

S&P 500[®] Corporate Pensions and Other Post-Employment Benefits (OPEB) in 2018

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Providing Americans with adequate retirement income and affordable medical care remains one of the country's most hotly debated social and political topics of the 21st century. However, the times have changed, as the medical cost of prolonged longevity has risen, and corporations' ability to absorb the risks associated with multi-decade portfolios to finance those commitments has fallen. Over the past three decades, corporations in the private sector have successfully shifted the responsibility of retirement to individuals, as programs have been frozen or closed to new employees, with 401(k)-type saving programs acting as substitutes. What remains is a lingering program of the past that will slowly decline in size and number of covered retirees over the coming decades. For now, both [S&P 500](#) pensions and OPEB remain a manageable cost with sufficient resources and cash flow to support them—even as decreasing interest rates could worsen the funding levels and ratios via higher discounted liabilities for 2019. For 2018, corporate pension underfunding stood at USD 270 billion—11.2% lower than the USD 304 billion level of 2017, as markets declined and interest rates used for liability discounting increased. The funding level increased to 86.35% in 2018 from 85.62% in 2017, 80.75% in 2016, 81.14% in 2015, and 81.12% in 2014. The most recent low-funding level was in 2012, at 77.26%, with the last full-funding level occurring in 2007, at 104.40%.

Clearly, the traditional defined-benefit corporate pension has become a relic of an earlier age, one that dates back to World War II, when the average American's life expectancy was 65 years. By 1974, when Congress passed the Employee Retirement Income Security Act (ERISA; the federal law that sets minimum standards for most voluntarily established pensions in the private industry), Americans' average life expectancy had risen to 72 years. Today (according to the Center for Disease Control), the average life expectancy in the U.S. is 78.6 years (76.1 years for men and 81.1 years for women). In 1983, when the life expectancy was 74, the official Social Security age of "full retirement" was scaled forward from 65 years to 67 years, depending on the year of birth, as longevity continues to move up. Medicare eligibility, however, has remained at 65. As a result, post-employment medical costs associated with longevity have skyrocketed, as have the costs of prescription drugs and elder care.

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Note the data for this report is as of July 2019, unless otherwise noted. Regarding the Appendix: Excluding the Appendix, the tables and charts in this paper are based on S&P 500 historical memberships. The alphabetical and sector listings in the Appendix are based on the S&P 500 current membership to permit comparisons with the same issues' 2017 data; the aggregates for 2017 in these two tables therefore could vary from the actual 2017 membership data, and data in the other tables and charts.

OVERVIEW

- Equity markets faltered in 2018, after two years of double-digit gains; interest rates also reversed themselves, increasing for the period to push down discounted liabilities, resulting in an 11.2% improvement in underfunding for 2018.
- Interest rates utilized for discounted pension liabilities increased in 2018 and were nearly half of those used in the 1999-2001 period, when pensions were overfunded.
- Expected pension return rates declined for the 18th year in a row.
- Most corporations have successfully shifted the burden of risk for retirement to the employee, as 401(k)-type savings accounts have become the norm, and active defined-benefit pensions in the private sector have become a rarity.
- Given the dwindling coverage and liability, the current obligations of pensions and OPEB are a manageable expense for most companies.
- OPEB obligations continue to decline, as fewer covered retirees cost more per person, but they are a quantifiable cost with a declining obligation (life span).

The regulated pension system in the U.S. continues to suffer from antiquated accounting regulations that can sometimes distort the financial position of pension funds and their sponsors. The problem with OPEB is that the mostly pay-as-you-go system has been hampered by low funding rates, few incentives, and few legal guarantees. These issues, however, continue to dwindle in the private sector, as plans close and the number of existing covered retirees declines.

In 2018, pension and OPEB assets set aside for issues in the S&P 500 amounted to USD 1.77 trillion, a 6.0% decrease from the USD 1.88 trillion held at year-end 2017, the first decline in three years, while the S&P 500 declined 4.38% and the [S&P United States BMI](#) fell 9.57% (both include reinvested dividends). Obligations posted a 7.0% decrease to USD 2.17 trillion from 2017's 2.34 trillion, also the first decline in three years. These combined to form an underfunding decrease to USD 402.6 billion from last year's USD 453.6 billion, the lowest level since 2007's USD 205.8 billion underfunding (when pensions were overfunded and OPEB underfunded). The combined coverage ratio (theoretical, since the funds cannot be legally comingled) increased to 81.5% from last year's 80.6%, its highest level since 2007's 88.6% (it was 70.0% in 2012).

For private companies, the long-term reality is that, thanks to shrinking (and frozen) programs and fewer employees who are covered (fewer are added, as longevity reduces the covered ones), the end of onerous retirement obligations is on the horizon, although their full demise may be decades away. In the short term, higher interest rates for 2018 have worsened funding requirements (as lower interest rates, seen through July 2019, should improve pension funding via discounted liabilities), as coverage continues to decline.

For many Americans, early retirement remains a common occurrence, sometimes by choice but more often due to job loss or change or medical requirements. Given the financial burden associated with longevity, many people are unable to completely retire and find they must supplement their retirement income with part-time jobs or postpone retirement for as long as possible.

One of the primary reasons U.S. corporations have given for the cutbacks in traditional pensions and OPEB has been the dramatic growth in the globalization of markets in the past 30 years. As a result, U.S. companies are less able to pass retirement-associated costs—which many foreign competitors do not have—through to consumers.

Still, the U.S. private sector remains in a much better financial condition to meet its pension obligations than the U.S. public sector, due mostly to stricter funding regulations and the massive shifts over the past 30 years from traditional defined-benefit pensions to enhanced, 401(k)-type saving accounts. After the bear markets of 2000-2002 and 2007-2008 drastically reduced private pension fund reserves, the bull markets of 2003-2007 and 2009-present (with the current bull market the longest in S&P 500 history, posting an annualized 17.77% with dividends through July 2019) helped them recoup somewhat. However, due to historically low interest rates and increases in longevity, pension underfunding remains substantial in absolute terms. For 2018, pensions were underfunded by USD 270.4 billion, an 11.2% improvement from the 2017 underfunding of USD 304.6 billion and a 30.9% improvement from 2016's underfunding of USD 391.2 billion; the last overfunded period was in 2007, with a USD 63.4 billion surplus. The increase in 2018 funding appears to be more of a product of lower discounted obligations (via higher discount rates) than the 2018 lower portfolio returns. For 2018, global markets excluding the U.S. posted a weighted loss of 14.18% with dividends, as measured by the [S&P Global Ex-U.S. BMI](#) (versus a 28.49% gain in 2017), as U.S. markets, where S&P 500 funds are more invested, posted a loss of 5.27% (up 21.18% in 2017), with the S&P 500 down 4.38% (up 21.83% for 2017). Historically, companies have chosen not to add additional discretionary funds to their required contribution, with the result being that underfunding remained prevalent. The bottom line for the prior 10 years (the current bull market) was that funding had become more of a product of liabilities, which are a product of interest rates, than the ability to use excess equity returns to fund pensions. At this point, equity returns for 2019 (with dividends) have returned to record levels, overcoming the 2018 declines; non-U.S. equities were up 7.82% through July 2019, and the U.S. equity market was up 20.45%, with the S&P 500 up 18.89%.

While funding levels remain low, the ability of companies to support them remains relatively high; earnings reached an all-time high in 2018 and are projected to set a record in 2019, as the lower U.S. tax rates have resulted in record earnings. The available resources (and cash flow) remain sufficient to support funding requirements. Additionally, cash levels and the availability of low-cost financing (especially abroad) remain high.

This means that the current underfunding and S&P 500 pension costs have become a reasonably controlled expense for corporations, with the expectations that they will decline over time. Pension costs and outflows fit well within income and asset levels, and they remain compatible with cash flow levels. Also helping corporations cope are the declining benefits for newly covered employees, as those expenditures represent a shrinking obligation base, even as short-term costs and longevity increase for those covered (grandfathered). If interest rates decline, as they have done YTD, liabilities would (mathematically) increase, hurting funds. If interest rates rise, liability will decline, and the funding ratio will most likely improve (subject to market returns). Of note, these levels are “on paper” and do not change any of the actual payments to be made.

Another factor allowing most companies to keep pensions as an acceptable expense is employees' grudging acceptance of lower levels of pension and benefits, for those who still have them. As companies continue to shift more of the risks associated with defined-benefit programs to defined-contribution programs—and have extended that to medical benefits as well—the result has been that legacy pension and benefit programs may largely disappear over the next several decades, as current and dwindling future recipients die.

While household wealth has climbed well above its prerecession level (to a record USD 113 trillion at the end of 2018), the distribution of that wealth has been uneven, making retirement more difficult for many. Even with unemployment at levels not seen since 1969 and with U.S. equity markets posting

new highs in July of 2019, the current economic reality for retirement is painful. Strained government programs, the need for additional tax revenue, reduced spending on entitlement programs, and higher social costs have heralded a return to the retirement of prior generations. That is, you work for most of your (now-longer) life and spend your remaining years in retirement with a reduced lifestyle.

For what's left of the middle class, this reality replaces the American dream of a golden retirement for current retirees and baby boomers. Instead, with resources that are mostly strained, it leaves few options for a comfortable retirement. Simply put, time has run out for most boomers to add significant income to their retirement resources. Their primary option is to work longer. Younger workers, who now appear to be left on their own to plan for their retirement, will need to start saving early, allowing time to compound their returns. Their ability to do so, however, remains unclear.

The increase in fund status came as assets (via the markets) and liabilities (via lower interest rates) declined (see Exhibit 1).

Exhibit 1: S&P 500 2018 Pension and OPEB Funding Stats

CATEGORY	PENSIONS 2018	PENSIONS 2017	OPEB 2018	OPEB 2017	COMBINED 2018	COMBINED 2017
Assets (USD Billions)	1,710.58	1,813.35	60.20	69.62	1,770.78	1,882.97
Obligations (USD Billions)	1,981.02	2,117.98	192.41	218.59	2,173.44	2,336.56
Funding Status (USD Billions)	-270.44	-304.62	-132.21	-148.97	-402.65	-453.59
Funding Ratio (%)	86.35	85.62	31.29	31.85	81.47	80.59

Source: Compiled by S&P DJI from data provided by S&P Capital IQ. Data as of each issue's 2018 and 2017 fiscal year-end. Table is provided for illustrative purposes.

Funding has improved, as most issues remain underfunded but have the assets and cash flow to cover the costs (see Exhibit 2).

Exhibit 2: S&P 500 Pension and OPEB Funding Stats

CATEGORY	NUMBER OF ISSUES			PERCENTAGE OF TOTAL (%)		
	PENSIONS	OPEB	COMBINED	PENSIONS	OPEB	COMBINED
2018						
Fully Funded	46	29	37	9.20	5.80	7.40
Funded 90%-99.99%	80	8	65	16.00	1.60	13.00
Funded 80%-89.99%	91	6	86	18.20	1.20	17.20
Funded 70%-79.99%	52	9	69	10.40	1.80	13.80
Funded 60%-79.99%	27	10	32	5.40	2.00	6.40
Funded < 60%	17	56	27	3.40	11.20	5.40
No Assets	10	136	15	2.00	27.20	3.00
No Plan	177	246	169	35.40	49.20	33.80
Total Issues	500	500	500	100.00	100.00	100.00
2017						
Fully Funded	43	21	28	13.27	8.11	8.51
Funded 90%-99.99%	78	12	72	24.07	4.63	21.88
Funded 80%-89.99%	83	7	76	25.62	2.70	23.10
Funded 70%-79.99%	57	9	63	17.59	3.47	19.15
Funded 60%-69.99%	33	9	50	10.19	3.47	15.20
Funded < 60%	30	59	40	9.26	22.78	12.16
No Assets (OPEB: included in <60%)	-	142	-	0.00	54.83	0.00
Total Issues	324	259	329	100.00	100.00	100.00

Source: Compiled by S&P DJI from data provided by S&P Capital IQ. Data as of each issue's 2018 and 2017 fiscal year-end. Table is provided for illustrative purposes. Note that pension and OPEB funds may not be comingled. When combined, a surplus from one account may not be sufficient to cover the deficit of the other, resulting in a lower issue count than just adding the overfunding issues of pensions and OPEB together.

TODAY'S PENSION SITUATION DIDN'T HAPPEN OVERNIGHT

By 2007, the stock market and economy had slowly recovered from the 2000-2002 recession. For companies in the S&P 500 as a group, the result was that defined-benefit plans for 2007 returned to their fully funded status for the first time since 2001, with USD 63.4 billion in excess assets over obligations and a funding level of 104.4% for obligations.

The downturn in equity markets that began in 2007 and lasted until 2009 was even more extreme than the 2000-2002 bear market. Equity returns for 2008 were a devastating -37%. That produced a 43% gap between what companies expected to earn in their pension funds and what they delivered. The net result was that for 2008, pension funds for companies in the S&P 500 declined to an underfunding record level of USD 308.4 billion, just one year after posting an overfunding of USD 63.4 billion. Stocks started 2009 poorly but bottomed out in March and reversed course, ending the year with a 26.46% total return gain for the S&P 500. That rally continued into 2010, with a 15.06% total return gain.

Those gains, however, were no match for the massive damage done to pension fund portfolios in 2008, as funds only slightly improved their levels, remaining underfunded by USD 245 billion.

In 2011, markets were flat, creating another shortfall between what companies estimated for pension fund returns and what they actually earned. Worse than the lack of investment gains were interest rates, which governments kept artificially low to try to stimulate growth. When used to determine discounted liabilities, these low interest rates pushed obligations higher, resulting in a record USD 355 billion in underfunding.

In 2012, the S&P 500 moved broadly higher, posting a 13.41% gain (16% with dividends). Again, however, artificially low interest rates overpowered the gains, resulting in a new underfunding record of USD 452 billion and pushing the funding rate down to 77.3%, its lowest level since at least 1999, when the data set begins (and was at 128.2% of funding). In 2013, the bull market in equities continued, with a massive 29.6% return (32.39% with dividends). Plus, interest rates increased (therefore reducing discounted liabilities), reducing pension underfunding to USD 224 billion—still a significant amount, but on the right track and expected to get better, as interest rates continued to increase.

Exhibit 3: S&P 500 Historical Pension Data

YEAR	PENSION ASSETS (USD MILLIONS)	PENSION OBLIGATIONS (USD MILLIONS)	PENSION FUNDING STATUS (USD MILLIONS)	PENSION FUNDING STATUS RATIO	PENSION DISCOUNT RATE (%)	PENSION RETURN RATE (%)	S&P 500 TOTAL RETURN (%)
2018	1,710,582	1,981,024	-270,443	0.863	3.83	6.27	-4.38
2017	1,813,354	2,117,979	-304,625	0.856	3.47	6.46	21.83
2016	1,640,935	2,032,087	-391,151	0.808	3.82	6.62	11.96
2015	1,614,622	1,983,152	-368,530	0.814	4.24	6.80	1.38
2014	1,681,892	2,070,963	-389,071	0.812	3.92	7.00	13.69
2013	1,622,693	1,847,151	-224,457	0.878	4.69	7.10	32.39
2012	1,534,448	1,986,156	-451,708	0.773	3.93	7.31	16.00
2011	1,321,962	1,676,615	-354,654	0.788	4.71	7.60	2.11
2010	1,273,321	1,518,314	-244,993	0.839	5.31	7.73	15.06
2009	1,160,202	1,420,912	-260,709	0.817	5.81	7.83	26.46
2008	1,100,149	1,408,580	-308,432	0.781	6.29	7.95	-37.00
2007	1,504,516	1,441,135	63,380	1.044	6.13	8.02	5.49
2006	1,470,964	1,511,301	-40,337	0.973	5.75	8.03	15.79
2005	1,318,010	1,458,439	-140,430	0.904	5.11	8.13	4.91
2004	1,265,338	1,429,667	-164,328	0.885	5.80	8.27	10.88
2003	1,113,478	1,278,265	-164,787	0.871	6.09	8.38	28.69

Source: Compiled by S&P DJI from data provided by S&P Capital IQ. Data as of each issue's historical fiscal year-end. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

In 2014, equity market returns continued at a robust double-digit rate, as S&P 500 large-cap constituents returned 11.39% (13.69% with dividends). The three-year equity rally of 2012-2014 resulted in a gain of 63.37% (74.6% with dividends). This greatly surpassed the expected return of 23% for the three-year period and the 7% forecast for 2014. In addition, those years' returns had a major impact via smoothing (an accounting practice that allows companies to calculate changes in pension funding with averages over a period of several years instead of on an annual basis).

However, interest rates, which were expected to increase in 2014, declined instead, reducing the discount rate used for future pension liabilities to 3.92% from 4.69% in 2013. That decrease pushed liabilities up. Adding to the increase in liabilities was a new longevity table, which reflected longer lives for retirees, extending the years of payments for funds. In recent years, several issues, especially in the Communication Services sector (formerly Telecommunication Services), have moved away from smoothing to a more mark-to-market evaluation, which permits gains (and losses) to flow into pension accounting more quickly. Both AT&T and Verizon took fourth-quarter 2014 charges to reflect the lower interest rates and new longevity tables, bringing the S&P 500 Communication Services sector's earnings into the red for the period.

For 2015, equity markets were basically flat, with the S&P 500 down 0.73% (up 1.38% with dividends), as markets outside the U.S. were down 6.30% (S&P Global Ex-U.S. BMI). Interest rates, which were expected to increase, did so slightly, as the U.S. Fed raised interest rates only once, by 0.25% in December. For 2015, both assets and obligations declined. Total pension assets fell 4.0% to USD 1.61 trillion (compared with 2014's 3.6% increase to USD 1.68 trillion), as liabilities decreased 4.2% to USD 1.98 trillion from 2014's record USD 2.07 trillion.

After a slow start in 2016 (the S&P 500 was down 10.5% YTD in February), markets rebounded and by July were setting new highs, as the aging bull market resumed its climb. U.S. markets (as measured by

the S&P United States BMI) closed the year up 10.30% (9.54% for the S&P 500), as non-U.S. markets posted a more moderate gain of 1.79%. Interest rates also declined from the start of 2016 and remained low through October (the 10-year U.S. Treasury Bond closed 2015 at 2.27%, trading under 2% at times), when the surprising U.S. election results pushed them higher to end the year up (the 10-year U.S. Treasury Bond closed 2016 at 2.45%). The result for the S&P 500, which invested more in U.S. equities (matching its obligation geography), was a profitable year for portfolios. However, portfolio gains were minor, as expenses and limited contributions increased pension assets by 1.6%. Liabilities increased 2.6%, as the discount rate used for its present value declined.

In 2017, equity markets continued to set new records throughout the year; global markets excluding the U.S. (S&P Global Ex-U.S. BMI) posted a broad 28.49% gain (with dividends), the U.S. equity market gained 21.84%, and the S&P 500 returned 21.83%. Interest rates, as measured by the U.S. 10-year Treasury Bond, declined to 2.40% from 2.45% in 2016, even as the U.S. FOMC raised interest rates. As a result of the strong equity returns, even as liabilities increased due to lower interest rates, funding levels for 2017 increased to 85.62% from 2016's 80.75%, 2015's 81.42%, and 2014's 81.21%, but they remained below 2013's 87.85%, and well below 2007's overfunding status of 104.4%.

For 2017, expected pension return rates declined to 6.46% from 2016's 6.62%, 2015's 6.80%, 2014's 7.00%, 2013's 7.10%, and 2012's 7.31%. The long-term decline has steadily reduced forward asset expectations, but they appear to have been guided by uncertain markets and changes in both asset allocations, which were also influenced by pension recipients' makeup and aging. Pension underfunding increased to USD 304.6 billion in 2017 from 2016's USD 391.2 billion and 2015's USD 368.5 billion; 2012 posted the underfunding record of USD 451.7 billion.

The gains continued into 2018, as equity markets continued to set new records through September (19 new S&P 500 closing highs); however, Q4 2018 resulted in one of the worst quarters on record (the S&P 500 with dividends declined 13.52%). The result was that global markets excluding the U.S. (S&P Global Ex-U.S. BMI) posted a broad 14.81% decline (with dividends), while the U.S. equity market fell 5.27% and the S&P 500 lost 4.38%. Interest rates, as measured by the U.S. 10-year Treasury Bond, increased to 2.68% from 2.40% in 2017, as the U.S. FOMC raised interest rates four times.

As a result of the equity losses, asset levels declined 5.67% (to USD 1.71 trillion from USD 1.81 trillion in 2017), as liabilities decreased by 6.47% (to USD 1.98 trillion from USD 2.12 trillion) due to lower interest rates. The overall funding level for 2018 increased to 86.35% (USD 270.4 billion in underfunding) from 2017's 85.62% (USD 304.6 billion), 2016's 80.75% (USD 391.2 billion), and 2015's 81.42% (USD 368.5 billion), remaining well below 2007's overfunding status of 104.4% (overfunded by USD 63.4 billion).

In 2018, expected pension return rates declined to 6.27% from 6.46% in 2017, 6.62% in 2016, and 6.80% in 2015. The decline marked the 18th consecutive year that expected return rates declined (the last increase was in 2000, when they rose to 9.17% from 1999's 9.13%). The long-term decline has steadily reduced forward asset expectations, but they appear to have been guided by uncertain markets and changes in both asset allocations (move to fixed income), which were also influenced by pension recipients' makeup and aging.

Total pension underfunding represented 23.9% of 2018 earnings (generally accepted accounting principles), down from 2017's 32.4% and 2016's 48.3%, demonstrating the declining liability of pensions compared with earnings.

Over the past decade, the pension fund asset allocation matrix has changed significantly. From 2004 through 2007, equity allocations averaged over 60% of invested assets (based on year-end allocations for the forward year). At year-end 2008, pension funds reduced their assets in equities in response to the bear market, diminishing their equity allocation to 43.7% from 61.3% in 2007. In 2009, equity allocations grew to 50.5%. For 2010, companies kept their allocations stable, putting 51% in stocks and 35.9% in fixed income. Given the 15% equity return for 2010, it appeared that the dominant implied strategy at that time was to maintain the same allocations by taking profits from equities. In 2011, for their 2012 allocations, funds again moved away from equities and toward fixed income in an attempt to reduce risk. Funds allocated less than half of their portfolios (48.4%) to equities at that time. For 2013, investment allocations remained mostly unchanged, as risk concerns continued, even as the bull market thrived. Equity allocations slightly increased to 48.6%, and fixed income allocations decreased to 40.4% from the prior year's 40.9%. Again, this means funds were actually transferring out of equities, because the previous allocation had grown over the year. In 2014, allocation changes were minor. Overall, funds maintained their equity allocation, slightly increasing it to 48.5%, while fixed income represented 40.6% (from 40.4%), real estate was 1.74% (from 1.76%), and "other investments" totaled 9.28% (from 8.78%). Once again, this means funds were actually transferring out of equities, because the previous year's allocation had grown over the year. For 2015's portfolios, equity allocations were reduced, as concern over the aging bull market and three years of double-digit returns added to worries over future returns. Equity allocations were reduced to 44.5% from the prior 48.5%. Fixed income allocations increased to 43.9% from 2014's 40.6% (companies do not provide maturity schedules, so the portfolio's duration cannot be measured). Real estate increased to 2.13% from the previous year's 1.74%, with "other investments" increasing to 9.55% from 2014's 9.28%.

The 2015 allocation for 2016 shows only slight changes, and given the lack of extreme asset outperformances, this leads to an assumption that levels were unchanged (with little profit taking), with changes potentially being more noise online (due to membership change). For 2016, companies gave specific information to identify 92.2% of their allocation. Equity allocations declined to 44.3% from 2015's 44.5%, as fixed income increased to 44.6% from the prior year's 43.9%. Real estate allocations, which include equity issues and REITs, increased to 2.23% from 2.13%. Other assets, a lump group typically with few details, increased to 9.73% from 2015's 9.55%.

For 2017, equity markets posted broad gains of more than 20%, the S&P 500 posted 62 new closing highs, and interest rates ended the year little changed. The result was that equity gains overpowered lower interest rates and improved funding ratios. From a portfolio standpoint, 2017 posted a 19.42% S&P 500 return (21.83% with dividends), posing a similar question as 2013, which produced a 29.60% S&P 500 equity return (32.39% with dividends)—Should one keep higher equity allocation (due to price gains) or reallocate to lower levels (booking the gains)? Overall, portfolio managers reacted similarly to 2013, reallocating gains, with the result being a year-end lower equity exposure. In 2017, disclosed portfolio allocations came in with detailed data for 91.7% of their pension assets, down from 92.3% in 2016 and 92.2 in 2015. Weighted allocations for equities decreased to 38.32% from 40.71% in 2016 and 42.38% in 2015 (and 61.13% in 2006). Fixed income increased to 47.42% from 45.73% in 2016 and 2015's 44.82% (note that no maturity information or schedule is given for fixed income). Real estate decreased to 3.18% from 2016's 2.09% and 2015's 3.78%. The catch-all "other" classification increased to 11.08% of all investments from 11.47% in 2016, 9.02% in 2015.

