De-risking efforts by plan sponsors reduce pension obligations, but continued discount rate declines produce record-high pension plan deficits in 2012

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Headlines in 2012 were all about the de-risking activities companies took to reduce their pension obligations. However, declining interest rates were once again the major story. Year-end discount rates fell to a record low of 4.02%, increasing pension funding deficits for the Milliman 100 companies to a record high of $388.8 billion (a $61.1 billion increase over 2011).

HIGHLIGHTS (FIGURES IN $ BILLION)

	FISCAL YEAR ENDING 2011	FISCAL YEAR ENDING 2012	CHANGE
MARKET VALUE OF ASSETS	$1,245.6	$1,318.5	$72.9
PROJECTED BENEFIT OBLIGATION	$1,573.3	$1,707.3	$134.0
FUNDED STATUS	($327.7)	($388.8)	($61.1)
FUNDED PERCENTAGE	79.2%	77.2%	-2.0%
NET PENSION INCOME/(COST)	($38.5)	($55.8)	($17.3)
EMPLOYER CONTRIBUTIONS	$55.2	$61.5	$6.3
DISCOUNT RATE	4.78%	4.02%	-0.76%
ACTUAL RATE OF RETURN	5.9%	11.7%	5.8%

NOTE: NUMBERS MAY NOT ADD UP PRECISELY DUE TO ROUNDING

De-risking and a change at the top

Pension de-risking activities were pursued by several of the top 100 U.S. pension plans during 2012. Data collected for fiscal years ending in the year indicates that at least 15 companies engaged in significant risk-reduction efforts, each resulting in a settlement of more than $100 million of plan liability. However, the de-risking measures were accompanied by increased pension cost. Generally, there were larger plan asset reductions than there were corresponding plan liability reductions. Settlement and curtailment accounting entries resulted in a fiscal year 2012 charge to earnings of $7.1 billion. The net balance sheet effect for many plans was a decline in pension funded status from 2011. We expect that this funding erosion, along with implications stemming from the 2012 enactment of the interest rate stabilization law (the Moving Ahead for Progress in the 21st Century [MAP-21]), will result in higher plan sponsor contributions during the 2013 fiscal year.

Perhaps the most widely known companies to implement de-risking strategies during 2012 were General Motors, Ford, and Verizon Communications. These companies invoked various measures (lump-sum offers and annuity purchases for former vested participants and retirees) to reduce the size of their pension plan obligations, settling a combined total of nearly $41 billion. Measuring the settlement activities of all 100 companies in our study, we observed a $45 billion reduction in plan obligations. In spite of this large reduction, the Milliman 100 companies still ended up with record highs in pension obligations for fiscal years ending in 2012: a total of $1.71 trillion. The primary factor for the record-high obligations was the continued decline in discount rates.

This marks the first time in the 13-year history of the Milliman Pension Funding Study where General Motors is no longer the largest U.S. corporate pension plan as measured by plan assets. The new leader is IBM. General Motors spent more than $30 billion of plan assets in de-risking activities, resulting in this change at the top. Despite its drop to number two in our pension study, General Motors still had the largest pension liability, $111 billion, at the end of 2012. As General Motors funds its pension plan deficit, it may regain the top spot in our study.

Impact of declining discount rates evident in 2012 financial statements of the Milliman 100 companies

As expected, declining discount rates in 2012—including a historic year-end low of 4.02%—drove the pension plans of the Milliman 100 companies to a record year-end 2012 funding deficit of $388.8 billion, a $61.1 billion increase over the year-end 2011 funding deficit of $327.7 billion. It is the largest deficit in the 13-year history of our study.

Pension expense—the charge to company earnings—also registered a record level of $55.8 billion during fiscal year 2012, a $17.3 billion increase over fiscal year 2011, which at that time was the highest on record. Somewhat of a surprise were the aggregate 2012 cash contributions of the Milliman 100 companies, which were only $61.5 billion. Although a new record high, we had expected a larger increase over the $55.2 billion contributed in 2011. Actual increases in contributions were more modest than our expectation, in part due to enactment of MAP-21 and plan sponsors availing themselves of the law's contribution relief. With the historic low discount rates, we expect new highs in 2013 contributions and pension expense.

