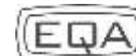
Our estimated sustainable pension expense for ED is \$916 million—or 65% higher than total periodic benefit cost incurred and 199% higher than the costs





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actually charged to operating expenses. Our sustainable pension expense estimate is based on carrying over the \$190 million in service costs incurred in 2011 plus \$483 million interest, minus \$468 million to reflect our view of a sustainable return on plan assets. Additionally we add \$703 million in actuarial losses that that will be amortized out of regulatory assets and AOCI, and \$8 million in prior service costs.

On one hand, with \$703 million in actuarial losses expected to be recognized in 2012, the amount of unrecognized net losses recorded in regulatory assets and AOCI would be fully wound down in just over 7.6 years. On the other hand, trends in net periodic benefit cost capitalization and deferrals suggest that a portion of the amortization of actuarial losses is cycling back to the regulatory asset account (and therefore not being recognized as a current-period expense in the statement of operations). For example, in 2011 (2010) ED capitalized or deferred \$250 million (\$272 million) in periodic benefit cost, which is equivalent to 132% (162%) of the service cost incurred during the year. The remaining amount of capitalization above and beyond the service cost incurred of \$60 million (\$104 million) represents 11.3% (24.5%) of the amortization expense “recognized” during the year. Investors should also be aware of the fact that almost all of the company’s actuarial losses (of \$5.4 billion) are recorded as an asset, and therefore are additive to as-presented retained earnings (of \$7.6 billion) and shareholders’ equity (of \$11.4 billion). After taxes, the full recognition of the actuarial loss would reduce retained earnings by 46.0% and shareholders’ equity by 30.4%.

Northrop Grumman Corp.
(NYSE:NOC)
2980 Fairview Park Drive Falls
Church, Virginia 22042
(703)-280-2900
www.northropgrumman.com

Company description: Northrop Grumman Corp. (NOC) provides products, services, and solutions in aerospace, electronics, information systems, and technical services worldwide.

Discount rate and adjusted PBO analysis: As of 12/31/11, NOC’s as-presented PBO was \$24.1 billion and was underfunded by \$2.79 billion. However, we believe that these figures are biased lower as a result of the company’s use of a discount rate of 5.03%, ranking in the 84th percentile of all companies analyzed in our current study. After adjusting for a lower discount-rate assumption, we believe the economic value of NOC’s PBO may be closer to \$34.8 billion.

Plan assets and adjusted funding deficit analysis: Plan assets totaled \$21.3 billion at the end of 2011, thereby leading to a \$2.8 billion shortfall based on as-presented figures. As a result of the company’s spin-off of Huntington Ingalls (HII), which occurred on 03/31/11, the company’s return performance is not comparable across time. However, we note that the company’s plan assets generated a 6.7% return (+\$1.3 billion) in 2011 and a 12.8% return (+\$2.3 billion) in 2010. That being said, unrealized gains associated with assets that were fair-valued using a Level 3 approach represented 12.8% of 2011 returns and 19.1% of 2010 returns. Level 3 assets (of \$5.3 billion) represented 24.0% of plan assets at the end of 2011, up from 23.6% (\$5.0 billion) at the end of 2010.

After adjusting the PBO to reflect the uniform discount rate applied throughout

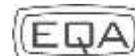
INDUSTRY	<i>Aerospace and Defense</i>
PRICE	\$62.29 (06/20/12)
MARKET CAP	15.67 billion
ENT. VALUE	16.92 billion
P-E RATIO	8.09
EV/REVENUE	0.65
DEBT/EBITDA	0.33
SHORT INTEREST	3.9%
DAYS TO COVER	5.6
VIEW	NEG.





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our analysis, we estimate that NOC has an adjusted pension funding deficit of \$13.4 billion, equivalent to 85.6% of the company's current market capitalization and 52.9% of total assets (138.6% of retained earnings) at the end of 2011.

Sustainable pension expense analysis: During 2011, NOC recognized a net periodic benefit cost of \$238 million. However, we believe that the expense is biased downward due to the company's use of an 8.25% assumed rate of return on plan assets (which ranks in the 80th percentile of all companies analyzed in our current study).

