

In a year of historic improvement in pension funded status, plans with the highest equity exposure were the biggest benefactors in 2013

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Interest rates rebounded, lowering plan liabilities, and investment performance exceeded expectations, raising plan asset values and making 2013 a “win-win” year.

A 7.5% decrease in plan liabilities from higher discount rates and a 9.9% average return on plan assets combined to produce a historic \$198.3 billion improvement in the funded status deficit from year-end 2012. In this unprecedented “win-win” year, the plans with the highest allocations to equity investments performed the best. Although cash contributions in 2013 were \$30 billion less than expected, the overall funded ratio still soared to 87.9% (92.3% for plans with calendar-year fiscal years).

The companies comprising the Milliman Pension Funding Study (PFS) have generally shifted toward higher allocations in fixed-income investments in recent years. This trend surfaced as plan sponsors consciously made moves to de-risk their pension plans. However, not all plan sponsors aggressively adopted liability-driven investing (LDI) strategies. Some continued to maintain a more traditional equity-heavy asset mix, perhaps waiting for a more opportune time to de-risk their plans. In 2013, as equity investments surged and interest rates moved higher, plan sponsors with significant allocations to equities experienced greater improvement in pension funded status than those who had reduced their equity exposure. The cumulative PFS data suggests that plan sponsors that adopted an LDI strategy after 2009 have not seen as much improvement in funded status as those plans that stuck with a more traditional asset allocation.

The overall funded status improvement in 2013 was not as large as projected by the Milliman 100 Pension Funding Index (PFI), which was based on last year’s study. The PFI projected a year-end 2013 funded ratio of 95.2% while the actual year-end 2013 funded ratio settled at 87.9% (92.3% for plans with calendar-year fiscal years) after all of the annual report data was collected and analyzed. Cash contributions that were \$30 billion less than we had forecasted were the key reason for the 7.3% lower funded status. The lower contributions are most likely due to the pension stabilization provisions of the July 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21) legislation. Many plan sponsors adhered to the lower required contributions under MAP-21. Nevertheless, 2013 still captured the largest funding status

HIGHLIGHTS (FIGURES IN \$ BILLION)

	FISCAL YEAR ENDING		CHANGE
	2012	2013	
MARKET VALUE OF ASSETS	\$1,330.0	\$1,398.6	\$68.6
PROJECTED BENEFIT OBLIGATION	\$1,721.5	\$1,591.7	(\$129.8)
FUNDED STATUS	\$391.5	\$193.2	(\$198.3)
FUNDED PERCENTAGE	77.3%	87.9%	10.6%
NET PENSION INCOME/(COST)	(\$55.8)	(\$32.1)	\$23.7
EMPLOYER CONTRIBUTIONS	\$62.2	\$44.1	(\$18.1)
DISCOUNT RATE	4.04%	4.75%	0.71%
ACTUAL RATE OF RETURN	11.7%	9.9%	-1.8%

NOTE: NUMBERS MAY NOT ADD UP PRECISELY DUE TO ROUNDING

improvement in the 14-year history of the PFS. We note that the 89 plans with calendar-year fiscal years reported a year-end funded ratio of 92.3%, which is more in line with the projections from the Milliman 100 PFI. The 11 plans with the off-calendar fiscal year-ends did not get to recognize the full extent of the discount rate increases during 2013.

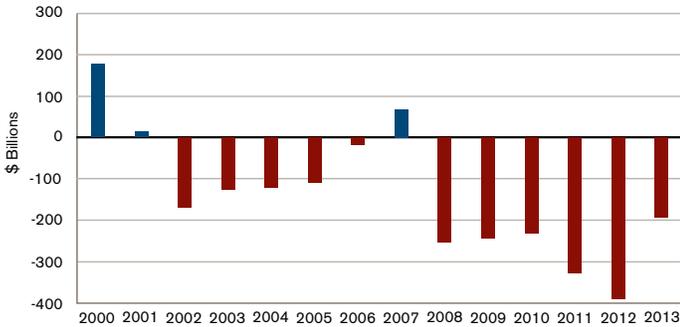
Impact of increasing discount rates evident in 2013 financial statements of the Milliman 100 companies