AT&T and Ford have already announced that they expect to make significant contributions in 2013 ($9.5 and $5.0 billion, respectively).

Favorable 2012 investment experience and $61.5 billion in contributions not enough to offset liability increases

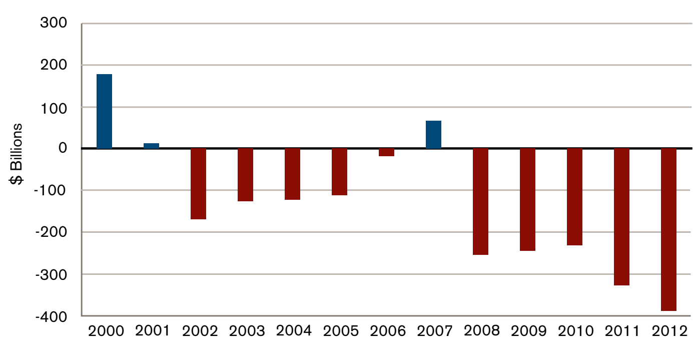
The 8.5% increase in pension obligations generated by the decrease in discount rates used to measure pension plan obligations (at a median rate of 4.02% at year-end 2012, down 76 basis points from 4.78% at year-end 2011), offset the cash contributions and a strong 11.7% investment return (actual weighted average return on assets during 2012). The Milliman 100 companies had set an expectation that 2012 investment returns would be, on average, 7.5%.

The deterioration in funded ratio continued the trend from 2010. The funded ratio dropped to 77.2% at year-end 2012, down from 79.2% at year-end 2011 and 83.9% at year-end 2010. The last funded ratio surplus was seen at year-end 2007 and measured 105.3%.

2012 pension expense also a record high

The continual decline in discount rates during 2012 led to record levels of pension expense: a $55.8 billion charge to earnings ($17.3 billion greater than in 2011), reaching the highest level in the 13-year history of our study. Defying all the sobering statistics, nine companies still recorded 2012 pension income (i.e., a credit to earnings), down from 10 in 2011.

PENSION FUNDING SURPLUS / (DEFICIT)



The discount rate for 2013 pension expense is based on the year-end 2012 Securities and Exchange Commission (SEC) disclosures. Given the record-low discount rates, we estimate that 2013 pension expense will increase to $63.4 billion, a $7.6 billion increase over 2012, resulting in another record-high charge to corporate earnings.

2013 contributions already reported

While the $61.5 billion in contributions during 2012 was significantly greater than most prior years, the contribution total was only $6.3 billion higher than the level of $55.2 billion in 2011, despite the significant decrease in discount rates. The lower-than-expected contributions were likely due to plan sponsors electing to change their contribution strategy to take advantage of the MAP-21 interest rate stabilization legislation. Because MAP-21 is a provision of pension tax law, it did not change the basis for the selection of the discount rates used to measure pension accounting obligations and pension expense under U.S. GAAP accounting standards. We expect future contribution levels to increase as the contribution funding relief provided under MAP-21 phases out. In addition to AT&T ($9.5 billion) and Ford ($5.0 billion), four other companies (Boeing, Chevron, Exxon-Mobil, and Lockheed-Martin) have indicated that they expect to make contributions during 2013 of at least $1 billion.