Our estimated sustainable pension expense for NOC is \$638 million—or 168% higher than the company's reported 2011 expense. Our sustainable expense is based on carrying over the \$520 million service cost recorded in 2011, plus \$1.0 billion in interest expense, minus \$1.3 billion to reflect our view of a sustainable return on plan assets. Additionally, we add the expected amortization of \$427 million in net actuarial losses and deduct \$58 million in service credits from our total. With \$6.1 billion in actuarial losses recorded in AOCI (representing 40% of retained earnings at the end of 2011, after adjusting for tax benefits), NOC could report 14 more years of actuarial losses at this level before the loss is cleared from the balance sheet.

Incremental review of HII: While not specifically featured in our current study (mainly as the company was not operating independently for all of 2011), we note that HII's discount rate assumption of 5.23% ranks in the 95th percentile of all companies in our study and the company's assumed rate of return of 8.5% ranks in the 88th percentile of all companies in our study. On an as-presented basis, the company's plans were underfunded by \$885 million at the end of 2011. After adjusting for the lower uniform discount rate applied throughout this analysis, we estimate that the company's PBO may be closer to \$6.5 billion, and the company's adjusted funding deficit may be closer to \$3.3 billion.

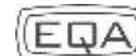
While the company recognized a net periodic benefit expense of \$103 million, we estimate that the company's sustainable expense may be closer to \$213 million. Our calculation assumes that the \$125 million service charge incurred in 2011 carries over in 2012 and we further add \$193 million in interest to reflect the higher PBO and lower discount rate assumption and deduct \$194 million to reflect what we view as a sustainable return on plan assets. Finally, we add \$77 million in net actuarial losses and \$12 million in prior service costs that are expected to be amortized in 2012. With \$1.2 billion in net actuarial losses recorded in AOCI, the company may report this level of actuarial losses for the next 15 years.





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Potlatch Corp.
(NasdaqGS:PCH)
 601 West First Ave. Map
 Ste. 1600
 Spokane, Washington 99201
 (509) 835-1500
 www.potlatchcorp.com

INDUSTRY	REIT- Industrial
PRICE	\$29.89 (06/20/12)
MARKET CAP	1.21 billion
ENT. VALUE	1.50 billion
P-E RATIO	31.93
EV/REVENUE	3.07
DEBT/EBITDA	3.05
SHORT INTEREST	5.5%
DAYS TO COVER	11.5
VIEW	NEG.

Company description: Potlatch Corp. (PCH) is a real estate investment trust. Through its wholly owned subsidiaries, PCH operates real estate sales and development business, and five wood-products manufacturing facilities that produce lumber and plywood.

Discount rate and adjusted PBO analysis: As of 12/31/11, PCH's as-presented PBO was \$418 million and was underfunded by \$106 million. We believe that the company's PBO is biased lower as a result of the company's utilization of a 4.95% discount rate, which ranks in the 73rd percentile among all companies analyzed in our current study. After adjusting for a lower discount-rate assumption, we believe the economic value of PCH's PBO may be closer to \$569 million.

Plan assets and adjusted funding deficit analysis: Plan assets totaled \$312 million at the end of 2011, thereby leading to a \$106 million shortfall based on as-presented figures. The company's current funding shortfall appears primarily as a result of a \$202 million (or -29.0%) return on plan assets in 2008. In 2008 the company was able to relieve \$80 million of its funding deficit due to the spinoff of Clearwater Paper. During 2011 plan assets generated a return of just 0.8% (\$2.5 million).

After adjusting the PBO to reflect the uniform discount rate applied throughout our analysis, we estimate that PCH has an adjusted pension funding deficit of \$257 million, equivalent to 21.3% of its current market capitalization and 34.4% of total assets (and equivalent to 297.2% of accumulated losses) at the end of 2011.

Sustainable pension expense: During 2011, PCH recognized a net periodic benefit cost of \$4.6 million. However, we believe this figure is biased lower as a result of the company's utilization of an 8.5% assumed rate of return on plan assets (which ranks in the 88th percentile of all companies analyzed in our current study).