Discount rates used to measure plan obligations, determined by reference to AA-rated corporate bonds, increased during 2013, reducing liabilities and reversing the trend from the prior four years. The median discount rate increased to 4.75% at the end of 2013, from 4.04% in 2012. Discount rates had been declining from 7.63% at the end of 1999. Discount rates were 160 basis points higher at the end of 2008. The increase in the discount rates during 2013 partially reversed the erosion in funded status that was caused by the drop in rates over the prior four years.

As expected, increasing discount rates in 2013, when combined with strong investment returns, improved the funded status of the pension plans of the Milliman 100 companies to a year-end 2013 funding deficit of \$193.2 billion, a \$198.3 billion improvement over the year-end 2012 funding deficit of \$391.5 billion. It is the smallest deficit in the six years since the financial crisis began in 2008. This increase in funded status follows just one year after the funding deficit reached its largest level in the 14-year history of the Milliman PFS study.

Pension expense—the charge to company earnings—also decreased to \$32.1 billion in 2013 after a record level of \$55.8 billion during fiscal year 2012, a \$23.7 billion decrease. The aggregate 2013 cash contributions of the Milliman 100 companies were only \$44.1 billion, which was a decrease of \$18.1 billion from the record high level of \$62.2 billion contributed in 2012.

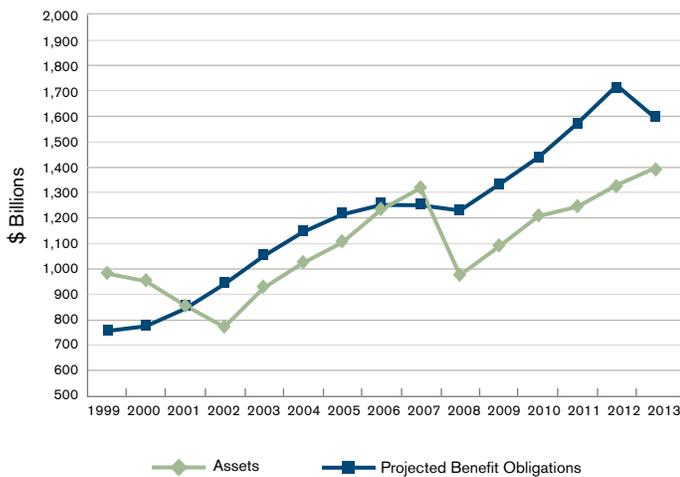
PENSION FUNDING SURPLUS / (DEFICIT)



The combined effect of better-than-expected 2013 investment experience and lower plan liabilities improves pension funding

The 7.5% decrease in pension obligations generated by the increase in discount rates used to measure pension plan obligations (at a median rate of 4.75% at year-end 2013, up 71 basis points from 4.04% at year-end 2012) resulted in a liability decrease of \$129.8 billion. A strong 9.9% investment return (actual weighted average return on assets during 2013) resulted in an increase of \$68.5 billion in the market value of plan assets. The Milliman 100 companies had set an expectation that 2013 investment returns would be, on average, 7.4%.