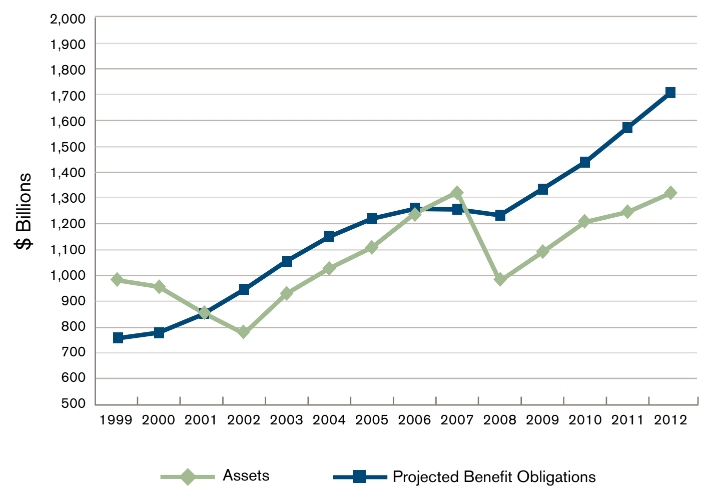
Asset allocations remained relatively stable during 2012

Overall investment allocations remained stable during 2012 as the trend toward liability-driven investment (LDI) strategies slowed. The percentage of pension plan assets invested in equities decreased from approximately 38.2% to 38.0%, fixed-income allocations decreased from 41.3% to 41.2%, and the allocation to other investments increased from 20.5% to 20.8% during 2012. Only five companies had decreases in their equity allocations that exceeded 10%.

Funded ratios decline

The funded ratio of the Milliman 100 pension plans decreased during 2012 to 77.2% from 79.2% at the end of 2011. The aggregate pension deficit increased by $61.1 billion during these companies' 2012 fiscal years, to $388.8 billion from an aggregate deficit of $327.7 billion at the end of 2011.

PLAN ASSETS AND OBLIGATIONS

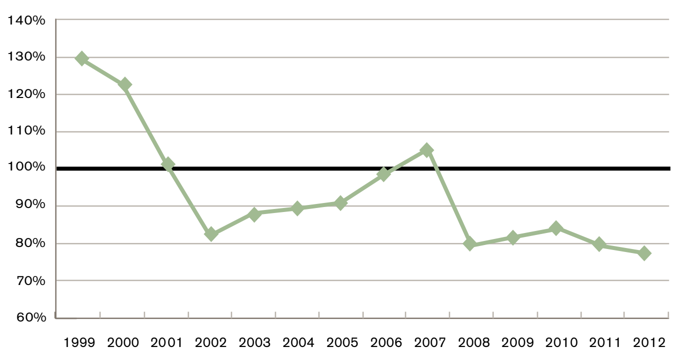


For fiscal year 2012, funded ratios ranged from a low of 38% for Delta Airlines to a high of 143% for Nextera Energy (formerly FPL Group). The average funded ratio decreased to 77.2% from the prior year's 79.2%.

Retiree health insurance and life insurance benefits are commonly referred to as other postemployment benefit (OPEB) plans. The Milliman 100 companies' balance sheets absorbed an additional loss of $1.4 billion when the pension obligations were combined with OPEB obligations. The resulting year-end 2012 balance sheet liability increase was $62.5 billion.

The plan sponsors of the Milliman 100 companies have realized investment returns above expectations during three out of the last four years, yet total asset levels have still not caught up to their peak value of $1.32 trillion at the end of 2007, prior to the collapse of the worldwide financial markets. While assets are still $4 billion lower than they were five years ago, pension obligations have increased by $451 billion, which is primarily due to the interest rate declines over the past four years. Pension funding went from a surplus of $66.6 billion at the end of 2007 to a record deficit of $388.8 billion at the end of 2012.