Our estimated sustainable pension expense for PCH is \$18.2 million—or 297% higher than the company's 2011 expense. Our sustainable expense is based on carrying over the \$4.5 million in service cost recorded in 2011, plus \$16.8 million in interest expense, minus \$18.7 million to reflect our view of a sustainable return on plan assets. Additionally, we add \$14.8 million in actuarial losses and \$0.8 million in prior services costs to our total. With \$256.6 million in actuarial losses stored in AOCI (representing nearly two times the size of the company's accumulated loss of \$86.4 million, after tax), PCH could report over 17 more years of actuarial losses at this level before the loss is cleared from the balance sheet.





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R.R. Donnelley & Sons Co.
(NasdaqGS:RRD)
 111 South Wacker Dr.
 Chicago, Illinois 60606-4301
 (312) 326-8000
 www.rrdonnelley.com

INDUSTRY	Commercial Printing
PRICE	\$11.09 (06/20/12)
MARKET CAP	2.00 billion
ENT. VALUE	5.34 billion
P-E RATIO	NA
EV/REVENUE	0.51
DEBT/EBITDA	2.62
SHORT INTEREST	40.4%
DAYS TO COVER	24.0
VIEW	NEG.

Company description: R.R. Donnelley & Sons Co. (RRD) provides integrated communication solutions (primarily printing) to private and public sectors worldwide.

Discount rate and adjusted PBO analysis: As of 12/31/11, RRD's as-reported PBO was \$3.9 billion, resulting in a stated deficit of \$1.1 billion. The company's discount rate of 4.9% ranks in the 66th percentile among all companies covered in this study. After adjusting for a lower discount-rate assumption, we believe the economic value of RRD's PBO may be closer to \$5.7 billion.

Plan assets and adjusted funding deficit analysis: Plan assets totaled \$2.8 billion at the end of 2011, thereby leading to a \$1.1 billion shortfall based on as-presented figures. The company's current funding position primarily resulted from a \$1.0 billion loss (or -30.5% return) on plan assets during 2008. Cumulative returns since 2008 have totaled \$898.7 million, or \$132.7 million short of the prior recorded loss.

After adjusting the PBO to reflect the uniform discount rate applied throughout our analysis, we estimate that RRD has an adjusted pension funding deficit of \$2.8 billion, equivalent to 143.0% of the company's current market capitalization and 33.9% of total assets (819.3% of retained earnings) at the end of 2011.

Sustainable pension expense analysis: During 2011, RRD recognized a net periodic benefit cost of \$57.9 million (before recognizing a curtailment gain of \$38.7 million as part of freezing the company's plans). However, we believe that the company's going-forward expense is biased downward as a result of the company's utilization of an 8.4% long-term assumed rate of return on plan assets (which ranks in the 84th percentile of all companies covered in our current study). Moreover, while the company's plan assets generated a negative return (-1.5%) in 2011, RRD actually increased its assumed rate of return from 8.3% to 8.4%.

Our estimated sustainable pension expense for RRD is \$26 million. Our sustainable pension expense assumes \$167 million interest expense, reflecting the lower uniform discount rate applied throughout this analysis to the adjusted PBO, minus \$171 million to reflect our view of a sustainable return on plan assets. Additionally we add the amortization net actuarial losses of \$30 million. For 2012, we expect that RRD will report approximately \$17 million in pension income utilizing the company's accounting assumptions at the end of 2011.

One final point that strikes us as very odd is that the company has \$1.6 billion in actuarial losses stored in AOCI, implying that it will take 52.5 years to fully amortize the loss. The significant time to amortize losses is a result of recognizing actuarial losses over the remaining life of plans, instead of the remaining service periods of covered employees. This is the longest amortization period of all companies we surveyed and points to a significant disparity between as-reported costs and economic reality.





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Weyerhaeuser Co. (NYSE:WY)
33663 Weyerhaeuser Way South
Federal Way, Washington 98063
(253) 924-2345
www.weyerhaeuser.com

Company description: Weyerhaeuser Co. (WY), a forest products company, grows and harvests trees, builds homes, and manufactures forest products worldwide.

Discount rate and adjusted PBO analysis: Of the companies featured in the current study, WY has one of the lowest discount rates at 4.5%,¹¹ which ranks in the 20th percentile of all companies covered in our analysis. At the end of 2011, the company's PBO stood at \$5.8 billion. But after adjusting for our lower discount-rate assumption applied to all companies, we estimate that the economic value of WY's PBO may be closer to \$7.6 billion.