PLAN ASSETS AND OBLIGATIONS

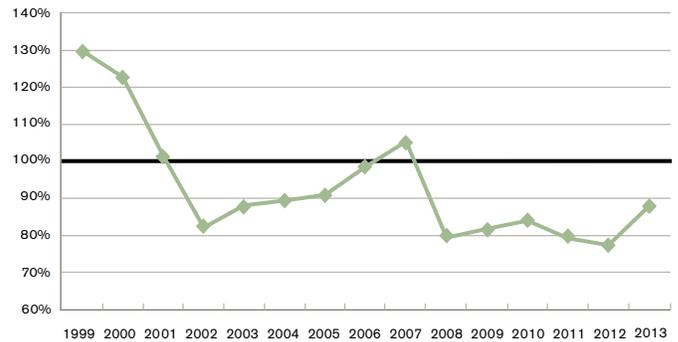


Funded ratios improve

The funded ratio of the Milliman 100 pension plans increased during 2013 to 87.9% from 77.3% at the end of 2012 (92.3% for plans with calendar-year fiscal years in 2013, up from 79.9% for 2012). The aggregate pension deficit was cut in half by \$198.3 billion during these companies' 2013 fiscal years, to \$193.2 billion from an aggregate deficit of \$391.5 billion at the end of 2012. For fiscal year 2013, funded ratios ranged from a low of 47% for Delta Airlines to a high of 164% for Nextera Energy (formerly FPL group).

The improvement in funded ratio reversed the trend from 2010. The funded ratio was 77.3% at year-end 2012 and 79.1% at year-end 2011. The funded ratio increase during 2013 was the largest percentage gain ever experienced in the 14-year history of the Milliman PFS. The last funded ratio surplus was seen at year-end 2007 and measured 105.4%.

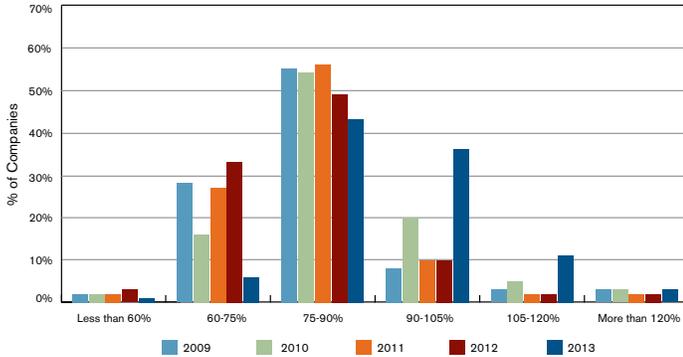
FUNDED RATIO - ASSETS / PROJECTED BENEFIT OBLIGATION



Eighteen of the 89 companies with calendar-year fiscal years reported surplus funded status at year-end 2013, compared with six companies at year-end 2012 and seven at year-end 2011. These numbers pale in comparison to the 52 companies with reported surplus funded status at year-end 2007. Due to the combined impact of favorable investment returns and the decrease caused by higher discount rates, 99 of the Milliman 100 companies reported an increase in funded ratio for 2013, compared with 41 for 2012. The only company with a decline in funding ratio had a February 2 fiscal year-end and has not yet reflected the favorable performance during 2013.

DISTRIBUTION BY FUNDED STATUS - 2009–2013

Calendar year fiscal years only

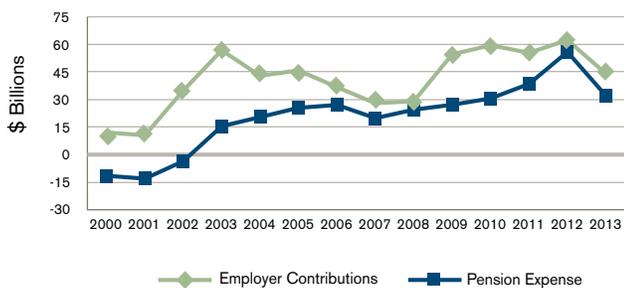


2013 pension expense also decreases

Favorable investment returns in 2012 offset the impact of declining discount rates in that year, leading to a reduced level of pension expense: a \$32.1 billion charge to earnings (\$23.7 billion lower than in 2012, which reached the highest level in the 14-year history of our study). Nineteen companies recorded 2013 pension income (i.e., a credit to earnings), up from 11 in 2012.