For 2018, equity markets continued to post broad gains through September, with the S&P 500 extending the bull market and posting 19 new closing highs, while the FOMC saw the economy as being strong enough to raise interest rates four times (one in each quarter, by 0.25% each time). From

the high on Sept. 20, 2019, however, the market started to react to trade and tariffs, as a global economic slowdown started to (statistically) appear in reports. The result was that Q4 2018 posted one of the worst periods in history, with global markets down 13.55%, and the prior 2018 gains turned into a 2018 loss. For 2018, the [S&P Global BMI](#) posted a broad 11.55% decline (with dividends), while the non-U.S. markets posted a 16.73% decline, the U.S. a smaller 5.27% decline, and the S&P 500 a 4.38% loss. On the liability side, interest rates, as measured by the U.S. 10-year Treasury Bond, increased to 2.68% from 2.40% in 2017.

The pension result was that assets and liabilities declined, mostly due to lower equity returns and higher interest rates, respectively, but also due to a declining base of covered (and expected to be covered) retirees. From a portfolio standpoint and similar to prior years, it was the liabilities that determined the pension funding status, as even in propitious periods, companies made only the required payments. For 2018, the result was a decline in the underfunding status.

The makeup of the asset portfolio remained a hot topic, as actual payment liabilities continued to resemble a stream of fixed costs, with the corporate desire continuing to be the ability to control and stabilize the outgoing stream. Specifically for 2018, disclosed portfolio allocations came in with detailed allocation data for 91.0% of the pension assets, down from last year's 91.7% and 2016's 92.3%. Weighted allocations for equities decreased again, to 33.04% from 2017's 38.32% and 42.71% in 2016, while fixed income increased again, to 49.91% from 47.42% in 2017 and 43.73% in 2016 (note that no maturity information or schedule is given for fixed income). Real estate increased to 3.63% from last year's 3.18% and 2016's 2.09%. The catch-all "other" classification increased to 13.42% of all investments from last year's 11.08% and 2016's 11.47%. The category includes private ventures, investments, and agreements, which cannot be classified.

Exhibit 4: S&P 500 2018 Pension Asset Allocations

GICS® SECTOR	PENSION ASSETS (USD MILLIONS)	ASSETS IDENTIFIED (USD MILLIONS)	IDENTIFIED ASSETS AS PERCENT OF PENSION ASSETS (%)	PENSION EQUITY ASSET ALLOCATION (%)	PENSION FIXED INCOME ASSET ALLOCATION (%)	PENSION REAL ESTATE ASSET ALLOCATION (%)	PENSION OTHER ASSET ALLOCATION (%)
Communication Services	100,281	99,991	99.7	29.03	39.55	6.23	25.19
Consumer Discretionary	161,521	87,189	54.0	16.00	74.76	2.68	6.56
Consumer Staples	107,793	104,108	96.6	29.80	56.50	2.82	10.88
Energy	80,853	77,676	96.1	32.15	55.98	3.29	8.58
Financials	214,776	184,600	86.0	33.78	50.07	1.98	14.17
Health Care	134,804	116,323	86.3	42.43	39.46	1.26	16.85
Industrials	475,587	475,401	100.0	38.16	43.45	5.36	13.03
Information Technology	154,449	151,944	98.4	17.26	69.86	0.19	12.69
Materials	141,906	136,135	95.9	33.75	48.31	4.79	13.16
Real Estate	5,204	4,930	94.7	21.90	35.90	0.00	42.20
Utilities	133,409	117,684	88.2	41.43	43.37	4.20	10.99
S&P 500 Allocations Declared (Weighted)	1,710,582	1,555,981	91.0	33.04	49.91	3.63	13.42
Allocations 2018 Average	-	-	-	35.83	48.70	2.27	16.97
Allocations 2017 Average	-	-	-	41.26	44.61	2.05	12.52
Allocations 2016 Average	-	-	-	40.45	45.84	3.42	10.29
Allocations 2015 Average	-	-	-	44.27	44.55	2.23	9.73
Allocations 2014 Average	-	-	-	44.45	43.88	2.13	9.55
Allocations 2013 Average	-	-	-	48.48	40.59	1.74	9.28

Source: S&P Dow Jones Indices LLC. Data as of each issue's 2018 fiscal year-end. Table is provided for illustrative purposes.

Exhibit 5: S&P 500 Historical Asset Allocations

YEAR	PENSION ASSETS (USD MILLIONS)	PENSION EQUITY ASSET ALLOCATION (%)	PENSION FIXED INCOME ASSET ALLOCATION (%)	PENSION REAL ESTATE ASSET ALLOCATION (%)	PENSION OTHER ASSET ALLOCATION (%)
2018	1,710,582	35.83	48.70	2.27	16.97
2017	1,813,354	41.26	44.61	2.05	12.52
2016	1,640,935	42.71	43.73	2.09	11.47
2015	1,614,622	44.27	44.55	2.23	9.73
2014	1,681,892	44.45	43.88	2.13	9.55
2013	1,622,693	46.85	40.61	3.42	9.12
2012	1,534,448	48.62	40.36	1.76	8.78
2011	1,321,961	48.42	40.93	2.01	8.64
2010	1,273,321	50.99	35.90	2.49	10.62
2009	1,160,202	50.50	38.03	2.86	8.61
2008	1,100,149	43.71	42.78	4.63	8.88
2007	1,504,516	61.26	32.25	1.84	5.91
2018 Weighted	-	33.04	49.91	3.63	13.42
2017 Weighted	-	38.32	47.42	3.18	11.08
2016 Weighted	-	40.45	45.84	3.42	10.29
2015 Weighted	-	42.38	44.82	3.78	9.02

Source: S&P Dow Jones Indices LLC. Data as of each issue's historical fiscal year-end. Table is provided for illustrative purposes.

Corporations continued to contribute more to their pension funds than expected, but that was not significantly different from what they have done historically. Companies contributed USD 68.2 billion to funds for 2018, versus their expected USD 34.9 billion contribution. Expected contributions at year-end 2018 were USD 31.5 billion.

OPEB: EASILY SURVIVING DAY-TO-DAY, AS COSTS ARE PASSED THROUGH

If OPEB were a patient, its condition would be critical, with a long, drawn-out prognosis for a slow demise. The two primary illnesses OPEB suffers from are a lack of government-mandated funding requirements and a scarcity of uniform information. These missing elements mean analysis and evaluations have limited use, and projections require large disclaimers. While balance sheets now include more disclosures, information on assumptions is sparse. Given OPEB's lack of funding requirements, the reporting rules have become a product of smoothing and the assumed changes in rates of growth for obligations, namely, expected future medical costs, including longevity. As the costs for medical care and drugs keep rising and retirees keep living longer lives, the estimated growth rate used in determining the present value of OPEB becomes the most important factor in evaluations.

Exhibit 6: Historical OPEB Data

YEAR	OPEB ASSETS (USD BILLIONS)	OPEB OBLIGATIONS (USD BILLIONS)	OPEB FUNDING STATUS (USD BILLIONS)	PENSION FUNDING STATUS (USD BILLIONS)	OPEB FUNDING STATUS RATIO	PENSION FUNDING STATUS RATIO	OPEB AND PENSION FUNDING STATUS (USD BILLIONS)
2018	60.2	192.4	-132.2	-270.4	0.313	0.863	-402.65
2017	69.6	218.6	-149.0	-304.6	0.318	0.856	-453.59
2016	70.7	232.1	-161.4	-391.2	0.305	0.808	-552.52
2015	65.9	237.0	-171.1	-368.5	0.278	0.814	-539.65
2014	71.4	267.0	-195.6	-389.1	0.267	0.812	-584.71
2013	72.1	253.3	-181.2	-224.5	0.285	0.878	-405.65
2012	67.4	302.3	-234.9	-451.7	0.223	0.773	-686.60
2011	62.3	285.6	-223.4	-354.7	0.218	0.788	-578.03
2010	64.5	274.5	-210.1	-245.0	0.235	0.839	-455.02
2009	61.1	275.7	-214.6	-260.7	0.222	0.817	-475.32
2008	65.7	322.9	-257.2	-308.4	0.203	0.781	-565.66
2007	95.3	364.4	-269.1	63.4	0.261	1.044	-205.76

Source: S&P Dow Jones Indices LLC. Data as of each issue's historical fiscal year-end. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

In 2018, the number of S&P 500 companies reporting OPEB obligations (active and frozen) was slightly down, coming in at 254 from 2017's 259, 2016's 260, 268 in 2015, 264 in 2014, 287 in 2013, and 286 in 2012.

For 2018, the aggregate underfunding of OPEB obligations was USD 132.2 billion, representing an 11.2% improvement from 2017's USD 149.0 billion (2016 was USD 161.4 billion and 2015 was USD 171.2 billion). Assets decreased 13.5% to USD 60.2 billion in 2018 from the previous year's USD 69.6 billion (USD 70.7 billion in 2016), while obligations decreased 12.0% to USD 192.4 billion from 2017's USD 218.6 billion (USD 232.1 billion in 2016). The 2018 funding rate decreased to 31.29% from 2017's 31.85%, 2016's 30.47%, 2015's 28.8%, and 2014's 26.7%.

The OPEB funding rate is significantly less than that of pensions. While the latter are funded at 86.35%, they have significantly more asset coverage (as required by regulations) than OPEB.

Pensions also have the backing of the federal Pension Benefit Guaranty Corp. (PBGC), while OPEB have no such support or fallback position.

The majority of companies choose not to set up separate funds for OPEB because they are not required to do so. Of the 254 companies in the S&P 500 with OPEB (259 in 2017), 118 had separate OPEB funds, compared with 117 in 2017. Those funds had 2018 assets of USD 60.2 billion (USD 69.6 billion in 2017) and obligations of USD 152.1 billion (USD 174.5 billion), resulting in a 39.6% funding rate, a tick lower than the 40.0% posted in 2017, and higher than the 38.5% in 2016 and 2015's 35.5%. The remaining 136 companies (142 in 2017) had obligations of USD 40.3 billion (USD 44.1 billion in 2017) and no separate asset accounts dedicated to pay for them. These companies are fully on a pay-as-you-go basis and thus experience the immediate impact of any change in costs. Within the S&P 500, 29 companies had overfunded OPEB in 2018 (up from 21 in 2017, 19 in 2016, and 14 in 2015). Notably, 37 companies would have enough set aside to be fully funded for OPEB and pensions (even though the accounts are separate and cannot be combined), up from 28 in 2017 and 15 in 2016.

Exhibit 7: OPEB Funding by GICS Sector

OPEB FUNDING	OPEB ASSETS (USD MILLIONS)	OPEB OBLIGATIONS (USD MILLIONS)	OPEB FUNDING STATUS (USD MILLIONS)	OPEB FUNDING STATUS RATIO (%)
Communication Services	6,202	41,339	-35,137	15.00
Consumer Discretionary	190	12,409	-12,218	1.53
Consumer Staples	6,316	15,380	-9,063	41.07
Energy	1,942	14,696	-12,754	13.21
Financials	9,362	10,194	-832	91.84
Health Care	5,455	13,687	-8,232	39.86
Industrials	8,007	38,820	-30,813	20.63
Information Technology	1,786	8,244	-6,458	21.66
Materials	141	11,548	-11,407	1.22
Real Estate	18	148	-130	12.16
Utilities	20,782	25,947	-5,165	80.09
Total	60,202	192,412	-132,210	31.29

Source: S&P Dow Jones Indices LLC. Data as of each issue's 2018 fiscal year-end. Table is provided for illustrative purposes.

Also worth noting, the Communication Services sector (formerly Telecommunication Services) has so reduced its workforce—mainly through early retirements—that it now faces outsized OPEB obligations. Communication Services' OPEB was USD 35.1 billion in 2018, down from USD 39.8 billion underfunded in 2017, continuing its decline from 2016's USD 41.8 billion underfunding, USD 47.8 billion in 2015, and USD 51.7 billion in 2014—but it is still the most underfunded sector in U.S. dollar terms in the S&P 500 on an aggregate basis (representing 26.6% of the OPEB underfunding). Two giants of Communication Services, Verizon and AT&T, are of note; they again placed first and second (as they did in 2017) as the most underfunded OPEB programs. Verizon had the largest underfunded OPEB in 2018, at USD 15.2 billion, down from 2017's USD 18.3 billion, while AT&T had USD 15.1 billion in underfunded OPEB, down from 2017's USD 18.1 billion. Combined, these two companies accounted for 22.3% of the S&P 500's total OPEB underfunding, down from 24.6% in 2017. Rounding out 2018's top five OPEB underfunded companies are Exxon Mobil (USD 7.1 billion, down from 2017's 7.7 billion), General Motors (USD 5.7 billion from 6.4 billion), and Ford (USD 5.6 billion from 6.2 billion). Combined, these five represented 36.8% (38.3% in 2017) of the S&P 500's underfunding.

OPEB for many currently retired workers not covered under collective bargaining agreements (that still have active programs) continue to be under extreme stress, as alternative public programs have been permitted, such as health savings accounts and the continued rollout of new healthcare coverage (and requirements). As new programs and incentives are developed and refined, companies are introducing alternative plans, which directly or indirectly continue to shift more of the financial burden and responsibility to current and future retirees, in addition to making them more portable.

Benefits for current retirees under collective bargaining agreements have changed more slowly, because companies attempt to reduce longer-term costs by reducing benefits to future retirees (current employees) through collective bargaining. However, those benefits have also been reduced, with newer workers receiving significantly less and in many cases contributing more.

The complaint of U.S. corporations that the cost of private medical retiree benefits puts them at a competitive disadvantage to global peers is legitimate. This expense does add to the cost of U.S. products, as domestic corporations must, to some degree, make up the difference of what foreign entities (and governments) provide in medical benefits by substituting higher product prices (to cover the cost of benefits) for the sovereigns' ability to tax. Just as defined-benefit pensions have shifted to defined contributions and 401(k)-like savings accounts, companies continue to shift the responsibility of providing post-retirement medical care directly to individuals and to new insurance plans available through healthcare saving plans and high-deductible option plans. Similar to 401(k)s, more companies are contributing to these benefits, with the difference being that the contribution is typically a flat amount and not related to compensation. The result is that fewer retirees are covered by corporate plans, and similar to pensions, the responsibility has shifted to the retiree. In the end, however, under current regulations (which are under review), the U.S. government has the eventual responsibility (and cost) of providing coverage via medical and social plans.

PENSION FUNDING REMAINS MANAGEABLE, AS COVERAGE AND OBLIGATIONS WILL EVENTUALLY SUNSET

Pension funding status remains a function of market gains on the asset side and interest rates on the liability side. However, the latter have had a greater impact recently. For example, consider how 2014's lower interest rates significantly hurt 2014 funding, just as 2013's rate increases helped 2013 funding. Even though the U.S. equity market posted a double-digit total return for 2016, pension funding declined, as gains were eclipsed by a lower discount rate. For 2017, the equity returns of over 20% were able to overcome lower interest rates and improve funding, but such high gains, especially in an aging bull market, are not a typically accepted prediction. As equity markets declined in 2018, funding improved while liabilities continued to fall.

Even though equity markets have returned to double-digit gains through July 2019 (the S&P Global Ex-U.S. BMI was up 12.31% including dividends, the U.S. was up 20.45%, and the S&P 500 was up 20.24%), it would take years for pensions to return to the full-funding levels of 2007 by themselves. Absent a major increase in equity allocations and prices, interest rates are now serving as the determining factor in pension fund status.

At this time last year, the predominant view was that the Federal Reserve would continue to increase interest rates, which would eventually be reflected in pension funds' discount rates—that view was incorrect. In 2018, the FOMC raised interest rates four times. So far in 2019, as the global economy has slowed and concern of a regional (and potentially global) recession has increased, the rate was decreased by 0.25% on Aug. 1, 2019. Currently, the Street consensus is that it will decrease again at

the Fed's Sept. 17-18, 2019, meeting. As of July 30, 2019, interest rates had decreased YTD and the 10-year U.S. Treasury Bond stood at 2.02%, down from 2.68% at year-end 2018 and 2.40% at year-end 2017, and significantly down from 4.03% at year-end 2007, when pensions were last overfunded. The S&P 500 total return of 20.24% YTD beat the expected 6.27% return from funds (if allocations don't change), even if a correction is measured in. It is currently generally believed that interest rates will continue at their lower rate, which would reduce future liabilities and improve funding, at least on paper. Theoretically, if rates were to rise high enough, pensions would eventually be fully funded—but that's not reality. At this point (and for the past few years), the funding requirements of ERISA have been playing the safety role by requiring companies to have enough short-term cash and equivalents on hand in their funds to cover current liabilities, regardless of their longer-term evaluations.

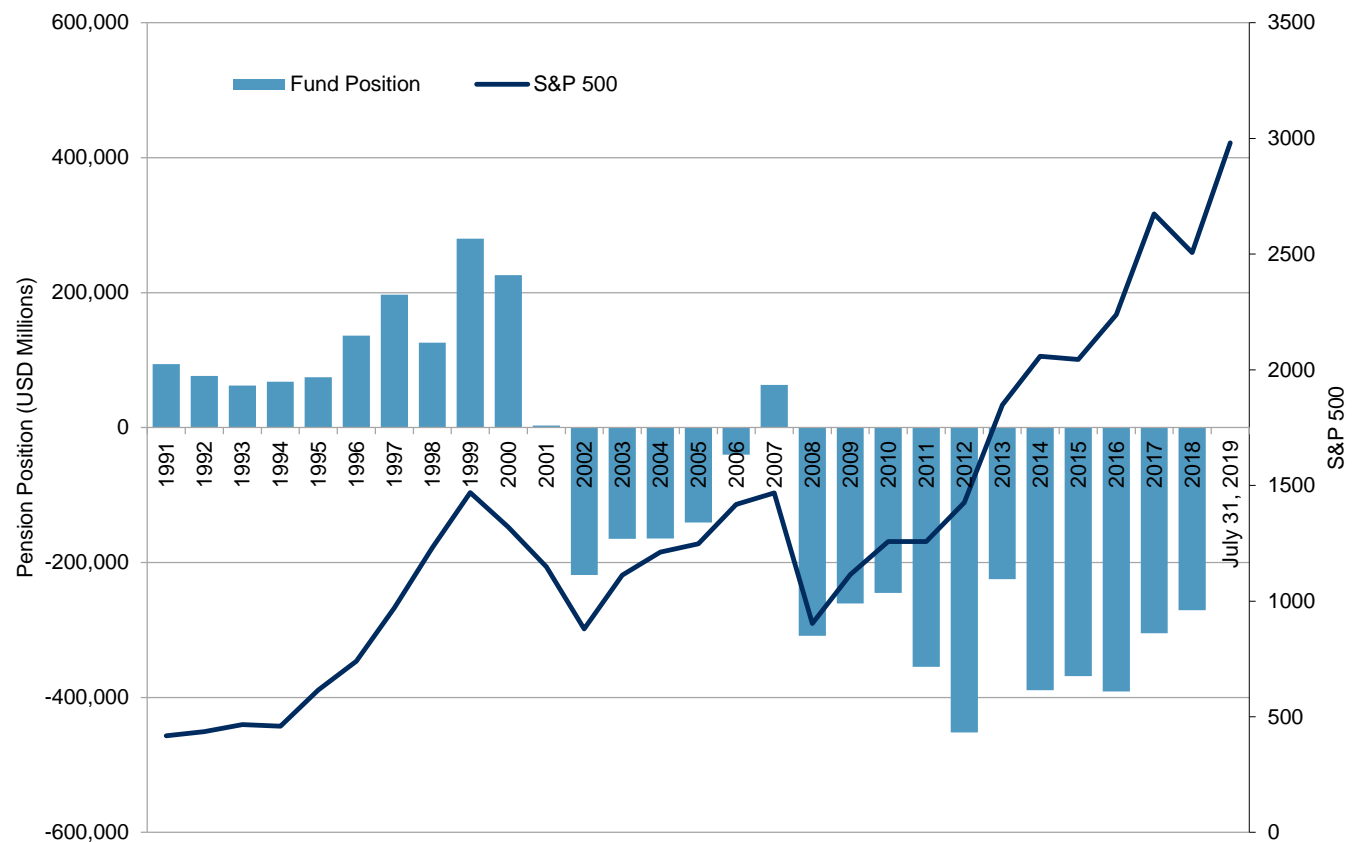
Although most plans are underfunded, it's not because companies lack cash. The S&P 500 Industrials (Old), which is the S&P 500 minus the Financials, Utilities, and Transportation segments, posted USD 1.392 trillion in cash and equivalents at the end of 2018. That amount is more than sufficient to fund pension and OPEB costs (USD 270 billion), as well as sustain buybacks, dividends, hiring (in the U.S. or abroad), and mergers and acquisitions.

Exhibit 8: S&P 500 Industrials (Old) Cash and Equivalent Levels

DATE	CASH AND EQUIVALENT (USD MILLIONS)	% HELD AS CASH	% HELD AS SHORT-TERM SECURITIES	CASH % OF LTD	LTD % OF MARKET VALUE	CASH % OF MARKET VALUE
March 29, 2019	1,342,958	58.07	41.93	35.30	20.44	7.21
Dec. 31, 2018	1,392,025	57.13	42.87	39.11	19.96	7.81
Sept. 28, 2018	1,484,879	58.71	41.29	45.33	15.44	7.00
June 29, 2018	1,489,419	59.35	40.65	45.84	16.45	7.54
March 31, 2018	1,603,091	59.13	40.87	48.95	17.20	8.42
Dec. 29, 2017	1,636,318	55.63	44.37	49.87	17.06	8.51
Sept. 30, 2017	1,629,648	55.62	44.38	49.51	18.07	8.95
June 30, 2017	1,534,536	53.44	46.56	48.50	17.90	8.68
March 31, 2017	1,496,698	54.31	45.69	47.59	18.15	8.64
Dec. 31, 2016	1,478,107	53.52	46.48	47.19	19.19	9.06
Sept. 30, 2016	1,487,051	52.55	47.45	46.88	21.37	10.02
June 30, 2016	1,374,660	53.11	46.89	43.45	22.22	9.65
March 31, 2016	1,347,726	54.48	45.52	44.78	21.14	9.46
Dec. 31, 2015	1,326,132	54.91	45.09	45.00	20.85	9.38
Sept. 30, 2015	1,304,856	54.82	45.18	42.23	21.20	8.95
June 30, 2015	1,323,883	56.47	43.53	44.69	19.19	8.58
March 31, 2015	1,225,482	56.33	43.67	42.47	18.59	7.90
Dec. 31, 2014	1,333,280	60.06	39.94	50.15	17.78	8.92
Sept. 30, 2014	1,246,063	58.01	41.99	48.91	17.18	8.40
June 30, 2014	1,249,892	54.06	45.94	49.60	17.01	8.44
March 31, 2014	1,233,070	58.63	41.37	49.49	17.86	8.84
Dec. 31, 2013	1,304,447	61.84	38.16	53.21	17.68	9.41

Source: S&P Dow Jones Indices LLC. Data as of each issue's historical quarterly data. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Note: Cash and equivalents (cash) are classified under current assets on the balance sheet, and represent the readily available discretionary liquid assets of a company. Cash is measured for the S&P 500 Industrials (Old), which consists of the S&P 500 minus Financials, Utilities, and Transportation issues, since these issues maintain high cash reserves as part of their normal operating process. The data for the S&P 500 Industrials (Old) dates back for decades. When the GICS classifications were developed, one of the new sectors was Industrials, so the former group is referred to as the S&P 500 Industrials (Old).

Exhibit 9: S&P 500 Pension and Market Levels

Source: S&P Dow Jones Indices LLC. Data as of each issue's historical fiscal year-end. Chart is provided for illustrative purposes. Past performance is no guarantee of future results.

CONCLUSION: TRADITIONAL PENSIONS AND OPEB ARE A DYING BREED

Current pension underfunding stems from the massive global market meltdown of the past two recessions, the current low interest rates that increase discounted liabilities, and the lack of regulatory supervision requiring more stringent funding requirements. While the U.S. market (as represented by the S&P 500) has recovered from the low of March 2009, increasing 341% (447% with dividends) as of July 2019, pension funding levels have remained deeply in the red. Pension funds have improved, as supplementary savings and retirement accounts for individuals have grown as an industry. Still, pension funds and personal wealth stand at low levels when taking longevity and inflation into account. Additionally, the improvement has been top-heavy, putting more middle- and lower-income people (and asset holders) in jeopardy.

OPEB underfunding stems in part from expensive medical advancements that have increased longevity and quality of life. In addition, a lack of requirements or incentives to create or support OPEB funding has also had a major impact on underfunding.