INDUSTRY	REIT - Industrial
PRICE	\$21.24 (06/20/12)
MARKET CAP	11.41 billion
ENT. VALUE	15.16 billion
P-E RATIO	41.81
EV/REVENUE	2.41
DEBT/EBITDA	3.68
SHORT INTEREST	2.4%
DAYS TO COVER	2.9

VIEW **NEG.**

Adjusted funding deficit/concerns regarding the composition of plan assets: Plan assets totaled \$4.7 billion, resulting in a funding shortfall of \$1.1 billion on an as-presented basis. The company's current funding shortfall primarily appears to be a result of a \$2.0 billion (28.8%) loss (negative return) on plan assets recorded in Q4 2008. Cumulative returns since 2008 have only totaled \$1.3 billion, or \$717 million short relative to the loss recorded in 2008.

Our analysis of WY's pension-plan-asset composition is one of the primary reasons we are featuring the company in our current study. At the end of 2011, 88.7% of plan assets were accounted for utilizing a Level 3 valuation approach, up from 83.4% at the end of 2010 and 84.9% at the end of 2009. The two primary assets accounted for using a Level 3 approach are hedge funds (\$2.4 billion) and private equity and related funds (\$1.6 billion). Of incremental concern, the company's pension trusts (which fund the company's plans) have significant derivative positions. At the end of 2011 the fair value of the company's derivatives was \$223 million. However, the notational amount of derivatives totaled \$1.9 billion—implying notational leverage of 8:1. This compares to notational leverage of 6:1 (\$328 million/\$1.8 billion) at the end of 2010 and 6:1 (\$259 million/\$1.6 billion) at the end of 2009.

The company provides the following information regarding its use of swaps and other derivative instruments:

Swaps and other derivative instruments generally are comprised of swaps, futures, forwards or options. In accordance with our investment risk and return objectives, some of these instruments are utilized to achieve target equity and bond asset exposure or to reduce exposure to certain market risks or to help manage the liquidity of our investments. The resulting asset mix achieved is intended to allow the assets to perform comparably with established benchmarks. Others, mainly total return swaps with limited exchange of principal, are designed to gain exposure to the return characteristics of specific financial strategies.

All swap, forward and option contracts are executed in a diversified

¹¹ We note that WY indicates that it utilized a discount-rate assumption of 4.5% for its U.S. plans and 4.9% for its plans in Canada. However, WY's disclosures do not indicate what portion of plan liabilities are associated with U.S. plans versus Canadian plans. As a result, given that 80% of the company's total long-lived assets are based in the U.S., we applied the 4.5% discount rate across the entire plan.





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manner through a number of financial institutions and in accordance with our investment guidelines.

It further appears that these derivatives are primarily valued using a Level 3 valuation approach. According to the company's 2011 10K:

Derivative contracts held by our pension trusts are not publicly traded and each derivative contract is specifically negotiated with a unique financial counterparty and references either illiquid fund units or a unique number of synthetic units of a publicly reported market index. The derivative contracts are valued based upon valuation statements received from the financial counterparties. We review embedded calculations in the valuation statements and compare referenced values to external sources.

In our view, the significant allocation of pension-plan investments to assets valued using a Level 3 methodology and the use of derivatives with significant leverage heightens the risks associated with the company's plan relative to other companies reviewed to date for our pension *Issue Commentaries*.

Sustainable pension expense analysis: During 2011 WY recognized \$71 million in net periodic benefit cost associated with its pension plans. However, we believe that this figure was biased significantly lower as a result of the company's utilization of a 9.5% assumed rate of return on plan assets. For 2012 the company did lower its expected return on plan assets to 9.0%, but this assumption still ranks in the 99th percentile of all companies analyzed in our study.

Our estimated sustainable pension expense is \$168 million—or 137% higher than recorded in 2011. Our estimate carries over the \$48 million of service cost incurred in 2011 plus \$225 million in interest expense, reflecting the accretion of the adjusted PBO utilizing our uniform discount rate, minus \$283 million, reflecting what we view as a sustainable return on plan-assets assumption. We further add \$170 million in expected amortization of net actuarial losses and \$8 million in prior service costs. With \$1.7 billion in net actuarial losses recorded in AOCI, WY could report this level of actuarial losses for the next 10 years.