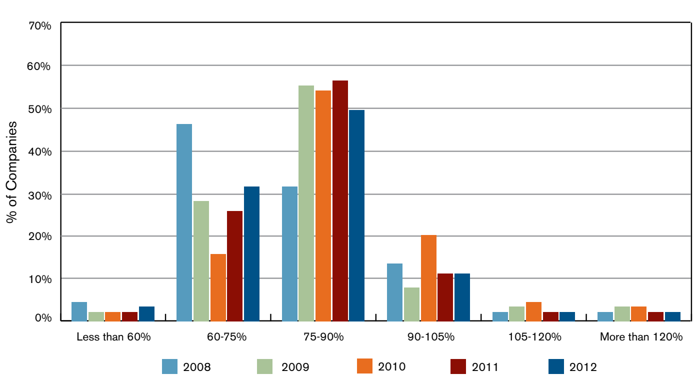
FUNDED RATIO - ASSETS / PROJECTED BENEFIT OBLIGATION



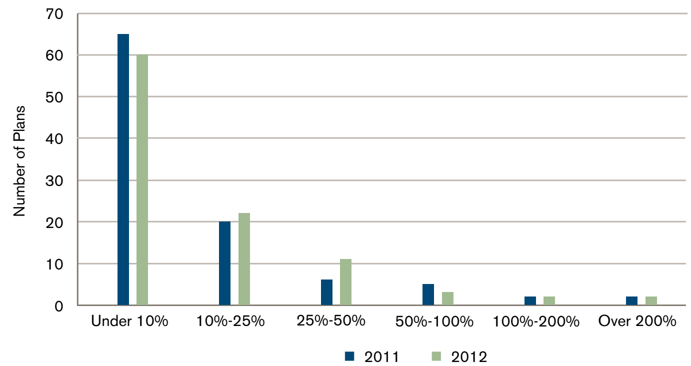
Six of the 89 companies with calendar-year fiscal years reported a surplus funded status at year-end 2012, compared with eight companies at year-end 2011 and 2010. These numbers pale in comparison to the 50 companies with reported surplus funded status at year-end 2007. In spite of the increases in liability that are due to the lower discount rates, 38 of the Milliman 100 companies reported an increase in funded ratio for 2012, compared with 14 for 2011.

DISTRIBUTION BY FUNDED STATUS - 2008 - 2012

Calendar year fiscal years only



PENSION FUNDING DEFICIT AS A PERCENTAGE OF MARKET CAPITALIZATION



Pension deficit increases as a percentage of market capitalization

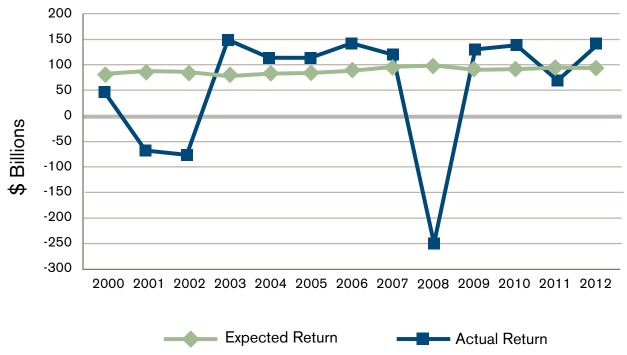
The favorable equity market performance during 2012 increased the total market capitalization for the Milliman 100 companies by 6.1%. However, the increase in pension obligations resulted in an increase in the unfunded pension liability as a percentage of market capitalization, from 6.5% at the end of 2011 to 7.2% at the end of 2012. Pension deficits represented less than 10% of market capitalization for 60 of the Milliman 100 companies. This is down from 65 companies with deficits of less than 10% of their market capitalization in 2011. The funding deficits represented a much more serious issue for the eight companies where the deficit exceeded 50% of market capitalization. This is down from nine companies that had deficits greater than 50% of their market capitalization in 2011.

Investment performance exceeds expectations

The weighted average actual investment return on pension assets for the Milliman 100 companies' 2012 fiscal years was 11.7%, which was above their average expected rate of return of 7.5%. Ninety of the Milliman 100 companies exceeded their expected returns in 2012, compared with 26 in 2011 and 99 in 2010. This was the third year out of the last four that actual returns exceeded expectations.

During 2012, investment performance increased the market value of assets by $141 billion, $48 billion more than the companies' expected return. For the five-year period ending in 2012, investment performance has averaged only 4.32% compounded annually. Three years of negative returns over the past 13 years (2001, 2002, and 2008) have resulted in an annualized investment return of only 5.63% over that period.