The bull market gains of 2002-2007 improved pensions and allowed for minimal corporate contributions. The bear market of October 2007 through March 2009 quickly exposed the extent and size of the liability to current and future retirees, and the interest rate declines in 2010 through 2012 increased the discounted liabilities for funds. While the bull market that started in March 2009 has added to personal wealth and helped pension funding, interest rates remain low, with higher liabilities. Accounting has helped hide these obligations via smoothing and a lack of full disclosures. The

difference between accounting and ERISA postings, as well as reports of actual cash flows, prevents most investors from properly analyzing the situation. Companies are continuing to limit their exposure to both pensions and OPEB.

Reductions in pensions and OPEB that are still offered are likely to continue, no matter how much workers and represented bargaining units try to resist the changes. Indeed, many workers appear more concerned about keeping their current jobs and current medical coverage than they are about their eventual retiree benefits, even as unemployment remains near record lows. It seems inevitable that this shift of responsibility for OPEB and other costs from the company to the individual will continue. Under the Affordable Care Act (ACA), healthcare coverage is required, with financial penalties imposed on those uninsured and financial aid offered for those unable to pay. While the ACA continues to undergo changes, the overall discussion of the ACA and that of health care coverage and “rights” has again grown as a national discussion. Currently, different plans have been raised (via the political spectrum), with most of them centering on government programs with some form of public financing. The reality of any plan at this point, similar to the path of the ACA, is that change will take years, with politics and economics playing critical roles. Over the short term, this leaves vulnerable workers and retirees in a different, but no less precarious, financial position. Likewise, government programs now absorb the costs of increasing numbers of participants, which can create strains and at times inequities.

The only question remaining is: How much more can individuals bear in reduced benefits or increased costs? This is especially pertinent as Americans are living longer, which will only increase the gap between existing benefits and personal wealth and the escalating cost of staying healthy over a longer period. Directly or indirectly, the U.S. government takes on the role of insurer of last resort, whether through the PBGC or as the medical provider via social or entitlement programs. That puts a major part of the responsibility for alleviating this issue into the government's hands, which is embroiled in the November 2020 election. While the S&P 500 pension and OPEB difficulties will improve over time, as the situation for covered workers did, the situation for non-covered employees will only get worse the longer it goes on. Exacerbating the problem is the widening income and asset gap in the U.S., an issue that has also become a political topic. Eventually, the government, the private sector, and the electorate will have to make the difficult choices needed to address these problems. So far, though, few have shown a willingness to compromise on their view of the solution or take such difficult measures as increasing taxes. As is the case for most other seemingly intractable problems, the longer that fixes are postponed or applied only at the margins, the more drastic the eventual cure will have to be. One thing seems certain, though, at this point: the pensions and OPEB that were once taken for granted won't be part of the solution. This will be difficult for those nearing retirement, a challenge for those in the middle of their working years, and a significant area for concern for those entering the system now.

Exhibit 10: Historical S&P 500 Pension and OPEB Levels						
CATEGORY	2018	2017	2016	2015	2014	2013
COMBINED PENSION AND OPEB						
Combined Pension and OPEB Assets (USD Billions)	1,770.8	1,883.0	1,711.6	1,680.5	1,753.3	1,694.8
Combined Pension and OPEB Obligations (USD Billions)	2,173.4	2,336.6	2,264.2	2,220.2	2,338.0	2,100.4
Combined Pension and OPEB Status (USD Billions)	-402.7	-453.6	-552.5	-539.6	-584.7	-405.7
Combined Pension and OPEB Funding (%)	81.5	80.6	75.6	75.7	75.0	80.7
PENSION						
Pension Assets (USD Billions)	1,710.6	1,813.4	1,640.9	1,614.6	1,681.9	1,622.7
Pension Obligations (USD Billions)	1,981.0	2,118.0	2,032.1	1,983.2	2,071.0	1,847.2
Pension Funding Status (USD Billions)	-270.4	-304.6	-391.2	-368.5	-389.1	-224.5
Pension Funding (%)	86.3	85.6	80.8	81.4	81.2	87.8
OPEB						
OPEB Assets (USD Billions)	60.2	69.6	70.7	65.9	71.4	72.1
OPEB Obligations (USD Billions)	192.4	218.6	232.1	237.0	267.0	253.3
OPEB Funding Status (USD Billions)	-132.2	-149.0	-161.4	-171.1	-195.6	-181.2
OPEB Funding (%)	31.3	31.8	30.5	27.8	26.7	28.5

Source: S&P Dow Jones Indices LLC. Data as of each issue's historical fiscal year-end. Table is provided for illustrative purposes. Past performance is no guarantee of future results.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Company (Not Historical Index Makeup)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
MMM	DJIA	3M CO	Industrials	-2,439	-1,940	-1,013	-915	-3,452	-2,855	22,423	20,973	24,862	22,913	1397.00	1260.00	2410	2175	91,536	93,516
ABT		ABBOTT LABORATORIES	Health Care	-655	-540	-974	-941	-1,629	-1,481	9,298	8,553	9,953	9,093	419.00	351.00	1393	1292	99	103
ABBV		ABBVIE INC	Health Care	-1,586	-981	-813	-561	-2,399	-1,542	5,399	5,637	6,985	6,618	0.00	0.00	813	561	29	30
ABMD		ABIOMED INC	Health Care															1,143	1,371
ACN		ACCENTURE PLC	Information Technology	-801	-767	-503	-507	-1,304	-1,274	1,359	1,338	2,159	2,105	26.54	28.71	529.68	535.632	425	459
ATVI		ACTIVISION BLIZZARD INC	Communication Services															9.8	9.9
ADBE		ADOBE INC	Information Technology			0								0.00	0.00	0	0	17,973	21,357
AAP		ADVANCE AUTO PARTS INC	Consumer Discretionary															71	71
AMD	DJIA	ADVANCED MICRO DEVICES	Information Technology															8.9	10.1
AES		AES CORP (THE)	Utilities	-145	-99			-99	1,582	1,436	1,727	1,535						10.5	9
AMG		AFFILIATED MANAGERS GRP INC	Financials															4.4	4.45
AFL		AFLAC INC	Financials	-531	-517	-36	-37	-567	-554	718	754	1,249	1,271	0.00	0.00	36	37	11,318	11,39
A		AGILENT TECHNOLOGIES INC	Health Care	-111	-107	-2	3	-113	-104	1,269	1,226	1,380	1,333	95.00	90.00	97	87	13.5	14.8
APD		AIR PRODUCTS & CHEMICALS INC	Materials	-698	-310	-67	-56	-765	-367	4,409	4,273	5,107	4,583	0.00	0.00	67	56.4	15.3	16.3
AKAM		AKAMAI TECHNOLOGIES INC	Information Technology															7.65	7,519
ALK		ALASKA AIR GROUP INC	Industrials	-304	-367		-82	-449	2,083	1,858	2,387	2,225				85	82	23,156	23,376
ALB		ALBEMARLE CORP	Materials	-301	-293	-56	-50	-357	-343	660	584	961	876	0.83	0.00	56.647	50.39	5.4	5.9
ARE	DJIA	ALEXANDRIA R E EQUITIES INC	Real Estate															0.323	0,386
ALXN		ALEXION PHARMACEUTICALS INC	Health Care	-19	-18			-18	24	22	43	39						2,525	2,656
ALGN		ALIGN TECHNOLOGY INC	Health Care															8,715	11,66
ALLE		ALLEGION PLC	Industrials	-32	-39	-9	-8	-41	-46	682	612	714	650	0.00	0.00	9.3	7.6	10	11
AGN		ALLERGEN PLC	Health Care	-95	-98		-42	-140	1,235	1,130	1,330	1,227				46.8	42.2	17.8	16.9
ADS		ALLIANCE DATA SYSTEMS CORP	Information Technology															20	20
LNT		ALLIANT ENERGY CORP	Utilities	-352	-366	-111	-107	-464	-473	951	809	1,303	1,175	111.10	99.10	222.3	206.1	3,989	3,885
ALL		ALLSTATE CORP	Financials	-531	-925	-386	-375	-917	-1,300	6,284	5,299	6,815	6,224	0.00	0.00	386	375	42.9	45.7
GOOGL		ALPHABET INC	Communication Services															80.11	98,771
MO		ALTRIA GROUP INC	Consumer Staples	-495	-588	-2,065	-1,829	-2,560	-2,417	8,015	7,138	8,510	7,726	270.00	211.00	2335	2040	8.3	8.3
AMZN		AMAZON.COM INC	Consumer Discretionary															566	647.5
AEE		AMEREN CORP	Utilities	-534	-560	-17	79	-551	-481	4,293	3,899	4,827	4,459	1223.00	1113.00	1240	1034	8,615	8,838
AAL		AMERICAN AIRLINES GROUP INC	Industrials	-6,880	-6,325	-716	-612	-7,596	-6,937	11,395	10,053	18,275	16,378	295.00	225.00	1011	837	126.6	128.9
AEP		AMERICAN ELECTRIC POWER CO	Utilities	-42	-114	401	340	359	225	5,174	4,696	5,216	4,810	1732.50	1534.20	1332	1194.5	17,666	17,582
AXP		AMERICAN EXPRESS CO	Financials															55	59
AIG		AMERICAN INTERNATIONAL GROUP	Financials	-1,068	-990	-253	-222	-1,321	-1,212	5,225	4,701	6,293	5,691	0.00	0.00	253	222	49.8	49.6
AMT		AMERICAN TOWER CORP	Real Estate															4,752	5,026
AWK		AMERICAN WATER WORKS CO INC	Utilities	-385	-393	-38	154	-423	-239	1,649	1,499	2,034	1,892	576.00	507.00	614	353	6.9	7.1
AMP		AMERIPRISE FINANCIAL INC	Financials	-247	-239	-15	-14	-262	-253	748	728	995	967	0.00	0.00	15	14	13	14
ABC		AMERISOURCEBERGEN CORP	Health Care															20	21
AME		AMETEK INC	Industrials	42	9			9	847	749	805	740						16.9	18.2
AMGN		AMGEN INC	Health Care															20.8	21.5
APH		AMPHENOL CORP	Information Technology	-244	-170	-13	-8	-257	-179	498	514	742	684	0.00	0.00	13.1	8.4	70	73.6
APC		ANADARKO PETROLEUM CORP	Energy	-794	-634	-302	-273	-1,096	-907	1,424	1,314	2,218	1,948	0.00	0.00	302	273	4.4	4.7
ADI		ANALOG DEVICES	Information Technology	-60	-39	0		-60	-39	80	85	140	124	0.00	0.00	0	0	15.3	15.8
ANSS		ANSYS INC	Information Technology															2.9	3.4
ANTM		ANTHEM INC	Health Care	140	75	-168	-95	-28	-20	2,012	1,818	1,872	1,743	356.30	336.00	524.2	431	56	63.9
AON		AON PLC	Financials	-329	-101	-82	-77	-411	-178	9,120	8,176	9,449	8,277	17.00	14.00	99	91	50	50
APA		APACHE CORP	Energy	22	21	-27	-27	-5	-6	238	208	216	187	0.00	0.00	27	27	3,356	3,42
AIV		APARTMENT INVST & MGMT CO	Real Estate															1.35	1.05
AAPL	DJIA	APPLE INC	Information Technology															123	132
AMAT		APPLIED MATERIALS INC	Information Technology	-145	-159			-159	361	365	506	524						18.4	21
APTIV		APTIV PLC	Consumer Discretionary	-487	-465		-3	-468	377	362	864	827				4	3	129	143
ADM		ARCHER-DANIELS-MIDLAND CO	Consumer Staples	-661	-587	-154	-144	-815	-731	2,448	1,736	3,109	2,323	0.00	0.00	154	144	31.3	31.6
ARNC		ARCONIC INC	Industrials	-2,497	-2,142	-927	-806	-3,424	-2,948	4,862	4,334	7,359	6,476	0.00	0.00	927	806	41.5	43
ANET		ARISTA NETWORKS INC	Information Technology															1.8	2.3
AJG		ARTHUR J GALLAGHER & CO	Financials	-52	-33	-3	-2	-55	-35	219	220	271	253	0.00	0.00	2.5	2	26,783	30,362
AIZ		ASSURANT INC	Financials	-16	-20	-55	-53	-71	-73	807	732	823	752	48.80	41.90	104	94.5	14.75	14.75
T		AT&T INC	Communication Services	-13,831	-3,758	-18,086	-15,101	-31,917	-18,859	45,463	51,681	59,294	55,439	5973.00	4277.00	24059	19378	254	268.22
ATO		ATMOS ENERGY CORP	Utilities	-160	-94	-89	-67	-249	-161	508	532	668	626	184.79	199.36	274.098	265.986	4,565	4,628
ADSK		AUTODESK INC	Information Technology	-37	-11			-11	121	81	158	92						8.8	9.6

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Company (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
ADP		AUTOMATIC DATA PROCESSING	Information Technology	272	43				43	2,138	2,178	1,867	2,135					58	57
AZO		AUTOZONE INC	Consumer Discretionary	2	0					316	0	315	0					87	89
AVB		AVALONBAY COMMUNITIES INC	Real Estate															3,112	3,087
AVY		AVERY DENNISON CORP	Materials	-495	-257	-4	-4	-499	-261	1,424	1,367	1,919	1,624	0.00	0.00	4.1	3.8	30	30
BHGE		BAKER HUGHES A GE CO	Energy	-359	-395	-187	-107	-546	-502	2,059	1,866	2,418	2,261	0.00	0.00	187	107	64	66
BLL		BALL CORP	Materials	-441	-395		-174		-569	6,052	5,175	6,493	5,570			220	174	18.3	17.5
BAC		BANK OF AMERICA CORP	Financials	3,808	3,711	-756	-676	3,052	3,035	25,375	23,223	21,567	19,512	300.00	252.00	1056	928	209.376	204.489
BK		BANK OF NEW YORK MELLON CORP	Financials	1,162	1,129	-72	-55	1,090	1,074	6,889	6,356	5,727	5,227	107.00	99.00	179	154	52.5	51.3
BAX		BAXTER INTERNATIONAL INC	Health Care	-911	-854	-235	-211	-1,146	-1,065	5,248	4,769	6,159	5,623	0.00	0.00	235	211	47	50
BBT		BB&T CORP	Financials	983	885				885	6,309	5,968	5,326	5,083					36.484	35.852
BDX		BECTON DICKINSON & CO	Health Care	-715	-604	-165	-148	-880	-752	1,932	2,642	2,647	3,246	0.00	0.00	165	148	41.933	76.032
BMS		BEMIS CO INC	Materials	-47	-75	-2	-2	-49	-77	704	616	751	691	0.00	0.00	2.3	1.7	16.582	15.694
BRK.B		BERKSHIRE HATHAWAY	Financials	-1,810	-1,963				-1,963	17,014	14,959	18,824	16,922					377.291	389.373
BBY		BEST BUY CO INC	Consumer Discretionary			0								0.00	0.00	0	0	125	125
BIIB		BIOGEN INC	Health Care	-8	-1	0		-8	-1	84	93	92	94	0.00	0.00	0	0	7.3	7.8
BLK		BLACKROCK INC	Financials							26	26							13.9	14.9
HRB		BLOCK H & R INC	Consumer Discretionary															90.7	86.1
BA		BOEING CO	Industrials	-16,382	-15,322	-5,942	-4,982	-22,324	-20,304	64,011	56,102	80,393	71,424	143.00	132.00	6085	5114	140.8	153
BKNG		BOOKING HOLDINGS INC	Consumer Discretionary															22.9	24.5
BWA		BORGWARNER INC	Consumer Discretionary	-189	-211	-107	-87	-296	-297	724	654	912	865	0.00	0.00	107	86.5	29	30
BXP		BOSTON PROPERTIES INC	Real Estate															0.74	0.76
BSX		BOSTON SCIENTIFIC CORP	Health Care	-120	-125				-125	87	107	207	232					29	32
BMJ	DJIA	BRISTOL-MYERS SQUIBB CO	Health Care	0	163	66	78	66	241	6,749	6,129	6,749	5,966	364.00	331.00	298	253	23.7	23.3
AVGO		BROADCOM INC	Information Technology	-82	30	3	7	-79	37	1,426	1,394	1,508	1,364	83.00	81.00	80	74	14	15
BR		BROADRIDGE FINANCIAL SOLUTIONS	Information Technology	-40	-43	-5	-5	-45	-48	0	0	40	43	0.00	0.00	4.9	5.3	10	10
BF.B		BROWN FORMAN CORP	Consumer Staples	-123	-154	-50	-50	-173	-204	780	754	903	908	0.00	0.00	50	50	4.8	4.7
CHRW		C H ROBINSON WORLDWIDE INC	Industrials															15.074	15.262
COG	DJIA	CABOT OIL & GAS CORP	Energy			-31	-30		-30					0.00	0.00	31.05	29.777	0.468	0.483
CDNS		CADENCE DESIGN SYSTEMS INC	Information Technology	-7	-8				-8	0	0	7	8					7.214	7.5
CPB		CAMPBELL SOUP CO	Consumer Staples	-267	-103	-276	-235	-543	-338	2,183	2,154	2,450	2,257	0.00	0.00	276	235	18	23
COF		CAPITAL ONE FINANCIAL CORP	Financials	68	61	-29	-23	39	38	246	218	178	157	6.00	6.00	35	29	49.3	47.6
CPRI		CAPRI HOLDINGS LTD	Consumer Discretionary															14.846	17.797
CAH		CARDINAL HEALTH INC	Health Care															40.4	50.2
KMX		CARMAX INC	Consumer Discretionary	-85	-77				-77	157	166	242	243					25.11	25.946
CCL		CARNIVAL CORP/PLC (USA)	Consumer Discretionary															99.2	102
CAT		CATERPILLAR INC	Industrials	-4,211	-3,446	-3,498	-3,321	-7,709	-6,767	17,721	16,722	21,932	20,168	504.00	328.00	4002	3649	98.4	104
CBOE		CBOE GLOBAL MARKETS INC	Financials															0.889	0.842
CBRE		CBRE GROUP INC	Real Estate	-122	-113				-113	334	274	456	387					80	90
CBS		CBS CORP	Communication Services	-994	-1,145	-424	-342	-1,418	-1,487	3,046	2,526	4,040	3,671	0.00	1.00	424	343	16.73	16.73
CE		CELANESE CORP	Materials	-477	-497	-66	-59	-543	-556	3,251	2,915	3,728	3,412	0.00	0.00	66	59	7.592	7.7
CELG		CELGENE CORP	Health Care															7.467	8.852
CNC		CENTENE CORP	Health Care															33.7	47.3
CNP		CENTERPOINT ENERGY INC	Utilities	-424	-497	-266	-217	-690	-714	1,801	1,516	2,225	2,013	120.00	114.00	386	331	7.977	7.977
CTL		CENTURYLINK INC	Communication Services	-2,062	-1,561	-3,352	-2,959	-5,414	-4,520	11,060	10,033	13,122	11,594	23.00	18.00	3375	2977	51	45
CERN	DJIA	CERNER CORP	Health Care															26	29.2
CF		CF INDUSTRIES HOLDINGS INC	Materials	-243	-210	-53	-43	-296	-253	1,152	1,056	1,395	1,266	0.00	0.00	53	43	3	3
CHTR		CHARTER COMMUNICATIONS INC	Communication Services	-296	-98				-98	3,273	2,943	3,569	3,041					94.8	98
CVX		CHEVRON CORP	Energy	-4,406	-3,872	-2,788	-2,430	-7,194	-6,302	14,714	12,674	19,120	16,546	0.00	0.00	2788	2430	51.9	48.6
CMG		CHIPOTLE MEXICAN GRILL INC	Consumer Discretionary															68.89	73
CB		CHUBB LTD	Financials	-81	-242	20	30	-61	-212	4,281	3,792	4,362	4,034	157.00	143.00	137	113	31	32.7
CHD		CHURCH & DWIGHT INC	Consumer Staples							IF	IF	IF	IF					4.7	4.7
CI		CIGNA CORP	Health Care	-688	-590	-256	-210	-944	-800	4,281	4,151	4,969	4,741	2.00	0.00	258	210	46	73.8
XEC		CIMAREX ENERGY CO	Energy															0.91	0.955
CINF		CINCINNATI FINANCIAL CORP	Financials	-6	0					345	318	351	318					4.925	4.999
CTAS		CINTAS CORP	Industrials	-28						59		86						41	
CSCO		CISCO SYSTEMS INC	Information Technology															72.9	74.2
C		CITIGROUP INC	Financials	-1,620	-1,615	-579	-440	-2,199	-2,055	19,853	18,189	21,473	19,804	1381.00	1381.00	1960	1821	209	204
CFG		CITIZENS FINANCIAL GROUP INC	Financials	-56	-17				-17	1,139	1,050	1,195	1,067					17.6	18.1

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Company (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
CTXS		CITRIX SYSTEMS INC	Information Technology															7.5	8.2
CLX		CLOROX CO/DE	Consumer Staples	-199	-173	-42	-38	-241	-211	434	420	633	593	0.00	0.00	42	38	8.1	8.7
CME		CME GROUP INC	Financials	74	51				51	348	316	274	265					2.83	4.59
CMS		CMS ENERGY CORP	Utilities	-629	-405	323	235	-306	-170	2,305	2,247	2,934	2,652	1420.00	1280.00	1097	1045	7.952	8.625
KO		COCA-COLA CO	Consumer Staples	-612	-595	-494	-419	-1,106	-1,014	8,843	7,409	9,455	8,004	288.00	289.00	782	708	61.8	62.6
CTSH		COGNIZANT TECH SOLUTIONS	Information Technology															260	281.6
CL		COLGATE-PALMOLIVE CO	Consumer Staples	-823	-856	-960	-822	-1,783	-1,678	2,387	2,078	3,210	2,934	0.00	54.00	960	876	35.9	34.5
CMCSA	DJIA	COMCAST CORP	Communication Services			-425	-408		-408			338	312	0.00		425	408	164	184
CMA		COMERICA INC	Financials	474	346	9	10	483	356	2,747	2,458	2,273	2,112	60.00	56.00	51	46	8.19	8.051
CAG		CONAGRA BRANDS INC	Consumer Staples	-69		-116		-184		3,355		3,424		3.70		119.3		12.4	
CXO		CONCHO RESOURCES INC	Energy															1.203	1.503
COP		CONOCOPHILLIPS	Energy	-893	-880	-265	-218	-1,158	-1,098	6,188	4,694	7,081	5,574	0.00	0.00	265	218	11.4	10.8
ED		CONSOLIDATED EDISON INC	Utilities	-1,262	-999	-180	-229	-1,442	-1,228	14,274	13,450	15,536	14,449	1039.00	885.00	1219	1114	15.591	15.307
STZ		CONSTELLATION BRANDS -CL A	Consumer Staples															9.6	9.8
COO		COOPER COS INC (THE)	Health Care	-39	-26				-26	113	121	152	147					11.8	12
CPRT	DJIA	COPART INC	Industrials															5.323	6.026
GLW		CORNING INC	Information Technology	-649	-764	-789	-699	-1,438	-1,463	3,539	3,239	4,188	4,003	0.00	0.00	789	699	46.2	51.5
CTVA		CORTEVA INC- SPN	Materials	-5,266	-4,496	-2,810	-2,514	-8,076	-7,010	20,284	18,918	25,550	23,414	0.00	0.00	2810	2514		21.9
COST		COSTCO WHOLESALE CORP	Consumer Staples															231	245
COTY		COTY INC	Consumer Staples	-493	-488	-63	-53	-557	-541	234	262	728	750	0.40	0.40	63.8	53.2	22	20
CCI		CROWN CASTLE INTL CORP	Real Estate															4.5	5
CSX		CSX CORP	Industrials	-169	-327	-250	-118	-419	-445	2,833	2,431	3,002	2,758	0.00	0.00	250	118	24.006	22.475
CMI		CUMMINS INC	Industrials	699	607	-318	-246	381	361	5,126	4,719	4,427	4,112	0.00	0.00	318	246	58.6	62.61
CVS		CVS HEALTH CORP	Health Care	-131	-178	-25	-228	-156	-406	0	5,663	131	5,841	0.00	0.00	25	228	246	295
DHI		D R HORTON INC	Consumer Discretionary															7.735	8.437
DHR		DANAHER CORP	Health Care	-981	-891	-167	-147	-1,148	-1,037	3,204	2,897	4,185	3,787	0.00	0.00	167.3	146.5	67	71
DRI		DARDEN RESTAURANTS INC	Consumer Discretionary	17		-20		-3		254		237		0.00		19.9		180.656	185
DVA		DAVITA INC	Health Care															74.5	77.7
DE		DEERE & CO	Industrials	-1,073	494	-5,623	-4,753	-6,696	-4,259	12,093	12,602	13,166	12,108	539.00	719.00	6162	5472	60.476	74.413
DAL		DELTA AIR LINES INC	Industrials	-6,952	-6,350				-6,350	14,744	13,459	21,696	19,809					86.564	88.68
XRAY		DENTSPLY SIRONA INC	Health Care	-360	-339	-16		-376	-339	186	173	546	512	0.00		15.9		16.1	16.4
DVN		DEVON ENERGY CORP	Energy	-244	-234	-19	-17	-263	-251	1,035	709	1,279	943	0.00	0.00	19	17	4.9	2.9
FANG		DIAMONDBACK ENERGY INC	Energy				3		3						8.22		5.351	0.251	0.711
DLR		DIGITAL REALTY TRUST INC	Real Estate															1.436	1.53
DFS		DISCOVER FINANCIAL SVCS	Financials	-179	-95				-95	424	455	603	550					16.5	16.6
DISCA		DISCOVERY INC	Communication Services		-40				-40		70		110					7	9
DISH		DISH NETWORK CORP	Communication Services															17	16
DIS		DISNEY (WALT) CO	Communication Services	-2,207	-1,772	-1,050	-878	-3,257	-2,650	12,325	12,728	14,532	14,500	696.00	731.00	1746	1609	199	201
DG		DOLLAR GENERAL CORP	Consumer Discretionary															129	135
DLTR		DOLLAR TREE INC	Consumer Discretionary															176.1	182.1
D		DOMINION ENERGY INC	Utilities	-990	-1,303	200	218	-790	-1,085	8,062	7,197	9,052	8,500	1729.00	1581.00	1529	1363	16.2	21.3
DOV		DOVER CORP	Industrials	-157	-133	-9	-8	-166	-141	793	651	951	784	0.00	0.00	8,595	7,849	29	24
DOW		DOW INC	Materials	-8,450	-7,056	-1,567	-1,478	-10,017	-8,534	23,401	22,544	31,851	29,600	0.00	0.00	1567	1478		
DTE		DTE ENERGY CO	Utilities	-940	-851	-62	44	-1,002	-807	4,636	4,273	5,576	5,124	1848.00	1689.00	1910	1645	10.2	10.6
DUK	DJIA	DUKE ENERGY CORP	Utilities	224	60	-588	-533	-364	-473	9,003	8,233	8,779	8,173	225.00	195.00	813	728	29.06	30.083
DRE		DUKE REALTY CORP	Real Estate															0.4	0.4
DD		DUPONT DE NEMOURS INC	Materials	-13,716	-11,552	-4,377	-3,992	-18,093	-15,544	43,685	41,462	57,401	53,014	0.00	0.00	4377	3992	98	98
DXC		DXC TECHNOLOGY CO	Information Technology	190	327				327	11,574	11,343	11,384	11,016					150	130
ETFC		E TRADE FINANCIAL CORP	Financials															3.607	4.035
EMN		EASTMAN CHEMICAL CO	Materials	-220	-266	-590	-537	-810	-803	2,827	2,533	3,047	2,799	148.00	135.00	738	672	14	14.5
ETN		EATON CORP PLC	Industrials	-1,048	-1,290	-393	-341	-1,441	-1,631	5,312	4,628	6,360	5,918	55.00	37.00	448	378	96	99
EBAY	DJIA	EBAY INC	Consumer Discretionary															14.1	14
ECL		ECOLAB INC	Materials	-816	-771	-174	-141	-989	-912	3,208	2,907	4,023	3,678	7.60	6.00	181.3	147.3	48.4	49
EIX		EDISON INTERNATIONAL	Utilities	-563	-559	-7	147	-570	-412	3,616	3,321	4,179	3,880	2330.00	2133.00	2337	1986	12.521	12.574
EW		EDWARDS LIFESCIENCES CORP	Health Care	-44	-37				-37	71	60	115	97					12.2	12.8
EA		ELECTRONIC ARTS INC	Communication Services															9.3	9.7
EMR		EMERSON ELECTRIC CO	Industrials	-330	77		-149		-72	5,528	5,476	5,858	5,399			174	149	76.5	87.5
ETR		ENTERGY CORP	Utilities	-1,934	-1,923	-904	-623	-2,838	-2,546	6,215	5,629	8,149	7,552	659.33	609.78	1563.487	1232.619	13.504	13.688