Future Risks Associated with Adoption of International Accounting Standards (IAS 19R)

ASSUMED RATE OF RETURN SMOOTHING MECHANISM ELIMINATED UNDER IFRS

While the full adoption of international financial reporting standards (IFRS) by U.S. GAAP-reporting companies is not expected until 2015 or later, the FASB has been working with the IASB on a number of convergence issues, including the accounting rules governing post-employment liabilities.

Up until July 2011, pension accounting under IFRS was to be governed by international accounting standard (IAS) 19 – *Employee Benefits*, which contained a variety of changes in pension accounting relative to U.S. GAAP. Under IAS 19, all actuarial gains and losses¹² as of the date of adoption could either be classified as a

¹² Actuarial gains and losses result from revising the discount rate applied to plan assets higher or lower, respectively.





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recognized gain or loss in the statement of operations or directly in equity in other comprehensive income (OCI), at the election of the company. If a company chose to record all gains and losses within OCI at the time of adoption, then all future gains and losses also would have to be recorded in OCI (i.e., they could not flow back to the income statement in the future¹³). Alternatively, if a company elected to reflect actuarial gains and losses within the statement of operations on the date of adoption, the company would have been allowed to “throttle” the amount of gains or losses that are reflected in the statement of operations using a corridor method (wherein a portion of the gains and losses are deferred and recognized over the remaining working lives of the employees in the plan).

Because of perceived deficiencies in IAS 19 by the members of the IASB, in June 2011 the IASB published a revision to the initial standard (IAS 19R), which introduced a whole new approach in calculating pension expense. Based on our assessment of IAS 19R, we believe adoption of the standard will materially affect the results of companies with major pension-funding deficits.

First, under IAS 19R actuarial gains and losses will never be recorded within the company’s statement of operations. Instead, gains and losses resulting from the revision of actuarial assumptions will be reported in OCI and will not flow back to the income statement, thereby eliminating the amortization mechanism currently used in U.S. GAAP.

Second, in the calculation of the periodic benefit cost, the current practice of using both an assumed rate of return on plan assets and a separate discount rate applied to the firm’s obligation has been eliminated.¹⁴ Instead, the new standard requires the computation of a “net interest expense,” wherein only one interest rate is applied. Specifically, under IAS 19R, the “net interest expense” will be calculated as the discount rate multiplied by the net funding position of plan. According to the IASB, it is the view of the board that the net funding deficit effectively represents a loan from its plan and should reflect interest expense accordingly. Additionally, IASB took the view that gains and losses associated with plan assets should be thought of as a completely separate activity relative to the company’s ongoing operations.

Third, in the event that plan assets underperform or outperform the discount rate embedded in the net interest expense calculations, the surplus/deficit will be recorded as an adjustment in OCI. However, the activity recorded in OCI will not directly flow back to the statement of operations.

IDENTIFYING FIRMS WHOSE EARNINGS WOULD BE SIGNIFICANTLY AFFECTED SHOULD IAS 19R BE ADOPTED BY US GAAP REPORTING FIRMS

This fundamental shift in the accounting for pension activities could increase

¹³ In contrast, under current U.S. GAAP actuarial gains and losses always flow back to the statement of operations through an amortization mechanism.

¹⁴ Under U.S. GAAP reporting, “net interest expense” is effectively calculated as the assumed rate of return on plan assets multiplied by the fair value of plan assets minus the discount rate applied to measure PBO multiplied by the balance of the PBO.





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accounting-related risks for a number of companies. To evaluate those companies with the highest pension-accounting risk related to the adoption of IAS 19R's net interest calculation we (A) estimated net pension interest income for 2012 utilizing the beginning-of-year PBO, total plan assets, the stated discount rate and the assumed rate of return, (B) we calculated what net interest expense would be under IAS 19R (i.e., we applied the discount rate to the net funding liability), and (C) we estimated the sustainable net interest expense per IAS 19R that would occur had a risk-free rate of return been recorded across all companies.

In Table 3 (next page), we present alternative approaches to calculating net interest income. For each approach, we also list the 50 companies¹⁵ exhibiting the highest accounting-related risks associated with the adoption of IAS 19R. Risk was measured as the difference between methods A and B, scaled by the last fiscal year EBIT. Absolute value of EBIT is used for those companies that reported a loss before interest and taxes.