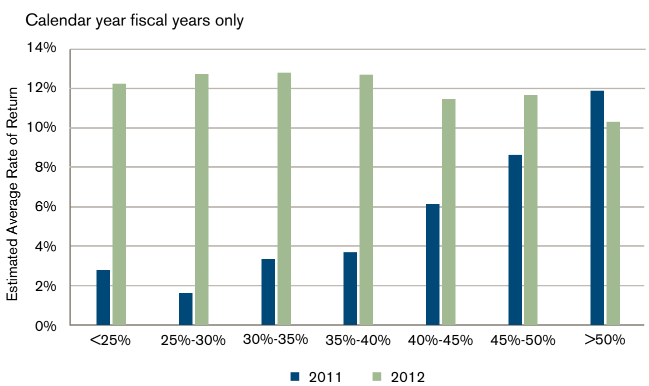
INVESTMENT RETURN ON PLAN ASSETS



Higher equity allocations resulted in better returns during 2012

Plans with higher allocations to equities had slightly better investment returns than those with higher allocations to fixed-income investments during 2012, reversing the experience in 2011 when higher fixed-income allocations resulted in significantly greater overall investment returns.

ESTIMATED AVERAGE RATE OF RETURN BY ALLOCATION TO FIXED INCOME



Pension expense and employer contributions at high levels

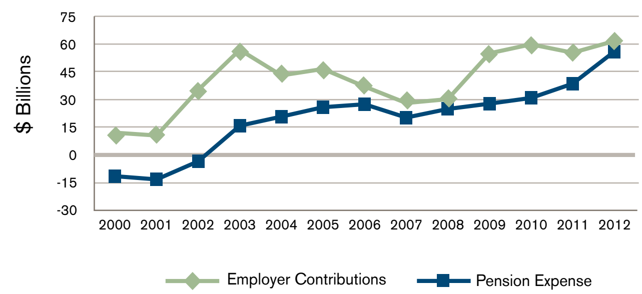
Pension expense increased by $17.3 billion during 2012, producing an aggregate pension expense of $55.8 billion. Both pension expense and employer contributions are expected to remain high during 2013.

Nine companies reported pension income during 2012, a decrease from the 10 that did so during 2011 and well below the high point of 62 companies in 2001.

Employer contributions increased to $61.5 billion for 2012, up from $55.2 billion in 2011. By comparison, contributions averaged $42.0 billion over the five prior years. The Milliman 100 companies have reported a lower level of expected contributions ($44 billion) for 2013. In spite of the preliminary contribution expectations for 2013, we believe that actual contribution levels for 2013 will exceed those for 2012, as the funding relief provided by MAP-21 begins to phase out.

The contribution levels during 2012 would have been higher were it not for the temporary funding relief that reduced the level of required contributions under MAP-21. Many plan sponsors elected to make higher contributions than the required amounts for 2012, a trend that we expect will continue into 2013.

PENSION EXPENSE (INCOME) AND CONTRIBUTIONS



Discount rates drop, boost pension obligations

Discount rates that are used to measure plan obligations continued to decrease during 2012, as they had for the fourth consecutive year. The lower discount rates increased pension obligations, offsetting the strong asset returns in 2012.

The median discount rate decreased to 4.02% at the end of 2012, from 4.78% in 2011 and 5.44% in 2010, continuing the decline from 7.63% at the end of 1999. Discount rates were 233 basis points higher at the end of 2008. The drop in rates over the past three years greatly accelerated the erosion in funded status.

Asset allocations virtually unchanged in 2012

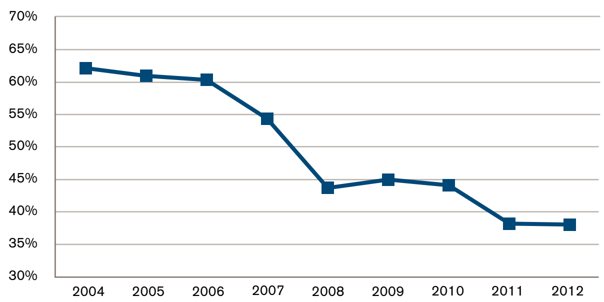
Companies continued to lower their expected rates of return on plan assets, to an average of 7.5% for 2012, as compared with 7.8% for 2011, 8.0% for 2010, and 8.1% for 2009. This represents a significant drop from the average expected rate of return of 9.4% back in 2000.