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Company (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
EOG		EOG RESOURCES INC	Energy															2,664	2.8
EFX		EQUIFAX INC	Industrials	-171	-132	-7	-8	-178	-140	561	534	732	666	17.10	13.90	24.2	21.9	10.3	10.9
EQIX		EQUINIX INC	Real Estate															7,273	7,903
EQR		EQUITY RESIDENTIAL	Real Estate															2.7	2.7
ESS		ESSEX PROPERTY TRUST	Real Estate															1,835	1,826
RE		EVEREST RE GROUP LTD	Financials	-106	-40	-35	-28	-141	-68	210	261	316	300	0.00	0.00	34,717	28,483	1,276	1,415
EVRG		EVERGY INC	Utilities	-480	-950	-14	-26	-494	-976	887	1,603	1,367	2,553	124.07	223.30	138,564	249.3	2,205	4,832
ES		EVERSOURCE ENERGY	Utilities	-1,197	-946	-26	8	-1,223	-938	4,740	4,574	5,937	5,520	922.20	849.60	948.6	841.5	8,084	7,998
EXC		EXELON CORP	Utilities	-3,764	-4,014	-2,124	-1,961	-5,888	-5,975	18,573	16,678	22,337	20,692	2732.00	2408.00	4856	4369	34,621	33,383
EXPE		EXPEDIA GROUP INC	Consumer Discretionary															22,615	24.5
EXPD		EXPEDITORS INTL WASH INC	Industrials															16.5	17.4
EXR		EXTRA SPACE STORAGE INC	Real Estate															3.38	3,624
XOM		EXXON MOBIL CORP	Energy	-13,030	-12,932	-7,673	-7,085	-20,703	-20,017	34,243	30,620	47,273	43,552	427.00	386.00	8100	7471	69.6	71
FFIV	DJIA	FS NETWORKS INC	Information Technology															4,366	4,409
FB		FACEBOOK INC	Communication Services															25,105	35,587
FAST		FASTENAL CO	Industrials															20,565	21,644
FRT		FEDERAL REALTY INVESTMENT TR	Real Estate															0.326	0,303
FDX		FEDEX CORP	Industrials	-1,254		-955		-2,209		23,566		24,820		0.00		955		429	460
FIS		FIDELITY NATIONAL INFO SVCS	Information Technology									57	54					53	47
FITB		FIFTH THIRD BANCORP	Financials	-24	-17				-17	185	164	209	181					18,125	17,437
FRC		FIRST REPUBLIC BANK	Financials															4,025	4,48
FE		FIRSTENERGY CORP	Utilities	-3,463	-2,478	-292	-200	-3,755	-2,678	6,704	6,984	10,167	9,462	439.00	408.00	731	608	15,617	12,494
FISV		FISERV INC	Information Technology															24	24
FLT		FLEETCOR TECHNOLOGIES INC	Information Technology															7.89	7.58
FLIR		FLIR SYSTEMS INC	Information Technology	-10	-4				-4	0	0	10	4					3,542	3,649
FLS		FLOWERVE CORP	Industrials	-162	-151	-24	-19	-186	-170	714	658	875	809	0.00	0.00	23,882	18.81	17	17
FMC		FMC CORP	Materials	-46	8	-19	-19	-65	-10	1,340	1,270	1,386	1,261	0.00	0.00	19	18.9	7	7.3
FL		FOOT LOCKER INC	Consumer Discretionary	14	-95	-15	-12	-1	-107	697	644	683	739	0.00	0.00	15	12	49,209	49,331
F		FORD MOTOR CO	Consumer Discretionary	-6,621	-6,301	-6,169	-5,559	-12,790	-11,860	73,817	67,047	80,438	73,348	0.00	0.00	6169	5559	202	199
FTNT		FORTINET INC	Information Technology															5,066	5,845
FTV		FORTIVE CORP	Industrials	-148	-125				-125	231	180	379	305					26	24
FBHS		FORTUNE BRANDS HOME & SECUR	Industrials	-176	-164	-2	-1	-177	-165	657	600	832	763	0.00	0.00	1.6	1.4	23.8	25.3
FOXA		FOX CORP	Communication Services	-280	-252				-252	70	70	350	322						
BEN		FRANKLIN RESOURCES INC	Financials															9,386	9,691
FCX		FREEPORT-MCMORAN INC	Materials	-726	-779	-143	-128	-869	-907	1,857	1,671	2,583	2,450	0.00	0.00	143	128	25.2	26.8
GPS		GAP INC	Consumer Discretionary															135	135
GRMN		GARMIN LTD	Consumer Discretionary															12.3	13
IT		GARTNER INC	Information Technology	-27	-25				-25	18	19	45	45					15,131	15,173
GD		GENERAL DYNAMICS CORP	Industrials	-4,082	-4,188	-455	-365	-4,537	-4,553	10,130	11,532	14,212	15,720	541.00	570.00	996	935	98.6	105.6
GE		GENERAL ELECTRIC CO	Industrials	-28,703	-22,368	-5,488	-4,791	-34,191	-27,159	71,585	69,388	100,288	91,756	518.00	362.00	6006	5153	313	283
GIS		GENERAL MILLS INC	Consumer Staples	-239		-146		-384		6,177		6,416		726.10		871.8		40	40
GM		GENERAL MOTORS CO	Consumer Discretionary	-14,105	-11,464	-6,374	-5,744	-20,479	-17,208	77,134	69,630	91,239	81,094	0.00	0.00	6374	5744	180	173
GPC		GENUINE PARTS CO	Consumer Discretionary	-229	-235				-235	2,206	2,043	2,436	2,278					48	50
GILD		GILEAD SCIENCES INC	Health Care															10	11
GNP		GLOBAL PAYMENTS INC	Information Technology															10	11
GS		GOLDMAN SACHS GROUP INC	Financials															36.6	36.6
GWW		GRAINGER (W W) INC	Industrials			-19	-14		-14					189.49	176.00	208.35	190	25.7	24.6
HAL		HALLIBURTON CO	Energy	-282	-119				-119	920	832	1,202	951					55	60
HBI		HANESBRANDS INC	Consumer Discretionary	-405	-378				-378	873	787	1,278	1,165					67.2	68
HOG		HARLEY-DAVIDSON INC	Consumer Discretionary	-38	-110	-121	-96	-159	-206	2,163	1,875	2,201	1,985	217.54	190.36	338,488	286,574	5.8	5.9
HRS		HARRIS CORP	Industrials	-1,219	-676	-53	-26	-1,272	-702	4,921	5,098	6,140	5,774	212.00	207.00	265	233	17	17.5
HIG		HARTFORD FINANCIAL SERVICES	Financials	-784	-656	-142	-135	-926	-791	3,592	3,344	4,376	4,000	114.00	85.00	256	220	16.4	18.5
HAS		HASBRO INC	Consumer Discretionary	-10	-38	-32	-30	-43	-69	383	357	393	396	0.00	0.00	32,153	30,081	5.4	5.8
HCA	DJIA	HCA HEALTHCARE INC	Health Care															253	262
HCP		HCP INC	Real Estate															0.19	0,201
HP		HELMERICH & PAYNE	Energy	-17	-11				-11	93	95	110	106					8,123	9,777
JKHY		HENRY (JACK) & ASSOCIATES	Information Technology															5,972	6,307
HSIC		HENRY SCHEIN INC	Health Care															22.4	18

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Company (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
HSY		HERSHEY CO	Consumer Staples	-31	-67	-236	-215	-267	-282	1,086	964	1,118	1,031	0.00	0.00	236.112	214.719	16.91	16.42
HES		HESS CORP	Energy	-282	-140	-87	-59	-369	-199	2,732	2,568	3,014	2,708	0.00	0.00	87	59	2,075	1,708
HPE		HEWLETT PACKARD ENTERPRISE	Information Technology	-459	-501	-120	-108	-579	-609	12,610	12,167	13,069	12,668	50.00	52.00	170	160	66	60
HLT		HILTON WORLDWIDE HOLDINGS	Consumer Discretionary	-156	-138	0		-156	-138	757	677	913	815	0.00	0.00	0	0	163	169
HFC		HOLLYFRONTIER CORP	Energy	-7	-4	-29	-27	-37	-31	59	62	66	67	0.00	0.00	29.499	26.88	3,522	3,622
HOLX		HOLOGIC INC	Health Care	-10	-10				-10	0	0	10	10					6,233	6,252
HD		HOME DEPOT INC	Consumer Discretionary															413	413
HON		HONEYWELL INTERNATIONAL INC	Industrials	966	1,267	-530	-364	436	903	26,136	23,590	25,170	22,323	0.00	0.00	530	364	131	114
HRL		HORMEL FOODS CORP	Consumer Staples	-80	-38	-305	-272	-385	-310	1,380	1,313	1,460	1,351	0.00	0.00	304.683	272.272	20.2	20.1
HST	DJIA	HOST HOTELS & RESORTS INC	Real Estate															0.205	0.184
HPQ		HP INC	Information Technology	-1,745	-1,526	-112	-9	-1,857	-1,535	11,653	10,868	13,398	12,394	351.00	388.00	463	397	49	55
HUM		HUMANA INC	Health Care			0								0.00	0.00	0	0	45.9	41.6
JBHT		HUNT (JB) TRANSPRT SVCS INC	Industrials															24.681	27.621
HBAN		HUNTINGTON BANCSHARES	Financials	3	7				7	903	828	900	821			7		15.77	15.693
HII		HUNTINGTON INGALLS IND INC	Industrials	-941	-793	-553	-479	-1,494	-1,272	5,837	5,726	6,778	6,519	0.00	0.00	553	479	38	40
IDXX		IDEXX LABS INC	Health Care															7.6	8.377
INFO		IHS MARKIT LTD	Industrials	-23	-17	-8		-32	-17	199	175	222	193	0.00	0.00	8.4	0	13	14.9
ITW		ILLINOIS TOOL WORKS	Industrials	171	121	-173	-178	-2	-57	2,832	2,550	2,661	2,429	373.00	333.00	546	511	50	48
ILMN		ILLUMINA INC	Health Care															6.2	7.3
INCY		INCYTE CORP	Health Care	-13	-16				-16	24	30	38	46					1.208	1.367
IR		INGERSOLL-RAND PLC	Industrials	-679	-698	-528	-443	-1,207	-1,141	3,063	2,767	3,742	3,465	0.00	0.00	528	442.7	46	49
INTC		INTEL CORP	Information Technology	-1,555	-882	-4	-71	-1,559	-953	2,287	2,551	3,842	3,433	563.00	476.00	567	547	102.7	107.4
ICE		INTERCONTINENTAL EXCHANGE	Financials	-6	3		-154		-151	869	794	875	791			179	154	4,952	5,161
IPG		INTERPUBLIC GROUP OF COS	Communication Services	-205	-158	-32	-28	-237	-185	503	454	708	611	0.00	0.00	31.8	27.7	50.2	54
IBM		INTL BUSINESS MACHINES CORP	Information Technology	-8,062	-8,611	-4,828	-4,523	-12,890	-13,134	93,492	84,971	101,554	93,582	88.00	94.00	4916	4617	366.6	350.6
IFF		INTL FLAVORS & FRAGRANCES	Materials	-64	-91		-60		-150	1,512	1,429	1,576	1,520			82.714	59.625	7,299	13,209
IP		INTL PAPER CO	Materials	-1,967	-1,786	-295	-237	-2,262	-2,023	11,544	8,896	13,511	10,682	0.00	0.00	295	237	56	53
INTU		INTUIT INC	Information Technology			0								0.00	0.00	0	0	8.2	8.9
ISRG	DJIA	INTUITIVE SURGICAL INC	Health Care															4,444	5,527
IVZ		INVESCO LTD	Financials	-62	-45	0		-62	-45	487	430	549	476	0.00	0.00	0	0	7.03	7,459
IPGP		IPG PHOTONICS CORP	Information Technology															5.03	6.22
IQV	DJIA	IQVIA HOLDINGS INC	Health Care	-157	-152		-11		-163	751	696	908	848			12	11	55	58
IRM		IRON MOUNTAIN INC	Real Estate															24	26.2
JEC		JACOBS ENGINEERING GROUP INC	Industrials	-252	-339				-339	1,225	2,258	1,477	2,598					54.7	80.8
JEF		JEFFERIES FINANCIAL GRP INC	Financials	-87	-52				-52	151	139	238	191					12.7	4.7
JNJ		JOHNSON & JOHNSON	Health Care	-4,817	-4,852	-4,301	-4,300	-9,118	-9,152	28,404	26,818	33,221	31,670	281.00	180.00	4582	4480	134	135.1
JCI		JOHNSON CONTROLS INTL PLC	Industrials	-794	-570	-37	-22	-831	-592	5,346	5,163	6,140	5,733	177.00	174.00	214	196	121	122
JPM	DJIA	JPMORGAN CHASE & CO	Financials	2,903	2,540	2,073	2,021	4,976	4,561	19,603	18,052	16,700	15,512	2757.00	2633.00	684	612	252.539	256.105
JNPR		JUNIPER NETWORKS INC	Information Technology															9,381	9,283
KSU		KANSAS CITY SOUTHERN	Industrials															7.13	7.2
K	DJIA	KELLOGG CO	Consumer Staples	-605	-440	102	71	-503	-369	5,043	4,677	5,648	5,117	1292.00	1140.00	1190	1069	33	34
KEY		KEYCORP	Financials	-160	-155	-16	-17	-176	-172	1,163	1,046	1,323	1,201	52.00	47.00	68	64	18.415	18.18
KEYS		KEYSIGHT TECHNOLOGIES INC	Information Technology	-58	68	-25	-18	-83	50	1,955	1,967	2,013	1,899	182.00	172.00	207	190	12.6	12.9
KMB		KIMBERLY-CLARK CORP	Consumer Staples	-399	-289	-765	-673	-1,164	-962	3,897	3,398	4,296	3,687	0.00	0.00	765	673	42	41
KIM		KIMCO REALTY CORP	Real Estate															0.546	0.533
KMI		KINDER MORGAN INC	Energy	-686	-702	-90	-33	-776	-735	2,296	1,864	2,982	2,566	335.00	306.00	425	339	10,897	11,012
KLAC		KLA-TENCOR CORP	Information Technology	-75	-69				-69	22	28	97	97					5.99	6.55
KSS		KOHL'S CORP	Consumer Discretionary															137	129
KHC		KRAFT HEINZ CO	Consumer Staples	758	918	-365	-250	393	668	8,941	6,908	8,183	5,990	1188.00	1044.00	1553	1294	39	38
KR		KROGER CO	Consumer Staples	-620	-282	-202	-200	-822	-482	2,943	3,010	3,563	3,292	0.00	0.00	202	200	449	453
LB		L BRANDS INC	Consumer Discretionary															93.2	88.9
LH		LABORATORY CP OF AMER HLDGS	Health Care	-166	-127	-9	-7	-175	-134	546	505	711	633	0.00	0.00	9.3	6.9	60	61
LRCX		LAM RESEARCH CORP	Information Technology				-37		-37							39.9	37.2	9.4	10.9
LW		LAMB WESTON HOLDINGS INC	Consumer Staples	-2		-7		-9		17		19		0.00		7		7.2	
EL		LAUDER (ESTEE) COS INC -CL A	Consumer Staples	-179	-85	-146	-136	-325	-221	1,329	1,399	1,508	1,484	37.00	34.00	183	170	46	46
LEG		LEGGETT & PLATT INC	Consumer Discretionary	-56	-38				-38	186	182	242	220					22.2	22
LEN		LENNAR CORP	Consumer Discretionary															9,111	11,626
LLY		LILLY (ELI) & CO	Health Care	-3,254	-2,598	644	854	-2,610	-1,744	11,845	11,064	15,098	13,662	2372.40	2398.10	1728.5	1543.9	40,655	38.68

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Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Company (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
LNC		LINCOLN NATIONAL CORP	Financials	-108	-121	-27	-10	-135	-131	1,566	1,356	1,674	1,477	60.00	64.00	87	74	9,047	11,034
LIN		LINDE PLC	Materials	-718	-1,797	-146	-184	-864	-1,981	2,222	8,244	2,940	10,041	0.00	0.00	146	184	26,461	80,82
LKQ		LKQ CORP	Consumer Discretionary		-110				-110		92		201					43	51
LMT		LOCKHEED MARTIN CORP	Industrials	-15,591	-11,303	-719	-704	-16,310	-12,007	33,095	32,002	48,686	43,305	1883.00	1644.00	2602	2348	100	105
L		LOEWS CORP	Financials	-665	-615	26	32	-639	-583	2,577	2,304	3,242	2,919	88.00	85.00	62	53	18.1	17.9
LOW		LOWE'S COS INC	Consumer Discretionary															310	300
LYB		LYONDELLBASELL INDUSTRIES NV	Materials	-903	-992	-342	-293	-1,245	-1,285	2,532	2,419	3,435	3,411	0.00	0.00	342	293	13.4	19.45
MTB		M & T BANK CORP	Financials	-174	-116	-69	-60	-242	-176	2,015	1,834	2,189	1,950	0.00	0.00	68.637	59.991	16,794	17,267
MAC		MACERICH CO	Real Estate															0.855	0.718
M		MACY'S INC	Consumer Discretionary	-565	-637	-156	-137	-721	-774	3,409	3,018	3,974	3,655	0.00	0.00	156	137	130	130
MRO		MARATHON OIL CORP	Energy	-97	-40	-221	-96	-318	-136	886	797	983	837	0.00	0.00	221	96	2.3	2.4
MPC		MARATHON PETROLEUM CORP	Energy	-324	-690	-826	-884	-1,150	-1,574	1,840	2,089	2,164	2,779	0.00	0.00	826	884	43.8	60.35
MKTX		MARKETAXESS HOLDINGS INC	Financials															0.429	0.454
MAR		MARRIOTT INTL INC	Consumer Discretionary	27	-5	-14	-12	13	-17	294	202	267	207	0.00	0.00	14	12	177	176
MMC		MARSH & MCLENNAN COS	Financials	-99	-130	-102	-88	-201	-218	16,175	14,368	16,274	14,498	2.00	1.00	104	89	65	65
MLM		MARTIN MARIETTA MATERIALS	Materials	-241	-130	-15	-13	-257	-143	638	718	879	848	0.00	0.00	15,347	13,293	8,406	8,714
MAS		MASCO CORP	Industrials	-436	-381	-10	-9	-446	-390	695	670	1,131	1,051	0.00	0.00	10	9	26	26
MA		MASTERCARD INC	Information Technology	-41	-28	-61	-57	-102	-85	427	410	468	438	0.00	0.00	61	57	13.4	14.8
MXIM		MAXIM INTEGRATED PRODUCTS	Information Technology			-18	-19		-19					0.00	0.00	18,093	19,39	7.04	7,149
MKC		MCCORMICK & CO INC	Consumer Staples	-170	-99	-71	-63	-241	-162	986	947	1,155	1,046	0.00	0.00	70.9	62.9	11.7	11.6
MCD		MCDONALD'S CORP	Consumer Discretionary															235	210
MCK		MCKESSON CORP	Health Care	-498	-465	-78	-73	-576	-538	1,022	964	1,520	1,429	0.00	0.00	78	73	78	80
MDT		MEDTRONIC PLC	Health Care	-928	-1,099	-14	-26	-942	-1,125	4,065	4,137	4,993	5,236	303.00	297.00	317	323	98.003	101.013
MRK		MERCK & CO	Health Care	-1,152	-1,475	-808	-647	-1,960	-2,122	20,235	18,228	21,387	19,703	1114.00	968.00	1922	1615	69	69
MET	DJIA	METLIFE INC	Financials	-1,721	-1,643	-240	36	-1,961	-1,607	9,688	8,948	11,409	10,591	1434.00	1360.00	1674	1324	49	48
MTD		METTLER-TOLEDO INTL INC	Health Care	-141	-131	-3	-2	-144	-134	920	863	1,061	994	0.00	0.00	2,673	2,186	15.4	16
MGM		MGM RESORTS INTERNATIONAL	Consumer Discretionary															77	83
MCHP		MICROCHIP TECHNOLOGY INC	Information Technology	-61	-73	0		-61	-73	0	0	61	73	0.00	0.00	0	0	14,234	18,286
MU		MICRON TECHNOLOGY INC	Information Technology	-25	-19				-19	150	171	175	190					34.1	36
MSFT		MICROSOFT CORP	Information Technology															124	131
MAA		MID-AMERICA APT CMNTYS INC	Real Estate															2,464	2,552
MHK		MOHAWK INDUSTRIES INC	Consumer Discretionary	-12	-9				-9	53	54	65	64					38.8	42.1
TAP		MOLSON COORS BREWING CO	Consumer Staples	313	313	-804	-672	-490	-360	5,898	5,217	5,584	4,905	0.00	0.00	803.6	672.1	17.2	17.75
MDLZ		MONDELEZ INTERNATIONAL INC	Consumer Staples	-1,570	-1,114	-435	-366	-2,005	-1,480	11,044	9,975	12,614	11,089	0.00	0.00	435	366	83	80
MNST		MONSTER BEVERAGE CORP	Consumer Staples															2,991	3,142
MCO	DJIA	MOODY'S CORP	Financials	-161	-159	-31	-32	-192	-191	357	348	518	508	0.00	0.00	31.2	31.8	11,896	13,057
MS		MORGAN STANLEY	Financials	-498	-360	-86	-71	-584	-431	3,468	3,203	3,966	3,563	0.00	0.00	86	71	57,633	60,348
MOS		MOSAIC CO	Materials	27	28	-41	-111	-14	-84	793	701	766	674	0.00	0.00	41.3	111.1	8.5	13.6
MSI		MOTOROLA SOLUTIONS INC	Information Technology	-1,875	-1,407	66	61	-1,809	-1,346	5,204	5,111	7,079	6,518	151.00	133.00	85	72	15	16
MSCI		MSCI INC	Financials							21	22							3,038	3,112
MYL		MYLAN NV	Health Care	-369	-352	-35	-34	-404	-386	296	284	665	635	0.00	0.00	35.1	34	35	35
NDAQ		NASDAQ INC	Financials											0.00	0.00			4,734	4,099
NOV		NATIONAL OILWELL VARCO INC	Energy	-45	-58	-62	-45	-107	-103	588	517	633	575	0.00	0.00	62	45	31,889	35,063
NKTR		NEKTAR THERAPEUTICS	Health Care															0.509	0.618
NTAP		NETAPP INC	Information Technology			-28	-30		-30					25.00	31.00	53	61	10.3	10.5
NFLX		NETFLIX INC	Communication Services															5.5	7.1
NWL		NEWELL BRANDS INC	Consumer Discretionary	-383	-290	-65	-53	-448	-343	1,892	1,629	2,275	1,918	0.00	0.00	65.1	53	49	37
NEM		NEWMONT GOLD CORP	Materials	-136	-154	-86	-82	-222	-236	985	909	1,121	1,063	0.00	0.00	86	82	12,547	12.4
NWSA		NEWS CORP	Communication Services	-195	-14	-117	-106	-312	-120	1,389	1,360	1,584	1,374	0.00	0.00	117	106	26	28
NEE		NEXTERA ENERGY INC	Utilities	1,427	1,284				1,284	4,020	3,806	2,593	2,522					14	14.3
NLSN		NIELSEN HOLDINGS PLC	Industrials	-213	-202				-202	1,559	1,396	1,772	1,598					46	46
NKE	DJIA	NIKE INC -CL B	Consumer Discretionary															73.1	
NI		NISOURCE INC	Utilities	-33	-114	-294	-276	-326	-390	2,160	1,868	2,193	1,981	262.50	216.30	556.3	492.5	8,175	8,087
NBL		NOBLE ENERGY INC	Energy															2,277	2,33
JWN		NORDSTROM INC	Consumer Discretionary	-200	-190				-190	0	0	200	190					72.5	71
NSC		NORFOLK SOUTHERN CORP	Industrials	-168	-266	-309	-308	-477	-574	2,373	2,105	2,541	2,371	201.00	158.00	510	466	27.11	26,662
NTRS		NORTHERN TRUST CORP	Financials	132	136	-34	-28	98	108	1,685	1,547	1,553	1,411	0.00	0.00	34.4	28.1	18.1	18.8
NOC		NORTHROP GRUMMAN CORP	Industrials	-4,741	-5,081	-772	-683	-5,513	-5,764	27,226	27,150	31,967	32,231	1338.00	1247.00	2110	1930	70	85