The first approach “(A)” computes a hypothetical “net interest income (expense)” value under the current U.S. accounting standard. In computing this value, we apply each company's assumed rate of return on plan assets to its plan-asset value used for computing pension interest income,¹⁶ and we subtract the accretion of interest expense on the pension liability. Under this comparative methodology, the 50 companies at the highest risk of an adverse impact from a net interest expense methodology actually reported “net interest income” from their pension plans of \$9.3 billion in 2012. This result is a byproduct of an accounting standard that (1) erroneously considers plan assets to be assets of the sponsoring entity and (2) allows the firm to subjectively choose its own assumed rate of return on those plan assets. Needless to say, neither assumption is reflective of the underlying economics of offering defined-benefit pension plans to a firm's employees.

The second approach to computing net interest expense “(B)” demonstrates what would occur if the stated discount rate selected by each firm was applied to the net funding position of the company's pension plan. As illustrated below, such a change would have a significant adverse impact on the statement operations for each of the 50 “at risk” firms we analyzed. In total, we would expect the subset of 50 companies to report \$6.4 billion in net interest expense. The difference in U.S. GAAP net interest relative to IFRS net interest would consume approximately 18.5% (\$15.7 billion) of prior-year reported EBIT (\$85.1 billion).

The third approach “(C)” demonstrates what would occur if a uniform discount rate were applied by all firms. Reflecting the methodology employed in our current study, we used the risk-free rate assumption of 2.96%. Under this

¹⁵ On 06/01/12, General Motors (GM) announced that it was amending plans and transferring certain of its pension liabilities. As a result, we have removed the company from this portion of the study.

¹⁶ This anomaly is caused by the spread between the assumed rate of return and the discount rate utilized by companies. With the current assumed rate of return on plan assets of 7.75% and the discount rate of 4.75%, companies require just \$0.61 of plan assets to offset the accretion of \$1.00 of the PBO liability.





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scenario, net interest expense would balloon to \$10.5 billion. The difference in adjusted net interest income relative to the net interest expense would consume approximately 23.3% (\$19.8 billion) of prior-year reported EBIT (\$85.1 billion).

**Table 3. IAS 19R Risk Assessment
(\$ in millions)**

Company name	Ticker	(A) Net interest income (expense) US GAAP	(B) Net interest income (expense) IFRS	Difference (B-A)	Difference (B-A) as a % of LFY EBIT	(C) Sustainable expense methodology	Difference (C-A)	Difference (C-A) as a % of LFY EBIT
United States Steel Corp.	X	\$184	(\$109)	(\$292)	188.6%	(\$148)	(\$331)	213.8%
NCR Corp.	NCR	\$50	(\$54)	(\$105)	55.1%	(\$76)	(\$127)	66.8%
Unisys Corp.	UIS	\$76	(\$99)	(\$175)	53.8%	(\$149)	(\$225)	69.2%
The Babcock & Wilcox Co.	BWC	\$30	(\$37)	(\$67)	43.3%	(\$51)	(\$81)	52.5%
Weyerhaeuser Co.	WY	\$161	(\$51)	(\$212)	41.0%	(\$86)	(\$247)	47.7%
The Boeing Co.	BA	\$980	(\$730)	(\$1,710)	30.9%	(\$1,115)	(\$2,095)	37.8%
Exelis Inc.	XLS	\$83	(\$87)	(\$170)	30.5%	(\$114)	(\$198)	35.4%
LSI Corp.	LSI	\$4	(\$26)	(\$30)	29.4%	(\$28)	(\$33)	32.1%
J. C. Penney Company Inc.	JCP	\$118	(\$21)	(\$139)	28.6%	(\$73)	(\$191)	39.5%
Olin Corp.	OLN	\$62	(\$2)	(\$64)	28.2%	(\$24)	(\$86)	37.9%
Textron Inc.	TXT	\$80	(\$65)	(\$145)	27.8%	(\$117)	(\$197)	37.9%
Lockheed Martin Corp.	LMT	\$391	(\$633)	(\$1,023)	27.0%	(\$877)	(\$1,268)	33.5%
Huntington Ingalls Industries Inc.	HII	\$60	(\$46)	(\$106)	26.5%	(\$97)	(\$157)	39.2%
MeadWestvaco Corp.	MWV	\$182	\$34	(\$148)	25.0%	\$1	(\$181)	30.5%
Armstrong World Industries Inc.	AWI	\$43	(\$8)	(\$51)	23.4%	(\$28)	(\$71)	32.7%
Northrop Grumman Corp.	NOC	\$600	(\$140)	(\$740)	22.6%	(\$398)	(\$998)	30.5%
Foster Wheeler AG	FWLT	\$40	(\$2)	(\$42)	22.4%	(\$8)	(\$48)	25.8%
Sears Holdings Corp.	SHLD	\$17	(\$110)	(\$127)	22.4%	(\$150)	(\$167)	29.4%
Ford Motor Co.	F	\$1,052	(\$723)	(\$1,776)	21.6%	(\$1,186)	(\$2,238)	27.3%
Marsh & McLennan Companies Inc.	MMC	\$274	(\$76)	(\$350)	21.4%	(\$221)	(\$495)	30.2%
Alcoa Inc.	AA	\$214	(\$158)	(\$371)	20.8%	(\$245)	(\$459)	25.7%
AO Smith Corp.	AOS	\$23	(\$7)	(\$30)	20.4%	(\$14)	(\$37)	25.2%
Kaman Corp.	KAMN	\$13	(\$6)	(\$19)	19.9%	(\$9)	(\$23)	23.1%
Selective Insurance Group Inc.	SIGI	\$2	(\$4)	(\$5)	19.7%	(\$7)	(\$8)	30.5%
Raytheon Co.	RTN	\$269	(\$303)	(\$572)	19.6%	(\$440)	(\$709)	24.3%