Only three Milliman 100 companies utilized an expected rate of return for 2012 of at least 9%. Three companies also assumed an expected rate of return of at least 9% in 2011 and 2010, but this was down from five in 2009 and a high of 81 in 2000.

Overall, the Milliman 100 companies' investment allocations remained the same during 2012. The percentage of pension fund assets allocated to equities, fixed income, and other investments was 38%, 41%, and 21%, respectively, at the end of 2012 and 2011. The allocation to equities was down from 54% at the end of 2007 and the allocation to fixed-income instruments was up from 34% at the end of 2007. The percentage of investments in other asset classes was also up from the 12% allocation at the end of 2007. Other asset classes include real estate, private equity, hedge funds, commodities, and cash equivalents. More explicit details on how investments are allocated to the other category are generally not available in the companies' SEC filings.

The investment allocations at the end of 2011 were used to select the 7.50% assumed rate of return on investments for 2012. Because the investment allocations at the end of 2012 have remained unchanged, we expect the assumed rate of return on investments to remain at 7.50% or decline slightly for 2013.

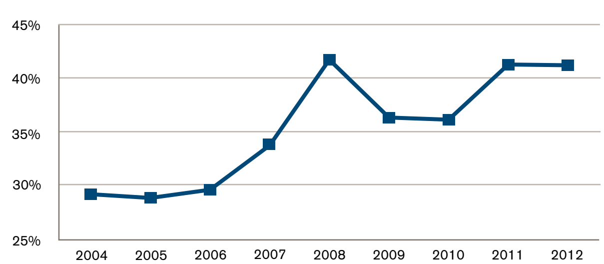
ASSET ALLOCATION - EQUITIES



Overall allocations to equities remained largely unchanged in 2012. Only five companies decreased their equity allocations by more than 10% in 2012, compared with 17 companies that had decreases of more than 10% in equity allocations in 2011. Only one of the 100 companies had increases to its equity allocation of more than 10% in 2012.

The fact that the overall investment allocations have remained unchanged during 2012 may be an indication that the trend to move toward LDI strategies has slowed. The companies that pursued LDI strategies by reducing their exposure to equities, increasing their allocation to fixed income, and lengthening the duration of fixed-income assets to more closely match their pension obligations appear to have attained their desired investment allocations, or have not reached the next trigger point along their glide path where they will de-risk further. In addition, the historic low interest rate environment makes it an inopportune time to start an LDI strategy, because this would lock in current funded status deficits for underfunded pension plans. This would lead to plan sponsors having to commit to making up the deficit through increased employer contributions.

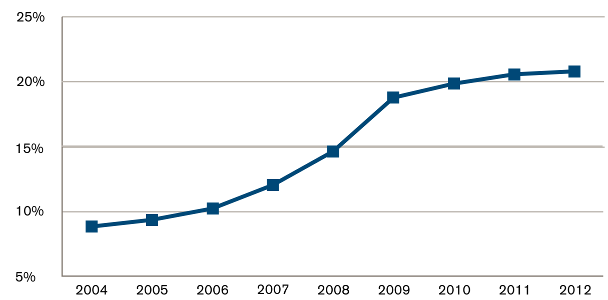
ASSET ALLOCATION - FIXED INCOME



Overall allocations to fixed income also remained largely unchanged in 2012. No company had a decrease of more than 10% in its fixed-income allocation. Three companies, however, increased their fixed-income allocations by more than 10% in 2012, compared with 11 companies that had increases in fixed-income allocations of more than 10% in 2011.

Overall allocations to other asset classes also remained unchanged in 2012. Twelve companies increased their allocations by 5% or more to other asset classes.