The discount rate for 2014 pension expense is based on the year-end 2013 Securities and Exchange Commission (SEC) disclosures. Given the compound effect of favorable investment returns in 2013 and higher discount rates at year-end, we estimate that 2014 pension expense will decrease to \$19 billion, a \$13 billion decrease compared with 2013. This would be the lowest level of pension expense in over 10 years. We may see more than 30 of the Milliman 100 companies with pension income in 2014, a level not seen since 2002.

PENSION EXPENSE (INCOME) AND CONTRIBUTIONS



Contributions decline significantly during 2013

The \$44.1 billion in contributions during 2013 (down \$18.1 billion from \$62.2 billion in 2012) was the lowest level in five years. The lower-than-expected contributions were likely due to plan sponsors changing their contribution strategy in light of the MAP-21 interest rate stabilization legislation, passed in July of 2012. Seven companies decreased their contribution by more than \$1 billion in

2013 compared with 2012, for a total of \$13.3 billion, as seen in the table below.

TOP EIGHT CHANGES IN CONTRIBUTION (\$ MILLIONS)

Company Name	Increase (Decrease) in Contribution
Verizon Communications Inc.	(\$3,612)
General Motors	(\$2,261)
Exxon Mobil	(\$2,144)
Ford	\$1,624
PepsiCo	(\$1,414)
Lockheed Martin	(\$1,387)
Johnson & Johnson	(\$1,273)
Merck	(\$1,208)

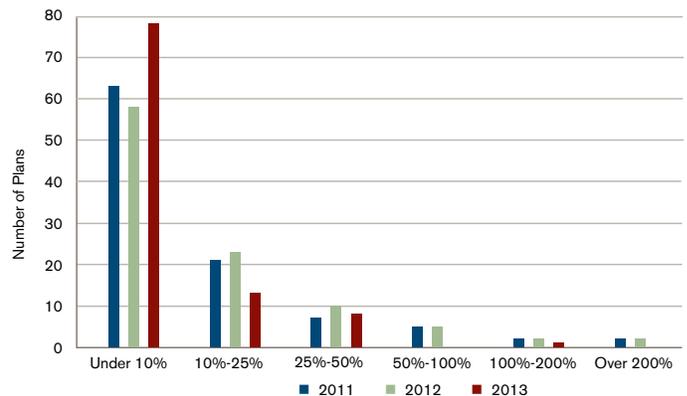
We expect that plan sponsors may continue to contribute at these lower levels for 2014 in light of improvements to funded status in this past year. However, we also expect that some plan sponsors undertaking de-risking activities (e.g., lump-sum payouts, annuity purchases, etc.) may have to increase contributions to maintain funded status. For example, Ford increased its 2013 contribution by more than \$1.6 billion, most likely to help fund its de-risking activities in 2012.

Exxon-Mobil (\$2.2 billion) and Ford (\$1.9 billion) have already disclosed their expected cash contributions, while Lockheed-Martin, General Electric, Verizon, Proctor & Gamble, and Goodyear have indicated that they expect to make contributions of at least \$1 billion during 2014.

Pension deficit decreases as a percentage of market capitalization

The favorable equity market performance during 2013 increased the total market capitalization for the Milliman 100 companies by 21.2%. When combined with the decrease in pension obligations, this resulted in a decrease in the unfunded pension liability as a percentage of market capitalization, from 7.3% at the end of 2012 to 3.0% at the end of 2013. Pension deficits represented less than 10% of market capitalization for 78 of the Milliman 100 companies (up from 58 companies in 2012). There is only one company whose deficit exceeded 50% of market capitalization, down from nine companies that had deficits greater than 50% of their market capitalization in 2012.