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Table 3. IAS 19R Risk Assessment (Cont.)
(\$ in millions)

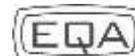
Company name	Ticker	(A) Net interest income (expense) US GAAP	(B) Net interest income (expense) IFRS	Difference (B-A)	Difference (B-A) as a % of LFY EBIT	(C) Sustainable expense methodology	Difference (C-A)	Difference (C-A) as a % of LFY EBIT
The New York Times Co.	NYT	\$7	(\$40)	(\$47)	19.3%	(\$54)	(\$61)	25.0%
Con-way Inc.	CNW	\$14	(\$23)	(\$37)	19.2%	(\$35)	(\$49)	25.2%
Honeywell International Inc.	HON	\$319	(\$169)	(\$487)	18.9%	(\$327)	(\$646)	25.1%
Allegheny Technologies Inc.	ATI	\$52	(\$26)	(\$78)	18.1%	(\$47)	(\$99)	23.0%
Fortune Brands Home & Security Inc.	FBHS	\$9	(\$8)	(\$17)	17.8%	(\$13)	(\$22)	22.8%
E. I. du Pont de Nemours and Co.	DD	\$385	(\$417)	(\$803)	16.3%	(\$512)	(\$897)	18.2%
USG Corp.	USG	\$2	(\$18)	(\$20)	16.2%	(\$27)	(\$29)	23.4%
The Brink's Co.	BCO	\$10	(\$18)	(\$28)	16.2%	(\$27)	(\$37)	21.4%
Cooper Tire & Rubber Co.	CTB	\$8	(\$17)	(\$25)	15.3%	(\$25)	(\$33)	20.1%
Potlatch Corp.	PCH	\$6	(\$5)	(\$11)	15.1%	(\$8)	(\$13)	18.3%
CenturyLink, Inc.	CTL	\$280	(\$83)	(\$363)	14.6%	(\$170)	(\$450)	18.1%
Motorola Solutions, Inc.	MSI	\$42	(\$130)	(\$172)	14.3%	(\$211)	(\$253)	21.0%
Goodyear Tire & Rubber Co.	GT	\$22	(\$145)	(\$168)	14.2%	(\$174)	(\$196)	16.6%
Chemtura Corp.	CHMT	\$13	(\$16)	(\$29)	14.1%	(\$24)	(\$37)	18.0%
Delta Air Lines Inc.	DAL	(\$258)	(\$568)	(\$311)	14.0%	(\$578)	(\$320)	14.4%
R.R. Donnelley & Sons Company	RRD	\$47	(\$53)	(\$100)	13.6%	(\$83)	(\$130)	17.7%
Harsco Corp.	HSC	\$10	(\$16)	(\$26)	13.6%	(\$25)	(\$34)	18.2%
Celanese Corp.	CE	\$45	(\$55)	(\$100)	13.5%	(\$70)	(\$115)	15.5%
Consolidated Edison Inc.	ED	\$107	(\$189)	(\$296)	13.2%	(\$252)	(\$360)	16.1%
PolyOne Corp.	POL	\$1	(\$11)	(\$11)	12.5%	(\$12)	(\$13)	14.6%
International Business Machines Corp.	IBM	\$2,258	(\$439)	(\$2,697)	12.3%	(\$981)	(\$3,240)	14.8%
The Dow Chemical Company	DOW	\$185	(\$331)	(\$516)	12.3%	(\$489)	(\$674)	16.1%
Timken Co.	TKR	\$67	(\$25)	(\$92)	12.2%	(\$47)	(\$115)	15.3%
Owens-Illinois, Inc.	OI	\$56	(\$36)	(\$91)	12.1%	(\$62)	(\$117)	15.6%
United Parcel Service Inc.	UPS	\$614	(\$109)	(\$723)	12.0%	(\$608)	(\$1,221)	20.2%