ASSET ALLOCATION - OTHER



What to expect in 2013 and beyond

Because the Federal Reserve has announced that it plans to keep interest rates low through 2014 (and perhaps longer, until the overall unemployment rate reaches 6.5%), there is little expectation that rising discount rates will contribute to improvements in the funded status of the Milliman 100 pension plans. Pension expense in 2013 is expected to approach $64 billion, and 2013 contributions should rise to a new record level in excess of $65 billion. Investment gains in 2013 could also contribute to improvements in funded status; 2013 is off to a great start with major equity indices exceeding or approaching their record highs.

Plan sponsors are continuing to focus on ways to de-risk their investment portfolios and hedge against interest rate risk. We expect asset allocation changes to level off, as return expectations have come down gradually over the last several years. While interest in liability-driven investing may have declined, further implementation of equity hedging and capital protection strategies may still be employed during 2013, given the present low interest rate environment. While we observed at least 15 employers engage in significant de-risking activities during 2012, we expect to see more plan sponsors adopt similar strategies during 2013. We do not expect to see any major moves toward annuity purchases or terminations of frozen plans until interest rates rise and funding levels improve. Other plan sponsors may find maintaining their plans and employing risk management strategies more economical than incurring the cost of a plan termination.

HISTORICAL VALUES

FUNDED STATUS

Fiscal Year	Market Value of Plan Assets	Change From Prior Year	Projected Benefit Obligation	Change From Prior Year	Funded Ratio	Change From Prior Year	Funded Status	Change From Prior Year
2012	$1,318,501	$72,866	$1,707,345	$134,034	77.2%	-1.9%	($388,844)	($61,168)
2011	$1,245,635	$38,773	$1,573,311	$134,490	79.2%	-4.7%	($327,676)	($95,717)
2010	$1,206,862	$116,466	$1,438,821	$103,728	83.9%	2.2%	($231,959)	$12,738
2009	$1,090,396	$112,091	$1,335,093	$101,740	81.7%	2.4%	($244,697)	$10,350
2008	$978,305	($344,203)	$1,233,353	($22,510)	79.3%	-26.0%	($255,047)	($321,693)
2007	$1,322,508	$83,436	$1,255,863	($2,089)	105.3%	6.8%	$66,646	$85,524
2006	$1,239,073	$130,700	$1,257,951	$38,022	98.5%	7.6%	($18,878)	$92,679
2005	$1,108,372	$81,050	$1,219,929	$69,658	90.9%	1.5%	($111,557)	$11,392
2004	$1,027,322	$97,592	$1,150,271	$94,275	89.3%	1.3%	($122,949)	$3,317
2003	$929,730	$155,151	$1,055,996	$111,213	88.0%	6.1%	($126,266)	$43,937
2002	$774,579	($84,341)	$944,782	$98,061	82.0%	-19.5%	($170,203)	($182,402)
2001	$858,920	($97,328)	$846,721	$68,284	101.4%	-21.4%	$12,198	($165,612)
2000	$956,247	n/a	$778,438	n/a	122.8%	n/a	$177,810	n/a

RETURN ON ASSETS

		Actual Rate of Return (Estimated)				
Fiscal Year	Expected Rate of Return	All Plans	Calendar Fiscal Years	Expected Return	Actual Return (All Plans)	Difference
2012	7.5%	11.7%	11.9%	$92,968	$141,233	($48,265)
2011	7.8%	5.9%	5.4%	$94,049	$68,764	$25,285
2010	8.0%	12.8%	12.5%	$91,016	$137,736	($46,720)
2009	8.1%	14.0%	16.6%	$89,657	$129,539	($39,882)
2008	8.1%	-18.8%	-21.8%	$98,220	($249,563)	$347,783
2007	8.2%	9.8%	8.8%	$95,430	$119,383	($23,953)
2006	8.3%	12.9%	12.2%	$87,809	$141,593	($53,784)
2005	8.3%	11.2%	10.5%	$83,531	$113,149	($29,618)
2004	8.4%	12.3%	11.5%	$82,185	$113,264	($31,080)
2003	8.5%	19.3%	19.0%	$77,294	$148,386	($71,093)
2002	9.1%	-8.6%	-8.4%	n/a	n/a	n/a
2001	9.3%	-6.5%	-6.3%	n/a	n/a	n/a
2000	9.4%	4.5%	3.5%	n/a	n/a	n/a