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Company (Not Historical Index Makeup) (cont.)**Pension and OPEB in USD Millions**

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
NCLH		NORWEGIAN CRUISE LINE HLDGS	Consumer Discretionary	-25	-24				-24	0	0	25	24					31	33.2
NRG		NRG ENERGY INC	Utilities	-225	-241	-128	-83	-353	-324	1,104	981	1,329	1,222	0.00	0.00	128	83	5.94	4.862
NUE		NUCOR CORP	Materials			-25	-26		-26					0.00	0.00	25.1	25.5	25.1	26.3
NVDA		VIDIA CORP	Information Technology															11,528	13,277
OXY		OCCIDENTAL PETROLEUM CORP	Energy	12	-11	-999	-808	-987	-819	403	338	391	349	0.00	0.00	999	808	11	11
OMC		OMNICOM GROUP	Communication Services	-197	-201	-128	-127	-324	-328	80	57	277	258	0.00	0.00	127.7	126.5	77.3	70.4
OKE		ONEOK INC	Energy	-176	-176	-24	-16	-199	-192	306	291	482	467	34.13	30.80	57.938	46.84	2.47	2,684
ORCL		ORACLE CORP	Information Technology															137	136
ORLY		O'REILLY AUTOMOTIVE INC	Consumer Discretionary															75,552	78,882
PCAR		PACCAR INC	Industrials	99	44				44	2,920	2,699	2,821	2,655					25	28
PKG		PACKAGING CORP OF AMERICA	Materials	-345	-332	-17	-15	-362	-346	955	873	1,300	1,205	0.00	0.00	16.5	14.6	14.6	15
PH		PARKER-HANNIFIN CORP	Industrials	-1,322	-1,118	-80	-67	-1,402	-1,185	3,896	3,916	5,218	5,034	0.00	0.00	79.933	66.521	56.69	57.17
PAYX		PAYCHEX INC	Information Technology															14.3	
PYPL		PAYPAL HOLDINGS INC	Information Technology															18.7	21.8
PNR		PENTAIR PLC	Industrials	-245	-97	-36	-15	-280	-112	426	181	670	278	0.00	0.00	35.6	14.9	18.4	10
PBCT		PEOPLE'S UNITED FINL INC	Financials	0	34	-15	-15	-15	18	585	596	585	563	0.00	0.00	14.6	15.3	5,584	5.92
PEP		PEPSICO INC	Consumer Staples	-2,225	-1,557	-866	-711	-3,091	-2,268	16,042	15,348	18,267	16,905	321.00	285.00	1187	996	263	267
PKI		PERKINELMER INC	Health Care	-219	-201	14	13	-205	-188	433	394	652	594	17.37	16.28	3,413	2,911	11	12.5
PRGO		PERRIGO CO PLC	Health Care	-12	-17	-6	-6	-18	-22	163	152	174	169	0.00	0.00	6.2	5.6	10.4	10.6
PFE		PFIZER INC	Health Care	-5,658	-5,107	-1,534	-1,401	-7,192	-6,508	23,147	21,266	28,805	26,373	494.00	469.00	2028	1870	90.2	92.4
PM		PHILIP MORRIS INTERNATIONAL	Consumer Staples	-1,430	-2,264	-248	-209	-1,678	-2,473	7,598	6,888	9,028	9,152	0.00	0.00	248	209	80.6	77.4
PSX		PHILLIPS 66	Energy	-529	-458	-232	-220	-761	-678	3,723	3,279	4,252	3,737	0.00	0.00	232	220	14.6	14.2
PNW		PINNACLE WEST CAPITAL CORP	Utilities	-337	-457	269	47	-68	-410	3,057	2,733	3,394	3,191	1022.37	723.68	753.393	676.771	6,292	6,259
PXD		PIONEER NATURAL RESOURCES CO	Energy															3,836	3,177
PNC		PNC FINANCIAL SVCS GROUP INC	Financials	178	350	-125	-90	53	260	5,253	4,963	5,075	4,613	230.00	232.00	355	322	52,906	53,063
PPG		PPG INDUSTRIES INC	Materials	-579	-482	-753	-681	-1,332	-1,163	2,883	2,618	3,462	3,100	0.00	0.00	753	681	47.2	47.3
PPL	DJIA	PPL CORP	Utilities	-529	-248	-184	-237	-713	-485	11,978	10,910	12,507	11,158	405.00	301.00	589	538	12,512	12,444
TROW		PRICE (T. ROWE) GROUP	Financials															6,881	7,022
PFJ		PRINCIPAL FINANCIAL GRP INC	Financials	-841	-741	588	545	-254	-196	2,542	2,498	3,384	3,239	696.80	643.90	109.1	98.9	15,378	16,475
PG	DJIA	PROCTER & GAMBLE CO	Consumer Staples	-5,331	-4,391	-1,356	-1,519	-6,687	-5,910	10,829	11,267	16,160	15,658	3831.00	3259.00	5187	4778	95	92
PGR		PROGRESSIVE CORP-OHIO	Financials															33,656	37,346
PLD		PROLOGIS INC	Real Estate															1,565	1,617
PRU		PRUDENTIAL FINANCIAL INC	Financials	-183	-378	-381	-444	-564	-822	13,655	12,807	13,838	13,185	1615.00	1432.00	1996	1876	49,705	50,492
PEG		PUBLIC SERVICE ENTRP GRP INC	Utilities	-676	-910	-2,007	-1,216	-2,683	-2,126	6,003	5,332	6,679	6,242	511.00	488.00	2518	1704	12,945	13,145
PSA		PUBLIC STORAGE	Real Estate															5.6	5.6
PHM		PULTEGROUP INC	Consumer Discretionary															4.81	5,086
PVH		PVH CORP	Consumer Discretionary	-84	-113	-11	-8	-95	-122	661	637	745	750	0.00	0.00	10.5	8.4	36.5	38
QRVO		QORVO INC	Information Technology	-9	-9				-9	4	4	13	13					8.3	8.1
QCOM		QUALCOMM INC	Information Technology															33.8	35.4
PWR		QUANTA SERVICES INC	Industrials															32.8	39.2
DGX		QUEST DIAGNOSTICS INC	Health Care															45	46
RL		RALPH LAUREN CORP	Consumer Discretionary	-1	-3				-3	42	45	43	48					23.5	24.3
RJF		RAYMOND JAMES FINANCIAL CORP	Financials															12.7	13.9
RTN		RAYTHEON CO	Industrials	-7,567	-6,135	-387	-372	-7,954	-6,507	21,002	19,321	28,569	25,456	358.00	300.00	745	672	64	67
O		REALTY INCOME CORP	Real Estate															0.152	0.165
REG		REGENCY CENTERS CORP	Real Estate															0.446	0.446
REGN		REGENERON PHARMACEUTICALS	Health Care															6.2	7.4
RF		REGIONS FINANCIAL CORP	Financials	-67	95		-17		78	2,218	2,105	2,285	2,010			19	17	21,714	19,969
RSG		REPUBLIC SERVICES INC	Industrials	14	9				9	257	230	243	221					35	36
RMD		RESMED INC	Health Care															6.08	5.94
RHI		ROBERT HALF INTL INC	Industrials															228.6	231.6
ROK		ROCKWELL AUTOMATION	Industrials	-797	-505	-78	-62	-875	-567	3,788	3,755	4,585	4,260	0.00	0.00	77.8	62.4	22	23
ROL		ROLLINS INC	Industrials	18	5				5	220	214	202	208					13,126	13,734
ROP		ROPER TECHNOLOGIES INC	Industrials															14,236	15,611
ROST		ROSS STORES INC	Consumer Discretionary															82.7	88.1
RCL		ROYAL CARIBBEAN CRUISES LTD	Consumer Discretionary															66.1	77.1
SPGI		S&P GLOBAL INC	Financials	-110	-89	-29	-24	-139	-113	2,219	1,987	2,329	2,076	20.00	16.00	49	40	20.4	21.2
CRM		SALESFORCE.COM INC	Information Technology															29,401	35,995
SBAC		SBA COMMUNICATIONS CORP	Real Estate	0	0					0	0	0	0					1,291	1,347

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Company (Not Historical Index Makeup) (cont.)**Pension and OPEB in USD Millions**

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
SLB		SCHLUMBERGER LTD	Energy	-790	-769	-119	-109	-909	-878	12,565	11,620	13,355	12,389	1094.00	997.00	1213	1106	100	100
SCHW		SCHWAB (CHARLES) CORP	Financials	-44	-56				-56	0	0	44	56					17.6	19.5
STX		SEAGATE TECHNOLOGY PLC	Information Technology															41	43
SEE		SEALED AIR CORP	Materials	-131	-147	-51	-46	-182	-193	776	669	907	816	0.00	0.00	51.3	46.4	15	15.5
SRE		SEMPRA ENERGY	Utilities	-1,198	-1,196	246	236	-952	-960	2,659	2,160	3,857	3,356	1209.00	1108.00	963	872	16,046	16,823
SHW		SHERWIN-WILLIAMS CO	Materials	203	190	-291	-275	-88	-85	1,469	1,031	1,266	841	0.00	0.00	290.823	274.634	52,695	53,368
SPG		SIMON PROPERTY GROUP INC	Real Estate											0.00	0.00			5	5
SWKS		SKYWORKS SOLUTIONS INC	Information Technology	-6	-5				-5	12	11	17	16					8.4	9.4
SLG		SL GREEN REALTY CORP	Real Estate															1,065	1,058
AOS		SMITH (A.O.)	Industrials	-48	-56	-8	-7	-56	-63	875	778	923	834	0.00	0.00	7.6	7	16.1	16.3
SJM		SMUCKER (JM) CO	Consumer Staples	-143	-135	-66	-70	-209	-205	497	480	640	616	0.00	0.00	65.9	70.1	7	7.4
SNA		SNAP-ON INC	Industrials	-163	-171	-39	-35	-202	-206	1,305	1,216	1,468	1,387	13.40	12.10	52.5	46.8	12.6	12.6
SO		SOUTHERN CO	Utilities	-816	-1,152	-1,286	-937	-2,102	-2,089	12,992	11,611	13,808	12,763	1053.00	928.00	2339	1865	31,344	30,286
LUV		SOUTHWEST AIRLINES	Industrials			-275	-232		-232					0.00	0.00	275	232	56.11	58,803
SWK		STANLEY BLACK & DECKER INC	Industrials	-598	-571	-52	-45	-650	-616	2,213	1,995	2,811	2,566	0.00	0.00	52.3	44.8	57,765	60,767
SBUX		STARBUCKS CORP	Consumer Discretionary															277	291
STT		STATE STREET CORP	Financials	-134	-111		-12		-123	1,311	1,209	1,445	1,320			16	12	36,643	40,142
SYK		STRYKER CORP	Health Care	-338	-359				-359	370	376	708	735					33	36
STI		SUNTRUST BANKS INC	Financials	378	417	106	104	484	521	3,288	2,885	2,910	2,468	164.00	155.00	58	51	23,785	22,899
SIVB		SVB FINANCIAL GROUP	Financials															2,438	2.9
SYMC		SYMANTEC CORP	Information Technology															11.83	11,923
SYF		SYNCHRONY FINANCIAL	Financials															16	16.5
SNPS		SYNOPSIS INC	Information Technology															11,686	13,245
SYF		SYSCO CORP	Consumer Staples	-1,044	-518		-14		-532	3,601	3,924	4,645	4,442			13.6	14.3	66.5	67
TTWO		TAKE-TWO INTERACTIVE SFTWR	Communication Services															4,492	4,894
TPR		TAPESTRY INC	Consumer Discretionary															14.4	20.8
TGT		TARGET CORP	Consumer Discretionary	-7	-33				-33	4,117	3,925	4,124	3,958					345	360
TEL		TE CONNECTIVITY LTD	Information Technology	-1,118	-1,006		-18		-1,024	2,365	2,307	3,483	3,313			20	18	78	80
FTI		TECHNIPFMC PLC	Energy	-282	-304	-10	-10	-292	-313	1,276	1,048	1,558	1,352	0.00	0.00	10	9.5	37	37
FTX		TELEFLEX INC	Health Care	-76	-54	-49	-42	-125	-96	386	363	462	416	0.00	0.00	48,903	42,115	14.4	15.2
TXN		TEXAS INSTRUMENTS INC	Information Technology	121	-6	-20	-31	101	-37	3,588	3,279	3,467	3,285	394.00	330.00	414	361	29,714	29,888
TXT	DJIA	TEXTRON INC	Industrials	-686	-779	-289	-250	-975	-1,029	7,877	7,122	8,563	7,901	0.00	0.00	289	250	37	35
TMO		THERMO FISHER SCIENTIFIC INC	Health Care	-432	-349	-54	-42	-486	-391	2,192	2,023	2,624	2,372	9.00	8.00	63	50	70	70
TIF		TIFFANY & CO	Consumer Discretionary	-218	-245	-79	-76	-296	-321	578	550	796	795	0.00	0.00	78.5	76.1	13.1	14.2
TJX		TJX COS INC (THE)	Consumer Discretionary	-78	-73				-73	1,418	1,245	1,495	1,318					249	270
TMUS		T-MOBILE US INC	Communication Services															51	52
TMK		TORCHMARK CORP	Financials	-225	-164	-26		-251	-164	378	393	603	556	0.00		25.613		3,102	3,102
TSS		TOTAL SYSTEM SERVICES INC	Information Technology															11	12.82
TSCO		TRACTOR SUPPLY CO	Consumer Discretionary															29.3	30.5
TDG		TRANSDIGM GROUP INC	Industrials	-31	-24				-24	70	69	101	92					9.2	10.1
TRV		TRAVELERS COS INC	Financials	161	215		-191	-51	24	4,070	3,874	3,909	3,659	13.00	12.00	225	203	30.8	30.4
TRIP		TRIPADVISOR INC	Communication Services															3,228	3,366
TWTR		TWITTER INC	Communication Services															3,372	3,92
TSN		TYSON FOODS INC -CL A	Consumer Staples	-195	-162	-33	-28	-228	-190	1,512	1,450	1,707	1,612	0.00	0.00	33	28	122	121
USB		U S BANCORP	Financials	-238	-571	19	27	-219	-544	5,482	4,936	5,720	5,507	87.00	81.00	68	54	72,402	73,333
UDR		UDR INC	Real Estate															1,542	1,431
ULTA		ULTA BEAUTY INC	Consumer Discretionary															34.7	44
UAA		UNDER ARMOUR INC	Consumer Discretionary															15.8	15
UNP		UNION PACIFIC CORP	Industrials	-305	-294	-330	-298	-635	-592	4,224	3,887	4,529	4,181	0.00	0.00	330	298	41,992	41,967
UAL		UNITED CONTINENTAL HLDGS INC	Industrials	-1,920	-1,569	-1,656	-1,338	-3,576	-2,907	3,932	3,827	5,852	5,396	54.00	53.00	1710	1391	89.8	92
UPS		UNITED PARCEL SERVICE INC	Industrials	-4,233	-6,047	-2,609	-2,484	-6,842	-8,531	43,265	40,838	47,498	46,885	183.00	26.00	2792	2510	454	481
URI		UNITED RENTALS INC	Industrials															14.8	18.5
UTX		UNITED TECHNOLOGIES CORP	Industrials	-1,310	-2,542	-767	-790	-2,077	-3,332	35,689	35,253	36,999	37,795	0.00	20.00	767	810	204.7	240.2
UNH		UNITEDHEALTH GROUP INC	Health Care															260	300
UHS		UNIVERSAL HEALTH SVCS INC	Health Care	3	-4	0		3	-4	119	105	116	108	0.00	0.00	0	0	83.1	87.1
UNM		UNUM GROUP	Financials	-545	-472	-129	-116	-674	-588	1,836	1,672	2,381	2,144	10.50	10.10	139.5	125.9	9.4	9.6
VLO		VALERO ENERGY CORP	Energy	-498	-403	-306	-292	-804	-695	2,428	2,236	2,926	2,639	0.00	0.00	306	292	10,015	10,261
VAR	DJIA	VARIAN MEDICAL SYSTEMS INC	Health Care	-16	-1				-1	215	225	231	226					6.6	7,174

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Company (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
VTR		VENTAS INC	Real Estate															0.493	0.5
VRSN		VERISIGN INC	Information Technology															0.952	0.9
VRSK		VERISK ANALYTICS INC	Industrials	32	14	-2		30	14	485	421	453	408	10.10	9.70	11.8	9.7	7.304	8.184
VZ		VERIZON COMMUNICATIONS INC	Communication Services	-2,356	-1,751	-18,341	-15,189	-20,697	-16,940	19,175	17,816	21,531	19,567	1119.00	1175.00	19460	16364	155.4	144.5
VRTX	DJIA	VERTEX PHARMACEUTICALS INC	Health Care															2.3	2.5
VFC		VF CORP	Consumer Discretionary	-134	-68				-68	1,810	1,751	1,944	1,819					69	75
VIAB		VIACOM INC	Communication Services	-455	-402				-402	544	543	999	945					10.75	10.4
V	DJIA	VISA INC	Information Technology	161	230	-11		150	230	1,507	1,526	1,346	1,296	0.00		11			17
VNO		VORNADO REALTY TRUST	Real Estate			0								0.00	0.00	0	0	3.989	3.928
VMC		VULCAN MATERIALS CO	Materials	-250	-122	-43	-41	-294	-163	841	837	1,091	959	0.00	0.00	43.48	40.834	8.287	8.782
WAB		WABTEC CORP	Industrials	-78	-77	-15	-12	-93	-90	319	271	397	349	0.00	0.00	15.065	12.487	18	18
WBA		WALGREENS BOOTS ALLIANCE INC	Consumer Staples	100	383	-361	-146	-261	237	8,980	8,676	8,880	8,293	0.00	0.00	361	146	345	354
WMT		WALMART INC	Consumer Staples															2300	2200
WM		WASTE MANAGEMENT INC	Industrials	-6	-3				-3	120	117	126	120					42.3	43.7
WAT	DJIA	WATERS CORP	Health Care	-18	-13	-6	-7	-24	-20	246	82	264	95	11.13	11.08	17.121	17.724	7.02	7.246
WEC	DJIA	WEC ENERGY GROUP INC	Utilities	-197	-236	23	164	-174	-73	2,967	2,691	3,164	2,927	841.50	771.70	818.5	608.2	8.129	7.878
WCG		WELLCARE HEALTH PLANS INC	Health Care															8.9	12
WFC		WELLS FARGO & CO	Financials	-1,064	-1,209	-46	-44	-1,110	-1,253	10,667	9,477	11,731	10,686	565.00	511.00	611	555	262.7	258.7
WELL		WELLTOWER INC	Real Estate															0.392	0.384
WDC	DJIA	WESTERN DIGITAL CORP	Information Technology	-60	-60				-60	189	200	249	260					67.629	71.6
WU		WESTERN UNION CO	Information Technology	-15	-16				-16	272	235	287	251					11.5	12
WRK		WESTROCK CO	Materials	79	148	-166	-147	-88	1	5,523	5,271	5,444	5,124	0.00	0.00	166.2	146.5	44.8	45.1
WY		WEYERHAEUSER CO	Real Estate	-1,281	-333	-200	-130	-1,481	-463	5,514	4,930	6,795	5,263	0.00	18.00	200	148	9.3	9.3
WHR		WHIRLPOOL CORP	Consumer Discretionary	-1,050	-673	-394	-356	-1,444	-1,029	3,317	3,194	4,367	3,867	0.00	0.00	394	356	92	92
WMB		WILLIAMS COS INC	Energy	-92	-55	21	28	-71	-27	1,227	1,132	1,319	1,187	227.00	214.00	206	186	5.425	5.322
WLTW		WILLIS TOWERS WATSON PLC	Financials	-337	-290	-121	-86	-458	-376	9,126	8,291	9,463	8,581	2.00	1.00	123	87	43	43.3
WYNN		WYNN RESORTS LTD	Consumer Discretionary															25.2	26
XEL		XCEL ENERGY INC	Utilities	-740	-735	-160	-125	-900	-860	3,088	2,742	3,828	3,477	461.00	417.00	621	542	11.134	11.092
XRX		XEROX CORP	Information Technology	-1,351	-1,154	-723	-385	-2,074	-1,539	9,532	8,087	10,883	9,241	0.00	0.00	723	385	35.3	32.4
XLNX		XILINX INC	Information Technology															4.014	4.433
XYL		XYLEM INC	Industrials	-322	-295	-55	-52	-377	-347	628	567	950	862	0.00	0.00	55	52	16.2	17
YUM		YUM BRANDS INC	Consumer Discretionary	-143	-118		-45		-163	864	755	1,007	873			55	45	60	34
ZBH		ZIMMER BIOMET HOLDINGS INC	Health Care	-36	-53				-53	1,009	974	1,044	1,027					18.2	19
ZION		ZIONS BANCORPORATION NA	Financials	4	10	-1	-1	3	9	168	157	164	147	0.00	0.00	1	1	10.083	10.201
ZTS		ZOETIS INC	Health Care	-60	-58				-58	69	65	129	123					9.2	10