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Transitory Issues Associated with Mark-to-Market Adjustments Permitted Under U.S. GAAP Accounting

In addition to the description of U.S. GAAP accounting provided earlier in this report, ASC 715 also allows companies to reflect mark-to-market adjustments for actuarial gains and losses in the statement of operations, thereby eliminating or significantly reducing the amount of actuarial gains and losses stored in AOCI. However, as IAS 19R currently stands, companies will not be permitted to reflect actuarial adjustments in the statement of operations under IFRS. This creates an obvious conundrum that must be resolved before the SEC's desired convergence of U.S. GAAP and IFRS.

Historically, very few U.S. companies have utilized a mark-to-market adjustment approach in reflecting actuarial adjustments in the statement of operations. This is not a surprise given that the declining discount-rate environment would have caused significant losses over the preceding years. However, in 2011 a handful of companies, including Honeywell (HON), Verizon (VZ), and AT&T (T) each adopted the practice of reporting either the entire amount of mark-to-market adjustment activities (VZ and T) or a portion of the adjustments, using a corridor approach (HON).

To adopt the standard of allowing mark-to-market adjustments to be reflected in operations, a company must reset retained earnings by immediately recognizing any previously stored actuarial losses in AOCI. To accomplish this, companies must restate their earnings in prior periods to reflect the recognition of prior actuarial adjustments. For example, VZ adjusted 2010 EBT lower by \$0.6 billion, 2009 EBT lower by \$1.4 billion, and 2008 EBT lower by \$15.0 billion to reflect the actuarial losses. Similarly, T adjusted 2010 EBT lower by \$2.5 billion, 2009 EBT lower by \$215 million, and 2008 EBT lower by \$25.1 billion to reflect the actuarial losses. HON adjusted 2010 EBT lower by \$471 million, 2008 EBT lower by \$741 million, and 2008 EBT lower by \$3.3 billion.

On one hand, this is a positive development, as balance sheets are now more fairly stated relative to prior periods. On the other hand, if interest rates, and therefore discount rates, rise in future periods, this approach would allow companies to record gains that otherwise would have been relegated to the AOCI account. This appears to be one of the reasons for the changes made to IAS 19R.

Finally, actuarial activities reflected in the statement of operations are being further complicated by non-GAAP adjustment disclosures. In 2011 VZ recorded a \$6.0 billion adjustment to EBITDA to reflect "Severance, Pension, and Benefit Charges." However, this disclosure does not provide a breakout of what amounts were due to severance or other associated restructuring charges, what amount was due to actuarial adjustments, and what amount was due to differences between expected versus actual returns on plan assets. Going forward, investors will continue to be at an informational disadvantage during Q4 earnings announcements (which is when companies are generally expected to record mark-to-market adjustments), as the components driving the non-GAAP adjustment can only be analyzed after a detailed review of annual statements—at least until (and assuming) IAS 19R is adopted.





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