PENSION FUNDING DEFICIT AS A PERCENTAGE OF MARKET CAPITALIZATION - 2011–2013



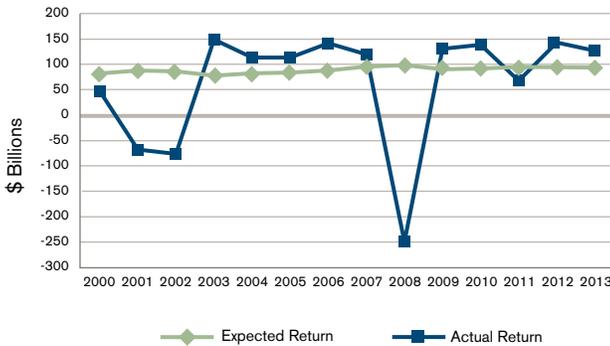
Investment performance exceeds expectations

The weighted average actual investment return on pension assets for the Milliman 100 companies' 2013 fiscal years was 9.9%, which was above their average expected rate of return of 7.4%. Seventy-four of the Milliman 100 companies exceeded their expected returns in 2013, compared with 90 in 2012 and 99 in 2010.

The plan sponsors of the Milliman 100 companies have realized investment gains above expectation during four out of the last five years, and total asset levels have now reached a record high of \$1.399 trillion. This is \$81 billion above the value of \$1.318 trillion at the end of 2007, prior to the collapse of the worldwide financial markets.

During 2013, investment performance increased the market value of assets by \$126 billion, \$33 billion more than the companies' expected returns. For the five-year period ending in 2013, investment performance has averaged 10.83% compounded annually. Three years of negative returns over the past 14 years (2001, 2002, and 2008) have contributed to an annualized investment return of only 5.92% over that period.

INVESTMENT RETURN ON PLAN ASSETS



Expected returns

Companies continued to lower their expected rates of return on plan assets to an average of 7.4% for 2013, as compared with 7.5% for 2012, 7.8% for 2011, and 8.0% for 2010. This represents a significant drop from the average expected rate of return of 9.4% back in 2000.

Only one of the Milliman 100 companies utilized an expected rate of return for 2013 of at least 9%. Three companies also assumed an expected rate of return of at least 9% in 2012, 2011, and 2010, but this was down from five in 2009 and a high of 83 in 2000.

Because the investment allocations at the end of 2013 have only incurred a modest change, we expect the assumed rate of return on investments to remain at 7.40% for 2014.

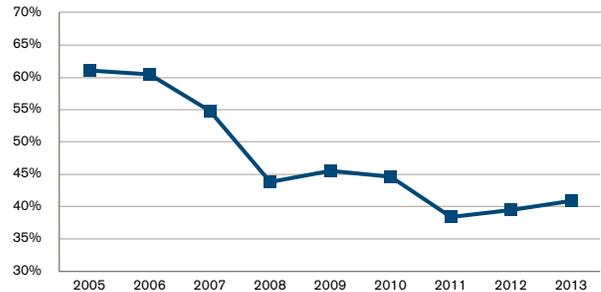
Asset allocations remained relatively stable during 2013

Investment allocations remained stable during 2013 as the trend toward implementing LDI strategies continued, but at a slower pace. The percentage of pension fund assets allocated to equities, fixed income, and other investments was 40.9%, 39.6%, and 19.5%, respectively, at the end of 2013, compared with 39.4%, 40.4%, and 20.1%, respectively, at the end of 2012.

Overall allocations to equities remained largely unchanged in 2013. With the very strong 2013 returns across most equity markets and losses in many fixed-income sectors, it is evident that many plans rebalanced during the year by moving money from equities, and possibly other asset classes, to fixed income. Four of the 100 companies had increases to their equity allocation of more than 10% in 2013. Only five companies decreased their equity allocations by more than 10% in 2013, compared with five companies that had decreases of more than 10% in equity allocations in 2012, and 15 companies that had decreases of more than 10% in 2011.