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Sector (Not Historical Index Makeup)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
			Communication Services	-23,077	-11,152	-41,955	-35,137	-65,032	-46,289	96,928	100,281	120,344	111,745	7,811	6,202	49,766	41,339	1,315	1,370
			Consumer Discretionary	-25,221	-22,141	-13,556	-12,218	-38,777	-34,359	178,498	161,521	203,719	183,661	218	190	13,833	12,409	6,151	6,234
			Consumer Staples	-16,833	-13,371	-10,529	-9,063	-27,362	-22,434	126,479	107,793	143,312	121,164	7,957	6,316	18,500	15,380	4,535	4,440
			Energy	-23,799	-22,866	-14,276	-12,754	-38,075	-35,621	91,243	80,853	115,042	103,719	2,117	1,942	16,393	14,696	559	584
			Financials	-4,639	-4,958	-1,291	-832	-5,930	-5,791	235,630	214,776	240,223	219,686	9,987	9,362	11,499	10,194	2,699	2,727
			Health Care	-24,689	-22,641	-8,994	-8,232	-33,683	-30,873	137,648	134,804	162,337	157,445	5,838	5,455	14,891	13,687	2,623	2,867
			Industrials	-119,843	-102,773	-36,017	-30,813	-155,860	-133,586	525,972	475,587	645,815	578,360	9,001	8,007	45,277	38,820	4,381	4,530
			Information Technology	-17,872	-16,663	-7,191	-6,458	-25,063	-23,121	166,382	154,449	184,311	171,166	1,914	1,786	9,165	8,244	2,892	2,986
			Materials	-36,968	-32,615	-12,200	-11,407	-49,168	-44,022	146,926	141,906	183,894	174,521	156	141	12,659	11,548	629	726
			Real Estate	-1,403	-446	-200	-130	-1,603	-576	5,848	5,204	7,251	5,650	0	18	200	148	171	185
			Utilities	-20,364	-20,497	-7,317	-5,165	-27,681	-25,663	145,000	133,409	165,364	153,907	23,180	20,782	30,497	25,947	352	355
			TOTAL	-314,708	-270,124	-153,526	-132,210	-468,234	-402,335	1,856,555	1,710,582	2,171,611	1,981,024	68,180	60,202	222,680	192,412	26,308	27,004
			Communication Services (sum)	-23,077	-11,152	-41,955	-35,137	-65,032	-46,289	96,928	100,281	120,344	111,745	7,811	6,202	49,766	41,339	1,315	1,370
ATVI		ACTIVISION BLIZZARD INC	Communication Services															9.8	9.9
GOOGL		ALPHABET INC	Communication Services															80.11	98.771
T		AT&T INC	Communication Services	-13,831	-3,758	-18,086	-15,101	-31,917	-18,859	45,463	51,681	59,294	55,439	5973.00	4277.00	24059	19378	254	268.22
CBS		CBS CORP	Communication Services	-994	-1,145	-424	-342	-1,418	-1,487	3,046	2,526	4,040	3,671	0.00	1.00	424	343	16.73	16.73
CTL		CENTURYLINK INC	Communication Services	-2,062	-1,561	-3,352	-2,959	-5,414	-4,520	11,060	10,033	13,122	11,594	23.00	18.00	3375	2977	51	45
CHTR		CHARTER COMMUNICATIONS INC	Communication Services	-296	-98				-98	3,273	2,943	3,569	3,041					94.8	98
CMCSA	DJIA	COMCAST CORP	Communication Services			-425	-408		-408			338	312	0.00		425	408	164	184
DISCA		DISCOVERY INC	Communication Services		-40				-40		70		110					7	9
DISH		DISH NETWORK CORP	Communication Services															17	16
DIS		DISNEY (WALT) CO	Communication Services	-2,207	-1,772	-1,050	-878	-3,257	-2,650	12,325	12,728	14,532	14,500	696.00	731.00	1746	1609	199	201
EA		ELECTRONIC ARTS INC	Communication Services															9.3	9.7
FB		FACEBOOK INC	Communication Services															25.105	35.587
FOXA		FOX CORP	Communication Services	-280	-252				-252	70	70	350	322						
IPG		INTERPUBLIC GROUP OF COS	Communication Services	-205	-158	-32	-28	-237	-185	503	454	708	611	0.00	0.00	31.8	27.7	50.2	54
NFLX		NETFLIX INC	Communication Services															5.5	7.1
NWSA		NEWS CORP	Communication Services	-195	-14	-117	-106	-312	-120	1,389	1,360	1,584	1,374	0.00	0.00	117	106	26	28
OMC		OMNICOM GROUP	Communication Services	-197	-201	-128	-127	-324	-328	80	57	277	258	0.00	0.00	127.7	126.5	77.3	70.4
TTWO		TAKE-TWO INTERACTIVE SFTWR	Communication Services															4.492	4.894
TMUS		T-MOBILE US INC	Communication Services															51	52
TRIP		TRIPADVISOR INC	Communication Services															3.228	3.366
TWTR		TWITTER INC	Communication Services															3.372	3.92
VZ		VERIZON COMMUNICATIONS INC	Communication Services	-2,356	-1,751	-18,341	-15,189	-20,697	-16,940	19,175	17,816	21,531	19,567	1119.00	1175.00	19460	16364	155.4	144.5
VIAB		VIACOM INC	Communication Services	-455	-402				-402	544	543	999	945					10.75	10.4
			Consumer Discretionary (sum)	-25,221	-22,141	-13,556	-12,218	-38,777	-34,359	178,498	161,521	203,719	183,661	218	190	13,833	12,409	6,151	6,234
AAP		ADVANCE AUTO PARTS INC	Consumer Discretionary															71	71
AMZN		AMAZON.COM INC	Consumer Discretionary															566	647.5
APTV		APTIV PLC	Consumer Discretionary	-487	-465		-3		-468	377	362	864	827			4	3	129	143
AZO		AUTOZONE INC	Consumer Discretionary	2	0					316	0	315	0					87	89
BBY		BEST BUY CO INC	Consumer Discretionary			0								0.00	0.00	0	0	125	125
HRB		BLOCK H & R INC	Consumer Discretionary															90.7	86.1
BKNG		BOOKING HOLDINGS INC	Consumer Discretionary															22.9	24.5
BWA		BORGWARNER INC	Consumer Discretionary	-189	-211	-107	-87	-296	-297	724	654	912	865	0.00	0.00	107	86.5	29	30
CPRI		CAPRI HOLDINGS LTD	Consumer Discretionary															14.846	17.797
KMX		CARMAX INC	Consumer Discretionary	-85	-77				-77	157	166	242	243					25.11	25.946
CCL		CARNIVAL CORP/PLC (USA)	Consumer Discretionary															99.2	102
CMG		CHIPOTLE MEXICAN GRILL INC	Consumer Discretionary															68.89	73
DHI		D R HORTON INC	Consumer Discretionary															7.735	8.437
DRI		DARDEN RESTAURANTS INC	Consumer Discretionary	17		-20		-3		254		237		0.00		19.9		180.656	185
DG		DOLLAR GENERAL CORP	Consumer Discretionary															129	135
DLTR		DOLLAR TREE INC	Consumer Discretionary															176.1	182.1
EBAY	DJIA	EBAY INC	Consumer Discretionary															14.1	14
EXPE		EXPEDIA GROUP INC	Consumer Discretionary															22.615	24.5
FL		FOOT LOCKER INC	Consumer Discretionary	14	-95	-15	-12	-1	-107	697	644	683	739	0.00	0.00	15	12	49.209	49.331
F		FORD MOTOR CO	Consumer Discretionary	-6,621	-6,301	-6,169	-5,559	-12,790	-11,860	73,817	67,047	80,438	73,348	0.00	0.00	6169	5559	202	199

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Sector (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
GPS		GAP INC	Consumer Discretionary															135	135
GRMN		GARMIN LTD	Consumer Discretionary															12.3	13
GM		GENERAL MOTORS CO	Consumer Discretionary	-14,105	-11,464	-6,374	-5,744	-20,479	-17,208	77,134	69,630	91,239	81,094	0.00	0.00	6374	5744	180	173
GPC		GENUINE PARTS CO	Consumer Discretionary	-229	-235				-235	2,206	2,043	2,436	2,278					48	50
HBI		HANES BRANDS INC	Consumer Discretionary	-405	-378				-378	873	787	1,278	1,165					67.2	68
HOG		HARLEY-DAVIDSON INC	Consumer Discretionary	-38	-110	-121	-96	-159	-206	2,163	1,875	2,201	1,985	217.54	190.36	338.488	286.574	5.8	5.9
HAS		HASBRO INC	Consumer Discretionary	-10	-38	-32	-30	-43	-69	383	357	393	396	0.00	0.00	32.153	30.081	5.4	5.8
HLT		HILTON WORLDWIDE HOLDINGS	Consumer Discretionary	-156	-138	0		-156	-138	757	677	913	815	0.00	0.00	0	0	163	169
HD		HOME DEPOT INC	Consumer Discretionary															413	413
KSS		KOHL'S CORP	Consumer Discretionary															137	129
LB		L BRANDS INC	Consumer Discretionary															93.2	88.9
LEG		LEGGETT & PLATT INC	Consumer Discretionary	-56	-38				-38	186	182	242	220					22.2	22
LEN		LENNAR CORP	Consumer Discretionary															9.111	11.626
LKQ		LKQ CORP	Consumer Discretionary		-110				-110		92		201					43	51
LOW		LOWE'S COS INC	Consumer Discretionary															310	300
M		MACY'S INC	Consumer Discretionary	-565	-637	-156	-137	-721	-774	3,409	3,018	3,974	3,655	0.00	0.00	156	137	130	130
MAR		MARRIOTT INTL INC	Consumer Discretionary	27	-5	-14	-12	13	-17	294	202	267	207	0.00	0.00	14	12	177	176
MCD		MCDONALD'S CORP	Consumer Discretionary															235	210
MGM		MGM RESORTS INTERNATIONAL	Consumer Discretionary															77	83
MHK		MOHAWK INDUSTRIES INC	Consumer Discretionary	-12	-9				-9	53	54	65	64					38.8	42.1
NWL		NEWELL BRANDS INC	Consumer Discretionary	-383	-290	-65	-53	-448	-343	1,892	1,629	2,275	1,918	0.00	0.00	65.1	53	49	37
NKE	DJIA	NIKE INC -CL B	Consumer Discretionary															73.1	
JWN		NORDSTROM INC	Consumer Discretionary	-200	-190				-190	0	0	200	190					72.5	71
NCLH		NORWEGIAN CRUISE LINE HLDGS	Consumer Discretionary	-25	-24				-24	0	0	25	24					31	33.2
ORLY		O'REILLY AUTOMOTIVE INC	Consumer Discretionary															75.552	78.882
PHM		PULTEGROUP INC	Consumer Discretionary															4.81	5.086
PVH		PVH CORP	Consumer Discretionary	-84	-113	-11	-8	-95	-122	661	637	745	750	0.00	0.00	10.5	8.4	36.5	38
RL		RALPH LAUREN CORP	Consumer Discretionary	-1	-3				-3	42	45	43	48					23.5	24.3
ROST		ROSS STORES INC	Consumer Discretionary															82.7	88.1
RCL		ROYAL CARIBBEAN CRUISES LTD	Consumer Discretionary															66.1	77.1
SBUX		STARBUCKS CORP	Consumer Discretionary															277	291
TPR		TAPESTRY INC	Consumer Discretionary															14.4	20.8
TGT		TARGET CORP	Consumer Discretionary	-7	-33				-33	4,117	3,925	4,124	3,958					345	360
TIF		TIFFANY & CO	Consumer Discretionary	-218	-245	-79	-76	-296	-321	578	550	796	795	0.00	0.00	78.5	76.1	13.1	14.2
TJX		TJX COS INC (THE)	Consumer Discretionary	-78	-73				-73	1,418	1,245	1,495	1,318					249	270
TSCO		TRACTOR SUPPLY CO	Consumer Discretionary															29.3	30.5
ULTA		ULTA BEAUTY INC	Consumer Discretionary															34.7	44
UAA		UNDER ARMOUR INC	Consumer Discretionary															15.8	15
VFC		VF CORP	Consumer Discretionary	-134	-68				-68	1,810	1,751	1,944	1,819					69	75
WHR		WHIRLPOOL CORP	Consumer Discretionary	-1,050	-673	-394	-356	-1,444	-1,029	3,317	3,194	4,367	3,867	0.00	0.00	394	356	92	92
WYNN		WYNN RESORTS LTD	Consumer Discretionary															25.2	26
YUM		YUM BRANDS INC	Consumer Discretionary	-143	-118		-45		-163	864	755	1,007	873			55	45	60	34
		Consumer Staples (sum)		-16,833	-13,371	-10,529	-9,063	-27,362	-22,434	126,479	107,793	143,312	121,164	7,957	6,316	18,500	15,380	4,535	4,440
MO		ALTRIA GROUP INC	Consumer Staples	-495	-588	-2,065	-1,829	-2,560	-2,417	8,015	7,138	8,510	7,726	270.00	211.00	2335	2040	8.3	8.3
ADM		ARCHER-DANIELS-MIDLAND CO	Consumer Staples	-661	-587	-154	-144	-815	-731	2,448	1,736	3,109	2,323	0.00	0.00	154	144	31.3	31.6
BF.B		BROWN FORMAN CORP	Consumer Staples	-123	-154	-50	-50	-173	-204	780	754	903	908	0.00	0.00	50	50	4.8	4.7
CPB		CAMPBELL SOUP CO	Consumer Staples	-267	-103	-276	-235	-543	-338	2,183	2,154	2,450	2,257	0.00	0.00	276	235	18	23
CHD		CHURCH & DWIGHT INC	Consumer Staples							IF	IF	IF	IF					4.7	4.7
CLX		CLOROX CO/DE	Consumer Staples	-199	-173	-42	-38	-241	-211	434	420	633	593	0.00	0.00	42	38	8.1	8.7
KO		COCA-COLA CO	Consumer Staples	-612	-595	-494	-419	-1,106	-1,014	8,843	7,409	9,455	8,004	288.00	289.00	782	708	61.8	62.6
CL		COLGATE-PALMOLIVE CO	Consumer Staples	-823	-856	-960	-822	-1,783	-1,678	2,387	2,078	3,210	2,934	0.00	54.00	960	876	35.9	34.5
CAG		CONAGRA BRANDS INC	Consumer Staples	-69		-116		-184		3,355		3,424		3.70		119.3		12.4	
STZ		CONSTELLATION BRANDS -CL A	Consumer Staples															9.6	9.8
COST		COSTCO WHOLESALE CORP	Consumer Staples															231	245
COTY		COTY INC	Consumer Staples	-493	-488	-63	-53	-557	-541	234	262	728	750	0.40	0.40	63.8	53.2	22	20
GIS		GENERAL MILLS INC	Consumer Staples	-239		-146		-384		6,177		6,416		726.10		871.8		40	40
HSY		HERSHEY CO	Consumer Staples	-31	-67	-236	-215	-267	-282	1,086	964	1,118	1,031	0.00	0.00	236.112	214.719	16.91	16.42
HRL		HORMEL FOODS CORP	Consumer Staples	-80	-38	-305	-272	-385	-310	1,380	1,313	1,460	1,351	0.00	0.00	304.683	272.272	20.2	20.1

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Sector (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
K	DJIA	KELLOGG CO	Consumer Staples	-605	-440	102	71	-503	-369	5,043	4,677	5,648	5,117	1292.00	1140.00	1190	1069	33	34
KMB		KIMBERLY-CLARK CORP	Consumer Staples	-399	-289	-765	-673	-1,164	-962	3,897	3,398	4,296	3,687	0.00	0.00	765	673	42	41
KHC		KRAFT HEINZ CO	Consumer Staples	758	918	-365	-250	393	668	8,941	6,908	8,183	5,990	1188.00	1044.00	1553	1294	39	38
KR		KROGER CO	Consumer Staples	-620	-282	-202	-200	-822	-482	2,943	3,010	3,563	3,292	0.00	0.00	202	200	449	453
LW		LAMB WESTON HOLDINGS INC	Consumer Staples	-2		-7		-9		17		19		0.00		7		7.2	
EL		LAUDER (ESTEE) COS INC -CL A	Consumer Staples	-179	-85	-146	-136	-325	-221	1,329	1,399	1,508	1,484	37.00	34.00	183	170	46	46
MKC		MCCORMICK & CO INC	Consumer Staples	-170	-99	-71	-63	-241	-162	986	947	1,155	1,046	0.00	0.00	70.9	62.9	11.7	11.6
TAP		MOLSON COORS BREWING CO	Consumer Staples	313	313	-804	-672	-490	-360	5,898	5,217	5,584	4,905	0.00	0.00	803.6	672.1	17.2	17.75
MDLZ		MONDELEZ INTERNATIONAL INC	Consumer Staples	-1,570	-1,114	-435	-366	-2,005	-1,480	11,044	9,975	12,614	11,089	0.00	0.00	435	366	83	80
MNST		MONSTER BEVERAGE CORP	Consumer Staples															2,991	3,142
PEP		PEPSICO INC	Consumer Staples	-2,225	-1,557	-866	-711	-3,091	-2,268	16,042	15,348	18,267	16,905	321.00	285.00	1187	996	263	267
PM		PHILIP MORRIS INTERNATIONAL	Consumer Staples	-1,430	-2,264	-248	-209	-1,678	-2,473	7,598	6,888	9,028	9,152	0.00	0.00	248	209	80.6	77.4
PG	DJIA	PROCTER & GAMBLE CO	Consumer Staples	-5,331	-4,391	-1,356	-1,519	-6,687	-5,910	10,829	11,267	16,160	15,658	3831.00	3259.00	5187	4778	95	92
SJM		SMUCKER (JM) CO	Consumer Staples	-143	-135	-66	-70	-209	-205	497	480	640	616	0.00	0.00	65.9	70.1	7	7.4
SYT		SYSCO CORP	Consumer Staples	-1,044	-518		-14		-532	3,601	3,924	4,645	4,442			13.6	14.3	66.5	67
TSN		TYSON FOODS INC -CL A	Consumer Staples	-195	-162	-33	-28	-228	-190	1,512	1,450	1,707	1,612	0.00	0.00	33	28	122	121
WBA		WALGREENS BOOTS ALLIANCE INC	Consumer Staples	100	383	-361	-146	-261	237	8,980	8,676	8,880	8,293	0.00	0.00	361	146	345	354
WMT		WALMART INC	Consumer Staples															2300	2200
		Energy (sum)		-23,799	-22,866	-14,276	-12,754	-38,075	-35,621	91,243	80,853	115,042	103,719	2117.13	1942.02	16393.487	14696.348	559.281	583.778
APC		ANADARKO PETROLEUM CORP	Energy	-794	-634	-302	-273	-1,096	-907	1,424	1,314	2,218	1,948	0.00	0.00	302	273	4.4	4.7
APA		APACHE CORP	Energy	22	21	-27	-27	-5	-6	238	208	216	187	0.00	0.00	27	27	3,356	3,42
BHGE		BAKER HUGHES A GE CO	Energy	-359	-395	-187	-107	-546	-502	2,059	1,866	2,418	2,261	0.00	0.00	187	107	64	66
COG	DJIA	CABOT OIL & GAS CORP	Energy			-31	-30		-30					0.00	0.00	31.05	29.777	0.468	0.483
CVX		CHEVRON CORP	Energy	-4,406	-3,872	-2,788	-2,430	-7,194	-6,302	14,714	12,674	19,120	16,546	0.00	0.00	2788	2430	51.9	48.6
XEC		CIMAREX ENERGY CO	Energy															0.91	0.955
CXO		CONCHO RESOURCES INC	Energy															1,203	1,503
COP		CONOCOPHILLIPS	Energy	-893	-880	-265	-218	-1,158	-1,098	6,188	4,694	7,081	5,574	0.00	0.00	265	218	11.4	10.8
DVN		DEVON ENERGY CORP	Energy	-244	-234	-19	-17	-263	-251	1,035	709	1,279	943	0.00	0.00	19	17	4.9	2.9
FANG		DIAMONDBACK ENERGY INC	Energy				3		3						8.22		5,351	0,251	0,711
EOG		EOG RESOURCES INC	Energy															2,664	2.8
XOM		EXXON MOBIL CORP	Energy	-13,030	-12,932	-7,673	-7,085	-20,703	-20,017	34,243	30,620	47,273	43,552	427.00	386.00	8100	7471	69.6	71
HAL		HALLIBURTON CO	Energy	-282	-119				-119	920	832	1,202	951					55	60
HP		HELMERICH & PAYNE	Energy	-17	-11				-11	93	95	110	106					8,123	9,777
HES		HESS CORP	Energy	-282	-140	-87	-59	-369	-199	2,732	2,568	3,014	2,708	0.00	0.00	87	59	2,075	1,708
HFC		HOLLYFRONTIER CORP	Energy	-7	-4	-29	-27	-37	-31	59	62	66	67	0.00	0.00	29,499	26,88	3,522	3,622
KMI		KINDER MORGAN INC	Energy	-686	-702	-90	-33	-776	-735	2,296	1,864	2,982	2,566	335.00	306.00	425	339	10,897	11,012
MRO		MARATHON OIL CORP	Energy	-97	-40	-221	-96	-318	-136	886	797	983	837	0.00	0.00	221	96	2.3	2.4
MPC		MARATHON PETROLEUM CORP	Energy	-324	-690	-826	-884	-1,150	-1,574	1,840	2,089	2,164	2,779	0.00	0.00	826	884	43.8	60.35
NOV		NATIONAL OILWELL VARCO INC	Energy	-45	-58	-62	-45	-107	-103	588	517	633	575	0.00	0.00	62	45	31,889	35,063
NBL		NOBLE ENERGY INC	Energy															2,277	2,33
OXY		OCCIDENTAL PETROLEUM CORP	Energy	12	-11	-999	-808	-987	-819	403	338	391	349	0.00	0.00	999	808	11	11
OKE		ONEOK INC	Energy	-176	-176	-24	-16	-199	-192	306	291	482	467	34.13	30.80	57,938	46,84	2,47	2,684
PSX		PHILLIPS 66	Energy	-529	-458	-232	-220	-761	-678	3,723	3,279	4,252	3,737	0.00	0.00	232	220	14.6	14.2
PXD		PIONEER NATURAL RESOURCES CO	Energy															3,836	3,177
SLB		SCHLUMBERGER LTD	Energy	-790	-769	-119	-109	-909	-878	12,565	11,620	13,355	12,389	1094.00	997.00	1213	1106	100	100
FTI		TECHNIPFMC PLC	Energy	-282	-304	-10	-10	-292	-313	1,276	1,048	1,558	1,352	0.00	0.00	10	9.5	37	37
VLO		VALERO ENERGY CORP	Energy	-498	-403	-306	-292	-804	-695	2,428	2,236	2,926	2,639	0.00	0.00	306	292	10,015	10,261
WMB		WILLIAMS COS INC	Energy	-92	-55	21	28	-71	-27	1,227	1,132	1,319	1,187	227.00	214.00	206	186	5,425	5,322
		Financials (sum)		-4,639	-4,958	-1,291	-832	-5,930	-5,791	235,630	214,776	240,223	219,686	9987.10	9361.90	11499.267	10193.974	2699.209	2727.139
AMG		AFFILIATED MANAGERS GRP INC	Financials															4.4	4.45
AFL		AFLAC INC	Financials	-531	-517	-36	-37	-567	-554	718	754	1,249	1,271	0.00	0.00	36	37	11,318	11,39
ALL		ALLSTATE CORP	Financials	-531	-925	-386	-375	-917	-1,300	6,284	5,299	6,815	6,224	0.00	0.00	386	375	42.9	45.7
AXP		AMERICAN EXPRESS CO	Financials															55	59
AIG		AMERICAN INTERNATIONAL GROUP	Financials	-1,068	-990	-253	-222	-1,321	-1,212	5,225	4,701	6,293	5,691	0.00	0.00	253	222	49.8	49.6
AMP		AMERIPRISE FINANCIAL INC	Financials	-247	-239	-15	-14	-262	-253	748	728	995	967	0.00	0.00	15	14	13	14
AON		AON PLC	Financials	-329	-101	-82	-77	-411	-178	9,120	8,176	9,449	8,277	17.00	14.00	99	91	50	50
AJG		ARTHUR J GALLAGHER & CO	Financials	-52	-33	-3	-2	-55	-35	219	220	271	253	0.00	0.00	2.5	2	26,783	30,362
AIZ		ASSURANT INC	Financials	-16	-20	-55	-53	-71	-73	807	732	823	752	48.80	41.90	104	94.5	14.75	14.75