PENSION COST

Fiscal Year	Pension Income/(Cost)	Change From Prior Year	Employer Contribution	Change From Prior Year	Discount Rate
2012	($55,807)	$17,308	$61,515	($6,273)	4.02%
2011	($38,499)	$7,706	$55,241	$4,509	4.78%
2010	($30,793)	$3,083	$59,751	($4,850)	5.44%
2009	($27,710)	$2,869	$54,901	($24,754)	5.82%
2008	($24,841)	$4,643	$30,147	($2,090)	6.35%
2007	($20,198)	($7,184)	$28,056	$8,893	6.20%
2006	($27,382)	$1,582	$36,950	$9,505	5.75%
2005	($25,800)	$5,092	$46,455	($3,465)	5.50%
2004	($20,708)	$4,914	$42,990	$13,823	5.75%
2003	($15,795)	$19,237	$56,812	($21,693)	6.05%
2002	$3,443	$9,780	$35,119	($24,623)	n/a
2001	$13,222	($1,751)	$10,496	$1,536	n/a
2000	$11,471	n/a	$12,031	n/a	n/a

ASSET ALLOCATIONS

	2012	2011	2010	2009	2008	2007	2006	2005
Equity Allocation	38.04%	38.18%	44.08%	44.96%	43.67%	54.31%	60.29%	60.91%
Change From Prior Year	-0.36%	-13.38%	-1.95%	2.96%	-19.60%	-9.91%	-1.02%	n/a
Fixed Allocation	41.21%	41.28%	36.10%	36.30%	41.73%	33.69%	29.52%	28.75%
Change From Prior Year	-0.17%	14.35%	-0.57%	-13.01%	23.87%	14.12%	2.68%	n/a
Other Allocation	20.77%	20.54%	19.82%	18.74%	14.60%	12.00%	10.19%	9.32%
Change From Prior Year	1.11%	3.64%	5.79%	28.32%	21.69%	17.76%	9.29%	n/a

- All dollar amounts in millions.
- Note: Numbers may not add up correctly due to rounding.

Who are the Milliman 100 companies?

The Milliman 100 companies are the 100 U.S. public companies with the largest defined benefit pension plan assets for which a 2012 annual report was released by March 7, 2013.

This 2013 report is Milliman's 13th annual study. The total value of the pension plan assets of the Milliman 100 companies was more than $1.3 trillion at the end of 2012.

About the study

The results of the Milliman 2013 Pension Funding Study are based on the pension plan accounting information disclosed in the footnotes to the companies' Form 10-K annual reports for the 2012 fiscal year and for previous fiscal years. These figures represent the GAAP accounting information that public companies are required to report under Financial Accounting Standards Board Accounting Standards Codification Subtopics 715-20, 715-30, and 715-60. In addition to providing the financial information on the funded status of their U.S. qualified pension plans, the footnotes may also include figures for the companies' nonqualified and foreign plans, both of which are often unfunded or subject to different funding standards from those for U.S. qualified pension plans. The information, data, and footnotes do not represent the funded status of the companies' U.S. qualified pension plans under ERISA.

Eleven of the companies in the 2013 Milliman Pension Funding Study had fiscal years other than the calendar year. The 2013 study includes four new companies to reflect mergers, acquisitions, and other corporate transactions during 2012. Privately held companies, mutual insurance companies, and U.S. subsidiaries of foreign parents were excluded from the study.

The results of the 2013 study will be used to update the Milliman 100 Pension Funding Index as of December 31, 2012, the basis of which will be used for projections in 2013 and beyond. The Milliman 100 Pension Funding Index is published on a monthly basis and reflects the effect of market returns and interest rate changes on pension funded status.

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