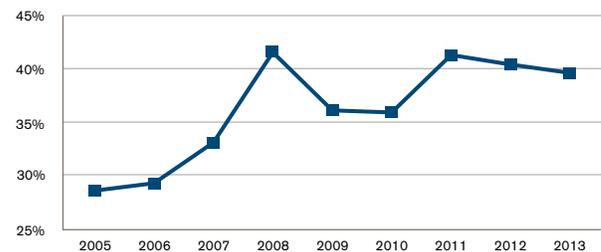
The allocation to equities was down from 55% at the end of 2007 and the allocation to fixed-income instruments was up from 33% at the end of 2007. The percentage of investments in other asset classes was also up from the 12% allocation at the end of 2007.

ASSET ALLOCATION - EQUITIES



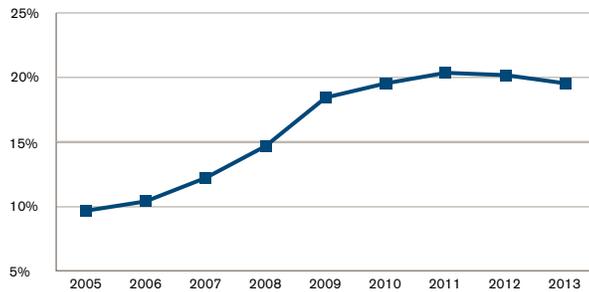
Overall allocations to fixed income also remained largely unchanged in 2013. No company had a decrease of more than 10% in its fixed-income allocation. Four companies, however, increased their fixed-income allocations by more than 10% in 2013, compared with three in 2012 and nine in 2011.

ASSET ALLOCATION - FIXED INCOME



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 categories are generally not available in the companies' SEC filings. Overall allocations to other asset classes also remained unchanged in 2013. Seven companies increased their allocations by 5% or more to other asset classes.

ASSET ALLOCATION - OTHER



Impact of LDI

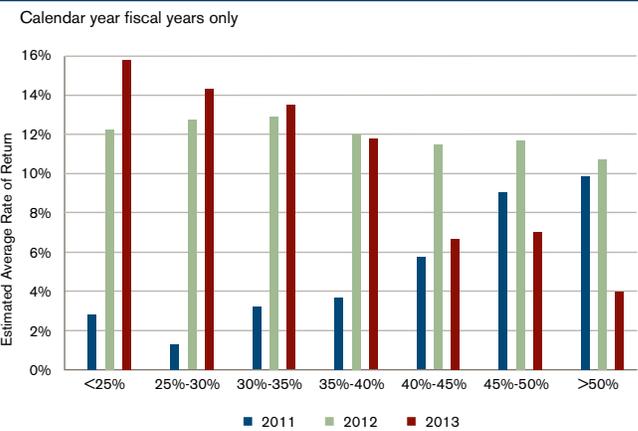
Among the Milliman 100 companies, 22 pension plans had fixed-income allocations greater than 40% at the end of 2009. Over the four years since then, these 22 plans experienced significantly lower funded ratio volatility than the other 78 plans (a median funded ratio volatility of 3.8% versus 6.4% for the other 78 plans). Moreover, they earned higher average annualized returns over the three years from 2010 through 2012 (10.6% versus 9.6%). Until 2013, reducing the asset-liability mismatch risk by reducing the exposure to equities and other assets and increasing the allocation to fixed income (most likely increasing the duration of fixed income as well) paid off in terms of reduced funded status volatility and higher returns.

AVERAGE FIXED-INCOME ALLOCATION 50% OR HIGHER

Year	Fixed-Income Allocation 50% or Higher		All Others	
	Number of Companies	Average Investment Return	Number of Companies	Average Investment Return
2013	19	4.7%	81	12.1%
2012	20	10.0%	80	12.0%
2011	14	9.3%	86	4.5%
2010	10	12.8%	90	13.0%

But in 2013, the markets turned this trend on its head. Equity markets soared and fixed income, especially long duration, saw significant losses. Those plans that retained the asset-liability mismatch risk were rewarded with giant gains to their funded status. Among the Milliman 100 companies, 81 pension plans had fixed-income allocations of less than 50% at the end of 2012. These plans had an average improvement in funded ratio of 13.1% during 2013 compared with just 6.3% for the 19 plans with fixed-income allocation in excess of 50%.