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Sector (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
BAC		BANK OF AMERICA CORP	Financials	3,808	3,711	-756	-676	3,052	3,035	25,375	23,223	21,567	19,512	300.00	252.00	1056	928	209,376	204,489
BK		BANK OF NEW YORK MELLON CORP	Financials	1,162	1,129	-72	-55	1,090	1,074	6,889	6,356	5,727	5,227	107.00	99.00	179	154	52.5	51.3
BBT		BB&T CORP	Financials	983	885				885	6,309	5,968	5,326	5,083					36,484	35,852
BRK.B		BERKSHIRE HATHAWAY	Financials	-1,810	-1,963				-1,963	17,014	14,959	18,824	16,922					377,291	389,373
BLK		BLACKROCK INC	Financials							26	26							13.9	14.9
COF		CAPITAL ONE FINANCIAL CORP	Financials	68	61	-29	-23	39	38	246	218	178	157	6.00	6.00	35	29	49.3	47.6
CBOE		CBOE GLOBAL MARKETS INC	Financials															0.889	0.842
CB		CHUBB LTD	Financials	-81	-242	20	30	-61	-212	4,281	3,792	4,362	4,034	157.00	143.00	137	113	31	32.7
CINF		CINCINNATI FINANCIAL CORP	Financials	-6	0					345	318	351	318					4,925	4,999
C		CITIGROUP INC	Financials	-1,620	-1,615	-579	-440	-2,199	-2,055	19,853	18,189	21,473	19,804	1381.00	1381.00	1960	1821	209	204
CFG		CITIZENS FINANCIAL GROUP INC	Financials	-56	-17				-17	1,139	1,050	1,195	1,067					17.6	18.1
CME		CME GROUP INC	Financials	74	51				51	348	316	274	265					2.83	4.59
CMA		COMERICA INC	Financials	474	346	9	10	483	356	2,747	2,458	2,273	2,112	60.00	56.00	51	46	8.19	8.051
DFS		DISCOVER FINANCIAL SVCS	Financials	-179	-95				-95	424	455	603	550					16.5	16.6
ETFC		E TRADE FINANCIAL CORP	Financials															3,607	4,035
RE		EVEREST RE GROUP LTD	Financials	-106	-40	-35	-28	-141	-68	210	261	316	300	0.00	0.00	34,717	28,483	1,276	1,415
FITB		FIFTH THIRD BANCORP	Financials	-24	-17				-17	185	164	209	181					18,125	17,437
FRC		FIRST REPUBLIC BANK	Financials															4,025	4,48
BEN		FRANKLIN RESOURCES INC	Financials															9,386	9,691
GS		GOLDMAN SACHS GROUP INC	Financials															36.6	36.6
HIG		HARTFORD FINANCIAL SERVICES	Financials	-784	-656	-142	-135	-926	-791	3,592	3,344	4,376	4,000	114.00	85.00	256	220	16.4	18.5
HBAN		HUNTINGTON BANCSHARES	Financials	3	7				7	903	828	900	821			7		15.77	15,693
ICE		INTERCONTINENTAL EXCHANGE	Financials	-6	3		-154		-151	869	794	875	791			179	154	4,952	5,161
IVZ		INVESCO LTD	Financials	-62	-45	0		-62	-45	487	430	549	476	0.00	0.00	0	0	7.03	7,459
JEF		JEFFERIES FINANCIAL GRP INC	Financials	-87	-52				-52	151	139	238	191					12.7	4.7
JPM	DJIA	JPMORGAN CHASE & CO	Financials	2,903	2,540	2,073	2,021	4,976	4,561	19,603	18,052	16,700	15,512	2757.00	2633.00	684	612	252,539	256,105
KEY		KEYCORP	Financials	-160	-155	-16	-17	-176	-172	1,163	1,046	1,323	1,201	52.00	47.00	68	64	18,415	18.18
LNC		LINCOLN NATIONAL CORP	Financials	-108	-121	-27	-10	-135	-131	1,566	1,356	1,674	1,477	60.00	64.00	87	74	9,047	11,034
L		LOEWS CORP	Financials	-665	-615	26	32	-639	-583	2,577	2,304	3,242	2,919	88.00	85.00	62	53	18.1	17.9
MTB		M & T BANK CORP	Financials	-174	-116	-69	-60	-242	-176	2,015	1,834	2,189	1,950	0.00	0.00	68,637	59,991	16,794	17,267
MKTX		MARKETAXESS HOLDINGS INC	Financials															0,429	0,454
MMC		MARSH & MCLENNAN COS	Financials	-99	-130	-102	-88	-201	-218	16,175	14,368	16,274	14,498	2.00	1.00	104	89	65	65
MET	DJIA	METLIFE INC	Financials	-1,721	-1,643	-240	36	-1,961	-1,607	9,688	8,948	11,409	10,591	1434.00	1360.00	1674	1324	49	48
MCO	DJIA	MOODY'S CORP	Financials	-161	-159	-31	-32	-192	-191	357	348	518	508	0.00	0.00	31.2	31.8	11,896	13,057
MS		MORGAN STANLEY	Financials	-498	-360	-86	-71	-584	-431	3,468	3,203	3,966	3,563	0.00	0.00	86	71	57,633	60,348
MSCI		MSCI INC	Financials							21	22							3,038	3,112
NDAQ		NASDAQ INC	Financials											0.00	0.00			4,734	4,099
NTRS		NORTHERN TRUST CORP	Financials	132	136	-34	-28	98	108	1,685	1,547	1,553	1,411	0.00	0.00	34.4	28.1	18.1	18.8
PBCT		PEOPLE'S UNITED FINL INC	Financials	0	34	-15	-15	-15	18	585	596	585	563	0.00	0.00	14.6	15.3	5,584	5,92
PNC		PNC FINANCIAL SVCS GROUP INC	Financials	178	350	-125	-90	53	260	5,253	4,963	5,075	4,613	230.00	232.00	355	322	52,906	53,063
TROW		PRICE (T. ROWE) GROUP	Financials															6,881	7,022
PFG		PRINCIPAL FINANCIAL GRP INC	Financials	-841	-741	588	545	-254	-196	2,542	2,498	3,384	3,239	696.80	643.90	109.1	98.9	15,378	16,475
PGR		PROGRESSIVE CORP-OHIO	Financials															33,656	37,346
PRU		PRUDENTIAL FINANCIAL INC	Financials	-183	-378	-381	-444	-564	-822	13,655	12,807	13,838	13,185	1615.00	1432.00	1996	1876	49,705	50,492
RJF		RAYMOND JAMES FINANCIAL CORP	Financials															12.7	13.9
RF		REGIONS FINANCIAL CORP	Financials	-67	95		-17		78	2,218	2,105	2,285	2,010			19	17	21,714	19,969
SPGI		S&P GLOBAL INC	Financials	-110	-89	-29	-24	-139	-113	2,219	1,987	2,329	2,076	20.00	16.00	49	40	20.4	21.2
SCHW		SCHWAB (CHARLES) CORP	Financials	-44	-56				-56	0	0	44	56					17.6	19.5
STT		STATE STREET CORP	Financials	-134	-111		-12		-123	1,311	1,209	1,445	1,320			16	12	36,643	40,142
STI		SUNTRUST BANKS INC	Financials	378	417	106	104	484	521	3,288	2,885	2,910	2,468	164.00	155.00	58	51	23,785	22,899
SIVB		SVB FINANCIAL GROUP	Financials															2,438	2.9
SYF		SYNCHRONY FINANCIAL	Financials															16	16.5
TMK		TORCHMARK CORP	Financials	-225	-164	-26		-251	-164	378	393	603	556	0.00		25,613		3,102	3,102
TRV		TRAVELERS COS INC	Financials	161	215	-212	-191	-51	24	4,070	3,874	3,909	3,659	13.00	12.00	225	203	30.8	30.4
USB		U S BANCORP	Financials	-238	-571	19	27	-219	-544	5,482	4,936	5,720	5,507	87.00	81.00	68	54	72,402	73,333
UNM		UNUM GROUP	Financials	-545	-472	-129	-116	-674	-588	1,836	1,672	2,381	2,144	10.50	10.10	139.5	125.9	9.4	9.6
WFC		WELLS FARGO & CO	Financials	-1,064	-1,209	-46	-44	-1,110	-1,253	10,667	9,477	11,731	10,686	565.00	511.00	611	555	262.7	258.7
WLTW		WILLIS TOWERS WATSON PLC	Financials	-337	-290	-121	-86	-458	-376	9,126	8,291	9,463	8,581	2.00	1.00	123	87	43	43.3
ZION		ZIONS BANCORPORATION NA	Financials	4	10	-1	-1	3	9	168	157	164	147	0.00	0.00	1	1	10,083	10,201

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Sector (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
Health Care (sum)				-24,689	-22,641	-8,994	-8,232	-33,683	-30,873	137,648	134,804	162,337	157,445	5838.20	5455.46	14891.41	13687.036	2622.735	2867.065
ABT		ABBOTT LABORATORIES	Health Care	-655	-540	-974	-941	-1,629	-1,481	9,298	8,553	9,953	9,093	419.00	351.00	1393	1292	99	103
ABBV		ABBVIE INC	Health Care	-1,586	-981	-813	-561	-2,399	-1,542	5,399	5,637	6,985	6,618	0.00	0.00	813	561	29	30
ABMD		ABIOMED INC	Health Care															1,143	1,371
A		AGILENT TECHNOLOGIES INC	Health Care	-111	-107	-2	3	-113	-104	1,269	1,226	1,380	1,333	95.00	90.00	97	87	13.5	14.8
ALXN		ALEXION PHARMACEUTICALS INC	Health Care	-19	-18				-18	24	22	43	39					2,525	2,656
ALGN		ALIGN TECHNOLOGY INC	Health Care															8,715	11,66
AGN		ALLERGAN PLC	Health Care	-95	-98		-42		-140	1,235	1,130	1,330	1,227			46.8	42.2	17.8	16.9
ABC		AMERISOURCEBERGEN CORP	Health Care															20	21
AMGN		AMGEN INC	Health Care															20.8	21.5
ANTM		ANTHEM INC	Health Care	140	75	-168	-95	-28	-20	2,012	1,818	1,872	1,743	356.30	336.00	524.2	431	56	63.9
BAX		BAXTER INTERNATIONAL INC	Health Care	-911	-854	-235	-211	-1,146	-1,065	5,248	4,769	6,159	5,623	0.00	0.00	235	211	47	50
BDX		BECTON DICKINSON & CO	Health Care	-715	-604	-165	-148	-880	-752	1,932	2,642	2,647	3,246	0.00	0.00	165	148	41.933	76.032
BIIB		BIOMER INC	Health Care	-8	-1	0		-8	-1	84	93	92	94	0.00	0.00	0	0	7.3	7.8
BSX		BOSTON SCIENTIFIC CORP	Health Care	-120	-125				-125	87	107	207	232					29	32
BMY	DJIA	BRISTOL-MYERS SQUIBB CO	Health Care	0	163	66	78	66	241	6,749	6,129	6,749	5,966	364.00	331.00	298	253	23.7	23.3
CAH		CARDINAL HEALTH INC	Health Care															40.4	50.2
CELG		CELGENE CORP	Health Care															7,467	8,852
CNC		CENTENE CORP	Health Care															33.7	47.3
CERN	DJIA	CERNER CORP	Health Care															26	29.2
CI		CIGNA CORP	Health Care	-688	-590	-256	-210	-944	-800	4,281	4,151	4,969	4,741	2.00	0.00	258	210	46	73.8
COO		COOPER COS INC (THE)	Health Care	-39	-26				-26	113	121	152	147					11.8	12
CVS		CVS HEALTH CORP	Health Care	-131	-178	-25	-228	-156	-406	0	5,663	131	5,841	0.00	0.00	25	228	246	295
DHR		DANAHER CORP	Health Care	-981	-891	-167	-147	-1,148	-1,037	3,204	2,897	4,185	3,787	0.00	0.00	167.3	146.5	67	71
DVA		DAVITA INC	Health Care															74.5	77.7
XRAY		DENTSPLY SIRONA INC	Health Care	-360	-339	-16		-376	-339	186	173	546	512	0.00		15.9		16.1	16.4
EW		EDWARDS LIFESCIENCES CORP	Health Care	-44	-37				-37	71	60	115	97					12.2	12.8
GILD		GILEAD SCIENCES INC	Health Care															10	11
HCA	DJIA	HCA HEALTHCARE INC	Health Care															253	262
HSIC		HENRY SCHEIN INC	Health Care															22.4	18
HOLX		HOLOGIC INC	Health Care	-10	-10				-10	0	0	10	10					6,233	6,252
HUM		HUMANA INC	Health Care			0								0.00	0.00	0	0	45.9	41.6
IDXX		IDEXX LABS INC	Health Care															7.6	8,377
ILMN		ILLUMINA INC	Health Care															6.2	7.3
INCY		INCYTE CORP	Health Care	-13	-16				-16	24	30	38	46					1,208	1,367
ISRG	DJIA	INTUITIVE SURGICAL INC	Health Care															4,444	5,527
IQV	DJIA	IQVIA HOLDINGS INC	Health Care	-157	-152		-11		-163	751	696	908	848			12	11	55	58
JNJ		JOHNSON & JOHNSON	Health Care	-4,817	-4,852	-4,301	-4,300	-9,118	-9,152	28,404	26,818	33,221	31,670	281.00	180.00	4582	4480	134	135.1
LH		LABORATORY CP OF AMER HLDGS	Health Care	-166	-127	-9	-7	-175	-134	546	505	711	633	0.00	0.00	9.3	6.9	60	61
LLY		LILLY (ELI) & CO	Health Care	-3,254	-2,598	644	854	-2,610	-1,744	11,845	11,064	15,098	13,662	2372.40	2398.10	1728.5	1543.9	40,655	38,68
MCK		MCKESSON CORP	Health Care	-498	-465	-78	-73	-576	-538	1,022	964	1,520	1,429	0.00	0.00	78	73	78	80
MDT		MEDTRONIC PLC	Health Care	-928	-1,099	-14	-26	-942	-1,125	4,065	4,137	4,993	5,236	303.00	297.00	317	323	98,003	101,013
MRK		MERCK & CO	Health Care	-1,152	-1,475	-808	-647	-1,960	-2,122	20,235	18,228	21,387	19,703	1114.00	968.00	1922	1615	69	69
MTD		METTLER-TOLEDO INTL INC	Health Care	-141	-131	-3	-2	-144	-134	920	863	1,061	994	0.00	0.00	2,673	2,186	15.4	16
MYL		MYLAN NV	Health Care	-369	-352	-35	-34	-404	-386	296	284	665	635	0.00	0.00	35.1	34	35	35
NKTR		NEKTAR THERAPEUTICS	Health Care															0.509	0,618
PKI		PERKINELMER INC	Health Care	-219	-201	14	13	-205	-188	433	394	652	594	17.37	16.28	3,413	2,911	11	12.5
PRGO		PERRIGO CO PLC	Health Care	-12	-17	-6	-6	-18	-22	163	152	174	169	0.00	0.00	6.2	5.6	10.4	10.6
PFE		PFIZER INC	Health Care	-5,658	-5,107	-1,534	-1,401	-7,192	-6,508	23,147	21,266	28,805	26,373	494.00	469.00	2028	1870	90.2	92.4
DGX		QUEST DIAGNOSTICS INC	Health Care															45	46
REGN		REGENERON PHARMACEUTICALS	Health Care															6.2	7.4
RMD		RESMED INC	Health Care															6.08	5.94
SYK		STRYKER CORP	Health Care	-338	-359				-359	370	376	708	735					33	36
TFX		TELEFLEX INC	Health Care	-76	-54	-49	-42	-125	-96	386	363	462	416	0.00	0.00	48,903	42,115	14.4	15.2
TMO		THERMO FISHER SCIENTIFIC INC	Health Care	-432	-349	-54	-42	-486	-391	2,192	2,023	2,624	2,372	9.00	8.00	63	50	70	70
UNH		UNITEDHEALTH GROUP INC	Health Care															260	300
UHS		UNIVERSAL HEALTH SVCS INC	Health Care	3	-4	0		3	-4	119	105	116	108	0.00	0.00	0	0	83.1	87.1
VAR	DJIA	VARIAN MEDICAL SYSTEMS INC	Health Care	-16	-1				-1	215	225	231	226					6.6	7,174

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Sector (Not Historical Index Makeup) (cont.)

Pension and OPEB in USD Millions

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
VRTX	DJIA	VERTEX PHARMACEUTICALS INC	Health Care															2.3	2.5
WAT	DJIA	WATERS CORP	Health Care	-18	-13	-6	-7	-24	-20	246	82	264	95	11.13	11.08	17.121	17.724	7.02	7.246
WCG		WELLCARE HEALTH PLANS INC	Health Care															8.9	12
ZBH		ZIMMER BIOMET HOLDINGS INC	Health Care	-36	-53					1,009	974	1,044	1,027					18.2	19
ZTS		ZOETIS INC	Health Care	-60	-58					69	65	129	123					9.2	10
Industrials (sum)				-119,843	-102,773	-36,017	-30,813	-155,860	-133,586	525,972	475,587	645,815	578,360	9001.09	8006.70	45276.925	38819.867	4381.244	4529.521
MMM	DJIA	3M CO	Industrials	-2,439	-1,940	-1,013	-915	-3,452	-2,855	22,423	20,973	24,862	22,913	1397.00	1260.00	2410	2175	91.536	93.516
ALK		ALASKA AIR GROUP INC	Industrials	-304	-367		-82		-449	2,083	1,858	2,387	2,225			85	82	23.156	23.376
ALLE		ALLEGION PLC	Industrials	-32	-39	-9	-8	-41	-46	682	612	714	650	0.00	0.00	9.3	7.6	10	11
AAL		AMERICAN AIRLINES GROUP INC	Industrials	-6,880	-6,325	-716	-612	-7,596	-6,937	11,395	10,053	18,275	16,378	295.00	225.00	1011	837	126.6	128.9
AME		AMETEK INC	Industrials	42	9				9	847	749	805	740					16.9	18.2
ARNC		ARCONIC INC	Industrials	-2,497	-2,142	-927	-806	-3,424	-2,948	4,862	4,334	7,359	6,476	0.00	0.00	927	806	41.5	43
BA		BOEING CO	Industrials	-16,382	-15,322	-5,942	-4,982	-22,324	-20,304	64,011	56,102	80,393	71,424	143.00	132.00	6085	5114	140.8	153
CHRW		C H ROBINSON WORLDWIDE INC	Industrials															15.074	15.262
CAT		CATERPILLAR INC	Industrials	-4,211	-3,446	-3,498	-3,321	-7,709	-6,767	17,721	16,722	21,932	20,168	504.00	328.00	4002	3649	98.4	104
CTAS		CINTAS CORP	Industrials	-28						59		86						41	
CPRT	DJIA	COPART INC	Industrials															5.323	6.026
CSX		CSX CORP	Industrials	-169	-327	-250	-118	-419	-445	2,833	2,431	3,002	2,758	0.00	0.00	250	118	24.006	22.475
CMI		CUMMINS INC	Industrials	699	607	-318	-246	381	361	5,126	4,719	4,427	4,112	0.00	0.00	318	246	58.6	62.61
DE		DEERE & CO	Industrials	-1,073	494	-5,623	-4,753	-6,696	-4,259	12,093	12,602	13,166	12,108	539.00	719.00	6162	5472	60.476	74.413
DAL		DELTA AIR LINES INC	Industrials	-6,952	-6,350				-6,350	14,744	13,459	21,696	19,809					86.564	88.68
DOV		DOVER CORP	Industrials	-157	-133	-9	-8	-166	-141	793	651	951	784	0.00	0.00	8,595	7,849	29	24
ETN		EATON CORP PLC	Industrials	-1,048	-1,290	-393	-341	-1,441	-1,631	5,312	4,628	6,360	5,918	55.00	37.00	448	378	96	99
EMR		EMERSON ELECTRIC CO	Industrials	-330	77		-149		-72	5,528	5,476	5,858	5,399			174	149	76.5	87.5
EFX		EQUIFAX INC	Industrials	-171	-132	-7	-8	-178	-140	561	534	732	666	17.10	13.90	24.2	21.9	10.3	10.9
EXPD		EXPEDITORS INTL WASH INC	Industrials															16.5	17.4
FAST		FASTENAL CO	Industrials															20.565	21.644
FDX		FEDEX CORP	Industrials	-1,254		-955		-2,209		23,566		24,820		0.00		955		429	460
FLS		FLOWSERVE CORP	Industrials	-162	-151	-24	-19	-186	-170	714	658	875	809	0.00	0.00	23.882	18.81	17	17
FTV		FORTIVE CORP	Industrials	-148	-125				-125	231	180	379	305					26	24
FBHS		FORTUNE BRANDS HOME & SECUR	Industrials	-176	-164	-2	-1	-177	-165	657	600	832	763	0.00	0.00	1.6	1.4	23.8	25.3
GD		GENERAL DYNAMICS CORP	Industrials	-4,082	-4,188	-455	-365	-4,537	-4,553	10,130	11,532	14,212	15,720	541.00	570.00	996	935	98.6	105.6
GE		GENERAL ELECTRIC CO	Industrials	-28,703	-22,368	-5,488	-4,791	-34,191	-27,159	71,585	69,388	100,288	91,756	518.00	362.00	6006	5153	313	283
GWW		GRAINGER (W W) INC	Industrials			-19	-14		-14					189.49	176.00	208.35	190	25.7	24.6
HRS		HARRIS CORP	Industrials	-1,219	-676	-53	-26	-1,272	-702	4,921	5,098	6,140	5,774	212.00	207.00	265	233	17	17.5
HON		HONEYWELL INTERNATIONAL INC	Industrials	966	1,267	-530	-364	436	903	26,136	23,590	25,170	22,323	0.00	0.00	530	364	131	114
JBHT		HUNT (JB) TRANSPRT SVCS INC	Industrials															24.681	27.621
HII		HUNTINGTON INGALLS IND INC	Industrials	-941	-793	-553	-479	-1,494	-1,272	5,837	5,726	6,778	6,519	0.00	0.00	553	479	38	40
INFO		IHS MARKIT LTD	Industrials	-23	-17	-8		-32	-17	199	175	222	193	0.00	0.00	8.4	0	13	14.9
ITW		ILLINOIS TOOL WORKS	Industrials	171	121	-173	-178	-2	-57	2,832	2,550	2,661	2,429	373.00	333.00	546	511	50	48
IR		INGERSOLL-RAND PLC	Industrials	-679	-698	-528	-443	-1,207	-1,141	3,063	2,767	3,742	3,465	0.00	0.00	528	442.7	46	49
JEC		JACOBS ENGINEERING GROUP INC	Industrials	-252	-339				-339	1,225	2,258	1,477	2,598					54.7	80.8
JCI		JOHNSON CONTROLS INTL PLC	Industrials	-794	-570	-37	-22	-831	-592	5,346	5,163	6,140	5,733	177.00	174.00	214	196	121	122
KSU		KANSAS CITY SOUTHERN	Industrials															7.13	7.2
LMT		LOCKHEED MARTIN CORP	Industrials	-15,591	-11,303	-719	-704	-16,310	-12,007	33,095	32,002	48,686	43,305	1883.00	1644.00	2602	2348	100	105
MAS		MASCO CORP	Industrials	-436	-381	-10	-9	-446	-390	695	670	1,131	1,051	0.00	0.00	10	9	26	26
NLSN		NIELSEN HOLDINGS PLC	Industrials	-213	-202				-202	1,559	1,396	1,772	1,598					46	46
NSC		NORFOLK SOUTHERN CORP	Industrials	-168	-266	-309	-308	-477	-574	2,373	2,105	2,541	2,371	201.00	158.00	510	466	27.11	26.662
NOC		NORTHROP GRUMMAN CORP	Industrials	-4,741	-5,081	-772	-683	-5,513	-5,764	27,226	27,150	31,967	32,231	1338.00	1247.00	2110	1930	70	85
PCAR		PACCAR INC	Industrials	99	44				44	2,920	2,699	2,821	2,655					25	28
PH		PARKER-HANNIFIN CORP	Industrials	-1,322	-1,118	-80	-67	-1,402	-1,185	3,896	3,916	5,218	5,034	0.00	0.00	79.933	66.521	56.69	57.17
PNR		PENTAIR PLC	Industrials	-245	-97	-36	-15	-280	-112	426	181	670	278	0.00	0.00	35.6	14.9	18.4	10
PWR		QUANTA SERVICES INC	Industrials															32.8	39.2
RTN		RAYTHEON CO	Industrials	-7,567	-6,135	-387	-372	-7,954	-6,507	21,002	19,321	28,569	25,456	358.00	300.00	745	672	64	67
RSG		REPUBLIC SERVICES INC	Industrials	14	9				9	257	230	243	221					35	36
RHI		ROBERT HALF INTL INC	Industrials															228.6	231.6
ROK		ROCKWELL AUTOMATION	Industrials	-797	-505	-78	-62	-875	-567	3,788	3,755	4,585	4,260	0.00	0.00	77.8	62.4	22	23
ROL		ROLLINS INC	Industrials	18	5				5	220	214	202	208					13.126	13.734
ROP		ROPER TECHNOLOGIES INC	Industrials															14.236	15.611

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Sector (Not Historical Index Makeup) (cont.)**Pension and OPEB in USD Millions**

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
AOS		SMITH (A.O.)	Industrials	-48	-56	-8	-7	-56	-63	875	778	923	834	0.00	0.00	7.6	7	16.1	16.3
SNA		SNAP-ON INC	Industrials	-163	-171	-39	-35	-202	-206	1,305	1,216	1,468	1,387	13.40	12.10	52.5	46.8	12.6	12.6
LUV		SOUTHWEST AIRLINES	Industrials			-275	-232		-232					0.00	0.00	275	232	56.11	58.803
SWK		STANLEY BLACK & DECKER INC	Industrials	-598	-571	-52	-45	-650	-616	2,213	1,995	2,811	2,566	0.00	0.00	52.3	44.8	57.765	60.767
TXT	DJIA	TEXTRON INC	Industrials	-686	-779	-289	-250	-975	-1,029	7,877	7,122	8,563	7,901	0.00	0.00	289	250	37	35
TDG		TRANSDIGM GROUP INC	Industrials	-31	-24				-24	70	69	101	92					9.2	10.1
UNP		UNION PACIFIC CORP	Industrials	-305	-294	-330	-298	-635	-592	4,224	3,887	4,529	4,181	0.00	0.00	330	298	41.992	41.967
UAL		UNITED CONTINENTAL HLDGS INC	Industrials	-1,920	-1,569	-1,656	-1,338	-3,576	-2,907	3,932	3,827	5,852	5,396	54.00	53.00	1710	1391	89.8	92
UPS		UNITED PARCEL SERVICE INC	Industrials	-4,233	-6,047	-2,609	-2,484	-6,842	-8,531	43,265	40,838	47,498	46,885	183.00	26.00	2792	2510	454	481
URI		UNITED RENTALS INC	Industrials															14.8	18.5
UTX		UNITED TECHNOLOGIES CORP	Industrials	-1,310	-2,542	-767	-790	-2,077	-3,332	35,689	35,253	36,999	37,795	0.00	20.00	767	810	204.7	240.2
VRSK		VERISK ANALYTICS INC	Industrials	32	14	-2		30	14	485	421	453	408	10.10	9.70	11.8	9.7	7.304	8.184
WAB		WABTEC CORP	Industrials	-78	-77	-15	-12	-93	-90	319	271	397	349	0.00	0.00	15.065	12.487	18	18
WM		WASTE MANAGEMENT INC	Industrials	-6	-3				-3	120	117	126	120					42.3	43.7
XYL		XYLEM INC	Industrials	-322	-295	-55	-52	-377	-347	628	567	950	862	0.00	0.00	55	52	16.2	17
Information Technology (sum)				-17,872	-16,663	-7,191	-6,458	-25,063	-23,121	166,382	154,449	184,311	171,166	1913.54	1785.71	9164.673	8243.922	2891.533	2986.308
ACN		ACCENTURE PLC	Information Technology	-801	-767	-503	-507	-1,304	-1,274	1,359	1,338	2,159	2,105	26.54	28.71	529.68	535.632	425	459
ADBE		ADOBE INC	Information Technology			0								0.00	0.00	0	0	17.973	21.357
AMD	DJIA	ADVANCED MICRO DEVICES	Information Technology															8.9	10.1
AKAM		AKAMAI TECHNOLOGIES INC	Information Technology															7.65	7.519
ADS		ALLIANCE DATA SYSTEMS CORP	Information Technology															20	20
APH		AMPHENOL CORP	Information Technology	-244	-170	-13	-8	-257	-179	498	514	742	684	0.00	0.00	13.1	8.4	70	73.6
ADI		ANALOG DEVICES	Information Technology	-60	-39	0		-60	-39	80	85	140	124	0.00	0.00	0	0	15.3	15.8
ANSS		ANSYS INC	Information Technology															2.9	3.4
AAPL	DJIA	APPLE INC	Information Technology															123	132
AMAT		APPLIED MATERIALS INC	Information Technology	-145	-159			-159		361	365	506	524					18.4	21
ANET		ARISTA NETWORKS INC	Information Technology															1.8	2.3
ADSK		AUTODESK INC	Information Technology	-37	-11			-11		121	81	158	92					8.8	9.6
ADP		AUTOMATIC DATA PROCESSING	Information Technology	272	43			43		2,138	2,178	1,867	2,135					58	57
AVGO		BROADCOM INC	Information Technology	-82	30	3	7	-79	37	1,426	1,394	1,508	1,364	83.00	81.00	80	74	14	15
BR		BROADRIDGE FINANCIAL SOLUTNS	Information Technology	-40	-43	-5	-5	-45	-48	0	0	40	43	0.00	0.00	4.9	5.3	10	10
CDNS		CADENCE DESIGN SYSTEMS INC	Information Technology	-7	-8			-8		0	0	7	8					7.214	7.5
CSCO		CISCO SYSTEMS INC	Information Technology															72.9	74.2
CTXS		CITRIX SYSTEMS INC	Information Technology															7.5	8.2
CTSH		COGNIZANT TECH SOLUTIONS	Information Technology															260	281.6
GLW		CORNING INC	Information Technology	-649	-764	-789	-699	-1,438	-1,463	3,539	3,239	4,188	4,003	0.00	0.00	789	699	46.2	51.5
DXC		DXC TECHNOLOGY CO	Information Technology	190	327				327	11,574	11,343	11,384	11,016					150	130
FFIV	DJIA	F5 NETWORKS INC	Information Technology															4.366	4.409
FIS		FIDELITY NATIONAL INFO SVCS	Information Technology									57	54					53	47
FISV		FISERV INC	Information Technology															24	24
FLT		FLEETCOR TECHNOLOGIES INC	Information Technology															7.89	7.58
FLIR		FLIR SYSTEMS INC	Information Technology	-10	-4				-4	0	0	10	4					3.542	3.649
FTNT		FORTINET INC	Information Technology															5.066	5.845
IT		GARTNER INC	Information Technology	-27	-25				-25	18	19	45	45					15.131	15.173
GPV		GLOBAL PAYMENTS INC	Information Technology															10	11
JKHY		HENRY (JACK) & ASSOCIATES	Information Technology															5.972	6.307
HPE		HEWLETT PACKARD ENTERPRISE	Information Technology	-459	-501	-120	-108	-579	-609	12,610	12,167	13,069	12,668	50.00	52.00	170	160	66	60
HPQ		HP INC	Information Technology	-1,745	-1,526	-112	-9	-1,857	-1,535	11,653	10,868	13,398	12,394	351.00	388.00	463	397	49	55
INTC		INTEL CORP	Information Technology	-1,555	-882	-4	-71	-1,559	-953	2,287	2,551	3,842	3,433	563.00	476.00	567	547	102.7	107.4
IBM		INTL BUSINESS MACHINES CORP	Information Technology	-8,062	-8,611	-4,828	-4,523	-12,890	-13,134	93,492	84,971	101,554	93,582	88.00	94.00	4916	4617	366.6	350.6
INTU		INTUIT INC	Information Technology			0								0.00	0.00	0	0	8.2	8.9
IPGP		IPG PHOTONICS CORP	Information Technology															5.03	6.22
JNPR		JUNIPER NETWORKS INC	Information Technology															9.381	9.283
KEYS		KEYSIGHT TECHNOLOGIES INC	Information Technology	-58	68	-25	-18	-83	50	1,955	1,967	2,013	1,899	182.00	172.00	207	190	12.6	12.9
KLAC		KLA-TENCOR CORP	Information Technology	-75	-69				-69	22	28	97	97					5.99	6.55
LRCX		LAM RESEARCH CORP	Information Technology				-37		-37							39.9	37.2	9.4	10.9
MA		MASTERCARD INC	Information Technology	-41	-28	-61	-57	-102	-85	427	410	468	438	0.00	0.00	61	57	13.4	14.8
MXIM		MAXIM INTEGRATED PRODUCTS	Information Technology			-18	-19		-19					0.00	0.00	18.093	19.39	7.04	7.149
MCHP		MICROCHIP TECHNOLOGY INC	Information Technology	-61	-73	0		-61	-73	0	0	61	73	0.00	0.00	0	0	14.234	18.286

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Sector (Not Historical Index Makeup) (cont.)**Pension and OPEB in USD Millions**

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
MU		MICRON TECHNOLOGY INC	Information Technology	-25	-19				-19	150	171	175	190					34.1	36
MSFT		MICROSOFT CORP	Information Technology															124	131
MSI		MOTOROLA SOLUTIONS INC	Information Technology	-1,875	-1,407	66	61	-1,809	-1,346	5,204	5,111	7,079	6,518	151.00	133.00	85	72	15	16
NTAP		NETAPP INC	Information Technology			-28	-30		-30					25.00	31.00	53	61	10.3	10.5
NVDA		NVIDIA CORP	Information Technology															11,528	13,277
ORCL		ORACLE CORP	Information Technology															137	136
PAYX		PAYCHEX INC	Information Technology															14.3	
PYPL		PAYPAL HOLDINGS INC	Information Technology															18.7	21.8
QRVO		QORVO INC	Information Technology	-9	-9				-9	4	4	13	13					8.3	8.1
QCOM		QUALCOMM INC	Information Technology															33.8	35.4
CRM		SALESFORCE.COM INC	Information Technology															29,401	35,995
STX		SEAGATE TECHNOLOGY PLC	Information Technology															41	43
SWKS		SKYWORKS SOLUTIONS INC	Information Technology	-6	-5				-5	12	11	17	16					8.4	9.4
SYMC		SYMANTEC CORP	Information Technology															11.83	11,923
SNPS		SYNOPSYS INC	Information Technology															11,686	13,245
TEL		TE CONNECTIVITY LTD	Information Technology	-1,118	-1,006		-18		-1,024	2,365	2,307	3,483	3,313			20	18	78	80
TXN		TEXAS INSTRUMENTS INC	Information Technology	121	-6	-20	-31	101	-37	3,588	3,279	3,467	3,285	394.00	330.00	414	361	29,714	29,888
TSS		TOTAL SYSTEM SERVICES INC	Information Technology															11	12.82
VRSN		VERISIGN INC	Information Technology															0.952	0.9
V	DJIA	VISA INC	Information Technology	161	230	-11		150	230	1,507	1,526	1,346	1,296	0.00		11			17
WDC	DJIA	WESTERN DIGITAL CORP	Information Technology	-60	-60				-60	189	200	249	260					67,629	71.6
WU		WESTERN UNION CO	Information Technology	-15	-16				-16	272	235	287	251					11.5	12
XRX		XEROX CORP	Information Technology	-1,351	-1,154	-723	-385	-2,074	-1,539	9,532	8,087	10,883	9,241	0.00	0.00	723	385	35.3	32.4
XLNX		XILINX INC	Information Technology															4,014	4,433
		Materials (sum)		-36,968	-32,615	-12,200	-11,407	-49,168	-44,022	146,926	141,906	183,894	174,521	156.43	141.00	12659.111	11547.976	629,069	726,137
APD		AIR PRODUCTS & CHEMICALS INC	Materials	-698	-310	-67	-56	-765	-367	4,409	4,273	5,107	4,583	0.00	0.00	67	56.4	15.3	16.3
ALB		ALBEMARLE CORP	Materials	-301	-293	-56	-50	-357	-343	660	584	961	876	0.83	0.00	56,647	50.39	5.4	5.9
AVY		AVERY DENNISON CORP	Materials	-495	-257	-4	-4	-499	-261	1,424	1,367	1,919	1,624	0.00	0.00	4.1	3.8	30	30
BLL		BALL CORP	Materials	-441	-395		-174		-569	6,052	5,175	6,493	5,570			220	174	18.3	17.5
BMS		BEMIS CO INC	Materials	-47	-75	-2	-2	-49	-77	704	616	751	691	0.00	0.00	2.3	1.7	16,582	15,694
CE		CELANESE CORP	Materials	-477	-497	-66	-59	-543	-556	3,251	2,915	3,728	3,412	0.00	0.00	66	59	7,592	7.7
CF		CF INDUSTRIES HOLDINGS INC	Materials	-243	-210	-53	-43	-296	-253	1,152	1,056	1,395	1,266	0.00	0.00	53	43	3	3
CTVA		CORTEVA INC- SPN	Materials	-5,266	-4,496	-2,810	-2,514	-8,076	-7,010	20,284	18,918	25,550	23,414	0.00	0.00	2810	2514		21.9
DOW		DOW INC	Materials	-8,450	-7,056	-1,567	-1,478	-10,017	-8,534	23,401	22,544	31,851	29,600	0.00	0.00	1567	1478		
DD		DUPONT DE NEMOURS INC	Materials	-13,716	-11,552	-4,377	-3,992	-18,093	-15,544	43,685	41,462	57,401	53,014	0.00	0.00	4377	3992	98	98
EMN		EASTMAN CHEMICAL CO	Materials	-220	-266	-590	-537	-810	-803	2,827	2,533	3,047	2,799	148.00	135.00	738	672	14	14.5
ECL		ECOLAB INC	Materials	-816	-771	-174	-141	-989	-912	3,208	2,907	4,023	3,678	7.60	6.00	181.3	147.3	48.4	49
FMC		FMC CORP	Materials	-46	8	-19	-19	-65	-10	1,340	1,270	1,386	1,261	0.00	0.00	19	18.9	7	7.3
FCX		FREEPORT-MCMORAN INC	Materials	-726	-779	-143	-128	-869	-907	1,857	1,671	2,583	2,450	0.00	0.00	143	128	25.2	26.8
IFF		INTL FLAVORS & FRAGRANCES	Materials	-64	-91		-60		-150	1,512	1,429	1,576	1,520			82,714	59,625	7,299	13,209
IP		INTL PAPER CO	Materials	-1,967	-1,786	-295	-237	-2,262	-2,023	11,544	8,896	13,511	10,682	0.00	0.00	295	237	56	53
LIN		LINDE PLC	Materials	-718	-1,797	-146	-184	-864	-1,981	2,222	8,244	2,940	10,041	0.00	0.00	146	184	26,461	80.82
LYB		LYONDELLBASELL INDUSTRIES NV	Materials	-903	-992	-342	-293	-1,245	-1,285	2,532	2,419	3,435	3,411	0.00	0.00	342	293	13.4	19.45
MLM		MARTIN MARIETTA MATERIALS	Materials	-241	-130	-15	-13	-257	-143	638	718	879	848	0.00	0.00	15,347	13,293	8,406	8,714
MOS		MOSAIC CO	Materials	27	28	-41	-111	-14	-84	793	701	766	674	0.00	0.00	41.3	111.1	8.5	13.6
NEM		NEWMONT GOLDCORP CORP	Materials	-136	-154	-86	-82	-222	-236	985	909	1,121	1,063	0.00	0.00	86	82	12,547	12.4
NUE		NUCOR CORP	Materials			-25	-26		-26					0.00	0.00	25.1	25.5	25.1	26.3
PKG		PACKAGING CORP OF AMERICA	Materials	-345	-332	-17	-15	-362	-346	955	873	1,300	1,205	0.00	0.00	16.5	14.6	14.6	15
PPG		PPG INDUSTRIES INC	Materials	-579	-482	-753	-681	-1,332	-1,163	2,883	2,618	3,462	3,100	0.00	0.00	753	681	47.2	47.3
SEE		SEALED AIR CORP	Materials	-131	-147	-51	-46	-182	-193	776	669	907	816	0.00	0.00	51.3	46.4	15	15.5
SHW		SHERWIN-WILLIAMS CO	Materials	203	190	-291	-275	-88	-85	1,469	1,031	1,266	841	0.00	0.00	290,823	274,634	52,695	53,368
VMC		VULCAN MATERIALS CO	Materials	-250	-122	-43	-41	-294	-163	841	837	1,091	959	0.00	0.00	43.48	40,834	8,287	8,782
WRK		WESTROCK CO	Materials	79	148	-166	-147	-88	1	5,523	5,271	5,444	5,124	0.00	0.00	166.2	146.5	44.8	45.1
		Real Estate (sum)		-1,403	-446	-200	-130	-1,603	-576	5,848	5,204	7,251	5,650	0.00	18.00	200	148	171,222	184,759
ARE	DJIA	ALEXANDRIA R E EQUITIES INC	Real Estate															0.323	0.386
AMT		AMERICAN FOWER CORP	Real Estate															4,752	5,026
AIV		APARTMENT INVST & MGMT CO	Real Estate															1.35	1.05
AVB		AVALONBAY COMMUNITIES INC	Real Estate															3,112	3,087
BXP		BOSTON PROPERTIES INC	Real Estate															0.74	0.76

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

Appendix: S&P 500 Pension and OPEB Report, 2017 for Comparison By Sector (Not Historical Index Makeup) (cont.)**Pension and OPEB in USD Millions**

Ticker	DJIA	Company	Sector	2017 Pension Status	2018 Pension Status	2017 OPEB Status	2018 OPEB Status	2017 Pension and OPEB Status	2018 Pension and OPEB Status	2017 Pension Assets	2018 Pension Assets	2017 Pension Oblig.	2018 Pension Oblig.	2017 OPEB Assets	2018 OPEB Assets	2017 OPEB Oblig.	2018 OPEB Oblig.	2017 Employees 000s	2018 Employees 000s
CBRE		CBRE GROUP INC	Real Estate	-122	-113				-113	334	274	456	387					80	90
CCI		CROWN CASTLE INTL CORP	Real Estate															4.5	5
DLR		DIGITAL REALTY TRUST INC	Real Estate															1.436	1.53
DRE		DUKE REALTY CORP	Real Estate															0.4	0.4
EQIX		EQUINIX INC	Real Estate															7.273	7.903
EQR		EQUITY RESIDENTIAL	Real Estate															2.7	2.7
ESS		ESSEX PROPERTY TRUST	Real Estate															1.835	1.826
EXR		EXTRA SPACE STORAGE INC	Real Estate															3.38	3.624
FRT		FEDERAL REALTY INVESTMENT TR	Real Estate															0.326	0.303
HCP		HCP INC	Real Estate															0.19	0.201
HST	DJIA	HOST HOTELS & RESORTS INC	Real Estate															0.205	0.184
IRM		IRON MOUNTAIN INC	Real Estate															24	26.2
KIM		KIMCO REALTY CORP	Real Estate															0.546	0.533
MAC		MACERICH CO	Real Estate															0.855	0.718
MAA		MID-AMERICA APT CMNTYS INC	Real Estate															2.464	2.552
PLD		PROLOGIS INC	Real Estate															1.565	1.617
PSA		PUBLIC STORAGE	Real Estate															5.6	5.6
O		REALTY INCOME CORP	Real Estate															0.152	0.165
REG		REGENCY CENTERS CORP	Real Estate															0.446	0.446
SBAC		SBA COMMUNICATIONS CORP	Real Estate	0	0					0	0	0	0					1.291	1.347
SPG		SIMON PROPERTY GROUP INC	Real Estate											0.00	0.00			5	5
SLG		SL GREEN REALTY CORP	Real Estate															1.065	1.058
UDR		UDR INC	Real Estate															1.542	1.431
VTR		VENTAS INC	Real Estate															0.493	0.5
VNO		VORNADO REALTY TRUST	Real Estate			0								0.00	0.00	0	0	3.989	3.928
WELL		WELLTOWER INC	Real Estate															0.392	0.384
WY		WEYERHAEUSER CO	Real Estate	-1,281	-333	-200	-130	-1,481	-463	5,514	4,930	6,795	5,263	0.00	18.00	200	148	9.3	9.3
		Utilities (sum)		-20,364	-20,497	-7,317	-5,165	-27,681	-25,663	145,000	133,409	165,364	153,907	23180.36	20782.02	30497.242	25947.476	352.284	355.07
AES		AES CORP (THE)	Utilities	-145	-99				-99	1,582	1,436	1,727	1,535					10.5	9
LNT		ALLIANT ENERGY CORP	Utilities	-352	-366	-111	-107	-464	-473	951	809	1,303	1,175	111.10	99.10	222.3	206.1	3.989	3.885
AEE		AMEREN CORP	Utilities	-534	-560	-17	79	-551	-481	4,293	3,899	4,827	4,459	1223.00	1113.00	1240	1034	8.615	8.838
AEP		AMERICAN ELECTRIC POWER CO	Utilities	-42	-114	401	340	359	225	5,174	4,696	5,216	4,810	1732.50	1534.20	1332	1194.5	17.666	17.582
AWK		AMERICAN WATER WORKS CO INC	Utilities	-385	-393	-38	154	-423	-239	1,649	1,499	2,034	1,892	576.00	507.00	614	353	6.9	7.1
ATO		ATMOS ENERGY CORP	Utilities	-160	-94	-89	-67	-249	-161	508	532	668	626	184.79	199.36	274.098	265.986	4.565	4.628
CNP		CENTERPOINT ENERGY INC	Utilities	-424	-497	-266	-217	-690	-714	1,801	1,516	2,225	2,013	120.00	114.00	386	331	7.977	7.977
CMS		CMS ENERGY CORP	Utilities	-629	-405	323	235	-306	-170	2,305	2,247	2,934	2,652	1420.00	1280.00	1097	1045	7.952	8.625
ED		CONSOLIDATED EDISON INC	Utilities	-1,262	-999	-180	-229	-1,442	-1,228	14,274	13,450	15,536	14,449	1039.00	885.00	1219	1114	15.591	15.307
D		DOMINION ENERGY INC	Utilities	-990	-1,303	200	218	-790	-1,085	8,062	7,197	9,052	8,500	1729.00	1581.00	1529	1363	16.2	21.3
DTE		DTE ENERGY CO	Utilities	-940	-851	-62	44	-1,002	-807	4,636	4,273	5,576	5,124	1848.00	1689.00	1910	1645	10.2	10.6
DUK	DJIA	DUKE ENERGY CORP	Utilities	224	60	-588	-533	-364	-473	9,003	8,233	8,779	8,173	225.00	195.00	813	728	29.06	30.083
EIX		EDISON INTERNATIONAL	Utilities	-563	-559	-7	147	-570	-412	3,616	3,321	4,179	3,880	2330.00	2133.00	2337	1986	12.521	12.574
ETR		ENTERGY CORP	Utilities	-1,934	-1,923	-904	-623	-2,838	-2,546	6,215	5,629	8,149	7,552	659.33	609.78	1563.487	1232.619	13.504	13.688
EVRG		EVERGY INC	Utilities	-480	-950	-14	-26	-494	-976	887	1,603	1,367	2,553	124.07	223.30	138.564	249.3	2.205	4.832
ES		EVERSOURCE ENERGY	Utilities	-1,197	-946	-26	8	-1,223	-938	4,740	4,574	5,937	5,520	922.20	849.60	948.6	841.5	8.084	7.998
EXC		EXELON CORP	Utilities	-3,764	-4,014	-2,124	-1,961	-5,888	-5,975	18,573	16,678	22,337	20,692	2732.00	2408.00	4856	4369	34.621	33.383
FE		FIRSTENERGY CORP	Utilities	-3,463	-2,478	-292	-200	-3,755	-2,678	6,704	6,984	10,167	9,462	439.00	408.00	731	608	15.617	12.494
NEE		NEXTERA ENERGY INC	Utilities	1,427	1,284			1,284	4,020	3,806	2,593	2,522					14	14.3	
NI		NISOURCE INC	Utilities	-33	-114	-294	-276	-326	-390	2,160	1,868	2,193	1,981	262.50	216.30	556.3	492.5	8.175	8.087
NRG		NRG ENERGY INC	Utilities	-225	-241	-128	-83	-353	-324	1,104	981	1,329	1,222	0.00	0.00	128	83	5.94	4.862
PNW		PINNACLE WEST CAPITAL CORP	Utilities	-337	-457	269	47	-68	-410	3,057	2,733	3,394	3,191	1022.37	723.68	753.393	676.771	6.292	6.259
PPL	DJIA	PPL CORP	Utilities	-529	-248	-184	-237	-713	-485	11,978	10,910	12,507	11,158	405.00	301.00	589	538	12.512	12.444
PEG		PUBLIC SERVICE ENTRP GRP INC	Utilities	-676	-910	-2,007	-1,216	-2,683	-2,126	6,003	5,332	6,679	6,242	511.00	488.00	2518	1704	12.945	13.145
SRE		SEMPRA ENERGY	Utilities	-1,198	-1,196	246	236	-952	-960	2,659	2,160	3,857	3,356	1209.00	1108.00	963	872	16.046	16.823
SO		SOUTHERN CO	Utilities	-816	-1,152	-1,286	-937	-2,102	-2,089	12,992	11,611	13,808	12,763	1053.00	928.00	2339	1865	31.344	30.286
WEC	DJIA	WEC ENERGY GROUP INC	Utilities	-197	-236	23	164	-174	-73	2,967	2,691	3,164	2,927	841.50	771.70	818.5	608.2	8.129	7.878
XEL		XCEL ENERGY INC	Utilities	-740	-735	-160	-125	-900	-860	3,088	2,742	3,828	3,477	461.00	417.00	621	542	11.134	11.092

Source: S&P Dow Jones Indices LLC. Data as of fiscal year-end 2018. Table is provided for illustrative purposes.

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