**ESTIMATED AVERAGE RATE OF RETURN
BY ALLOCATION TO FIXED INCOME - 2011-2013**



What to expect in 2014 and beyond

Given the funded status gains in 2013, we don't expect 2014 contribution increases over those made in 2013. For plans that were already in a surplus position at the end of 2013, plan sponsors may have even less incentive to further fund their plans at all in 2014. However, for some plans that had already engaged in LDI or other funded status lock-in strategies, higher contribution levels can be expected. It is likely that these plans haven't reached full funded status and will need to close their shortfalls with cash. In addition, the final Pension Benefit Guaranty Corporation (PBGC) premium increases that have been recently announced and the anticipated changes to statutory mortality assumptions to more conservative bases may serve as further incentive for plan sponsors to fund up their plans.

The increased discount rates at the end of 2013 combined with the investment gains will lead to significant 2014 pension expense reductions. This does not reflect any possible plan de-risking activity in the way of settlements and curtailments, which could in turn increase pension expense. Many de-risking activities (e.g., paying lump sums, purchasing annuities, etc.) come at a high short-term cost. However, 2014 may be an opportune time to pursue them, given the recent funded status gains.

Plan sponsors that have already de-risked their defined benefit plans or that have already achieved surplus funding levels at the end of 2013 may pursue funded status lock-in strategies. Among the highly desired consequences of this could be pension income on the P&L statements and minimal contribution funding requirements. This may be reminiscent of the situation in the 1990s when pension surpluses were common and pension funding was a rarity. For those plan sponsors that still need to close the funding gap by remaining committed to the equity markets, and thus not lock themselves into high funding requirements, it may be prudent for them to consider an equity tail-risk hedging strategy. These plans could be attracted to the idea of incorporating some downside protection while still being able to participate in future upward equity movements.

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
2013	\$1,398,561	\$68,514	\$1,591,747	(\$129,799)	87.9%	10.6%	(\$193,186)	\$198,312
2012	\$1,330,047	\$84,885	\$1,721,545	\$148,116	77.3%	-1.9%	(\$391,498)	(\$63,231)
2011	\$1,245,162	\$37,655	\$1,573,429	\$134,332	79.1%	-4.8%	(\$328,267)	(\$96,676)
2010	\$1,207,507	\$119,108	\$1,439,098	\$106,837	83.9%	2.2%	(\$231,591)	\$12,271
2009	\$1,088,399	\$113,093	\$1,332,261	\$102,360	81.7%	2.4%	(\$243,862)	\$10,733
2008	\$975,307	(\$342,976)	\$1,229,901	(\$20,682)	79.3%	-26.1%	(\$254,595)	(\$322,294)
2007	\$1,318,283	\$84,678	\$1,250,583	(\$1,196)	105.4%	6.9%	\$67,699	\$85,874
2006	\$1,233,604	\$129,963	\$1,251,780	\$37,822	98.5%	7.6%	(\$18,175)	\$92,141
2005	\$1,103,641	\$80,571	\$1,213,957	\$69,033	90.9%	1.6%	(\$110,316)	\$11,538
2004	\$1,023,070	\$97,719	\$1,144,925	\$94,129	89.4%	1.3%	(\$121,854)	\$3,590
2003	\$925,352	\$153,845	\$1,050,796	\$110,447	88.1%	6.0%	(\$125,444)	\$43,398
2002	\$771,507	(\$84,459)	\$940,349	\$97,104	82.0%	-19.5%	(\$168,841)	(\$181,562)
2001	\$855,966	(\$95,894)	\$843,245	\$68,603	101.5%	-21.4%	\$12,721	(\$164,496)
2000	\$951,860	n/a	\$774,642	n/a	122.9%	n/a	\$177,217	n/a

RETURN ON ASSETS

Fiscal Year	Expected Rate of Return	Actual Rate of Return (Estimated)		Expected Return	Actual Return (All Plans)	Difference
		All Plans	Calendar Fiscal Years			
2013	7.4%	9.9%	10.6%	\$93,127	\$126,242	(\$33,116)
2012	7.5%	11.7%	12.0%	\$93,819	\$142,420	(\$48,601)
2011	7.8%	5.8%	4.8%	\$94,314	\$67,326	\$26,987
2010	8.0%	12.8%	12.6%	\$91,289	\$137,963	(\$46,674)
2009	8.1%	14.1%	17.2%	\$89,783	\$130,006	(\$40,223)
2008	8.1%	-18.8%	-22.2%	\$97,940	(\$249,338)	\$347,277
2007	8.2%	9.8%	9.0%	\$95,146	\$119,044	(\$23,898)
2006	8.3%	12.9%	12.2%	\$87,499	\$140,978	(\$53,479)
2005	8.4%	11.3%	10.5%	\$83,305	\$112,845	(\$29,540)
2004	8.4%	12.3%	11.5%	\$81,965	\$112,850	(\$30,885)
2003	8.5%	19.4%	19.1%	\$77,264	\$148,288	(\$71,024)
2002	9.2%	-8.8%	-8.4%	n/a	n/a	n/a
2001	9.4%	-6.3%	-6.3%	n/a	n/a	n/a
2000	9.4%	4.2%	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
2013	(\$32,087)	(\$23,743)	\$44,050	\$18,196	4.75%
2012	(\$55,831)	\$17,405	\$62,246	(\$6,882)	4.04%
2011	(\$38,426)	\$7,888	\$55,365	\$4,056	4.79%
2010	(\$30,537)	\$3,408	\$59,420	(\$4,898)	5.44%
2009	(\$27,129)	\$2,714	\$54,523	(\$25,523)	5.82%
2008	(\$24,415)	\$4,563	\$29,000	(\$1,022)	6.35%
2007	(\$19,852)	(\$7,164)	\$27,978	\$8,658	6.20%
2006	(\$27,016)	\$1,561	\$36,636	\$9,168	5.75%
2005	(\$25,456)	\$5,043	\$45,804	(\$2,943)	5.50%
2004	(\$20,413)	\$4,954	\$42,862	\$13,859	5.75%
2003	(\$15,458)	\$19,015	\$56,721	(\$21,868)	6.09%
2002	\$3,556	\$9,484	\$34,852	(\$24,330)	n/a
2001	\$13,040	(\$1,573)	\$10,523	\$1,526	n/a
2000	\$11,467	n/a	\$12,049	n/a	n/a

ASSET ALLOCATIONS

	2013	2012	2011	2010	2009	2008	2007	2006	2005
Equity Allocation	40.87%	39.45%	38.37%	44.60%	45.51%	43.79%	54.77%	60.43%	61.04%
Change From Prior Year	3.60%	2.82%	-13.99%	-2.00%	3.94%	-20.05%	-9.37%	-0.99%	n/a
Fixed Allocation	39.62%	40.41%	41.31%	35.88%	36.08%	41.56%	33.05%	29.20%	28.50%
Change From Prior Year	-1.94%	-2.18%	15.12%	-0.55%	-13.20%	25.76%	13.19%	2.47%	n/a
Other Allocation	19.51%	20.15%	20.33%	19.51%	18.41%	14.65%	12.18%	10.36%	9.63%
Change From Prior Year	-3.16%	-0.90%	4.18%	6.02%	25.67%	20.27%	17.49%	7.65%	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 2013 annual report was released by March 10, 2014.

This 2014 report is Milliman's 14th 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 2013.

About the study

The results of the Milliman 2014 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 2013 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 2014 Milliman Pension Funding Study had fiscal years other than the calendar year. The 2014 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 2014 study will be used to update the Milliman 100 Pension Funding Index as of December 31, 2013, the basis of which will be used for projections in 2014 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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