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For The Five Highest-Funded U.S. State Pension Plans, Being Proactive Keeps Liabilities Manageable

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For The Five Highest-Funded U.S. State Pension Plans, Being Proactive Keeps Liabilities Manageable

U.S. states have varying governance and benefit structures and operate in different economic environments, so there's no one-size-fits-all measure for assessing their pension risk. In S&P Global Ratings' view, appropriate recognition and management of long-term pension liabilities and costs have become an increasingly important factor for financial sustainability for U.S. states. Although funding pensions are typically flexible, external factors make costs relatively volatile and could pressure overall finances if not adequately and proactively managed.

Based on plan information reported through the end of fiscal 2016, New York (AA+/Stable), North Carolina (AAA/Stable), Tennessee (AAA/Stable), South Dakota (AAA/Stable), and Wisconsin (AA/Stable) reported the highest-funded pension funding status among U.S states. These states' funded status ranged from a good 87.2% to a strong 98.2% funded compared with the median funded ratio across state plans of 68%. While the long-term outlook for most U.S. state pensions remains sluggish, we believe that these five states' exposures to weak market returns and growing pension costs are significantly limited and manageable, improving our view of their overall credit quality. For each of the five states, it is our view that a commitment to strong funding discipline and proactive management of actuarial inputs are the best indicators that they can effectively manage pension liabilities over the long term.

Overview

- New York, North Carolina, Tennessee, South Dakota, and Wisconsin reported the highest funded pension funding status for fiscal 2016.
- Similar to national trends, the highest funded pension plans reported declines in funded ratios.
- Despite continued exposure to weak market returns and growing pension costs, proactive management and commitment to funding keep pension liabilities manageable long term.

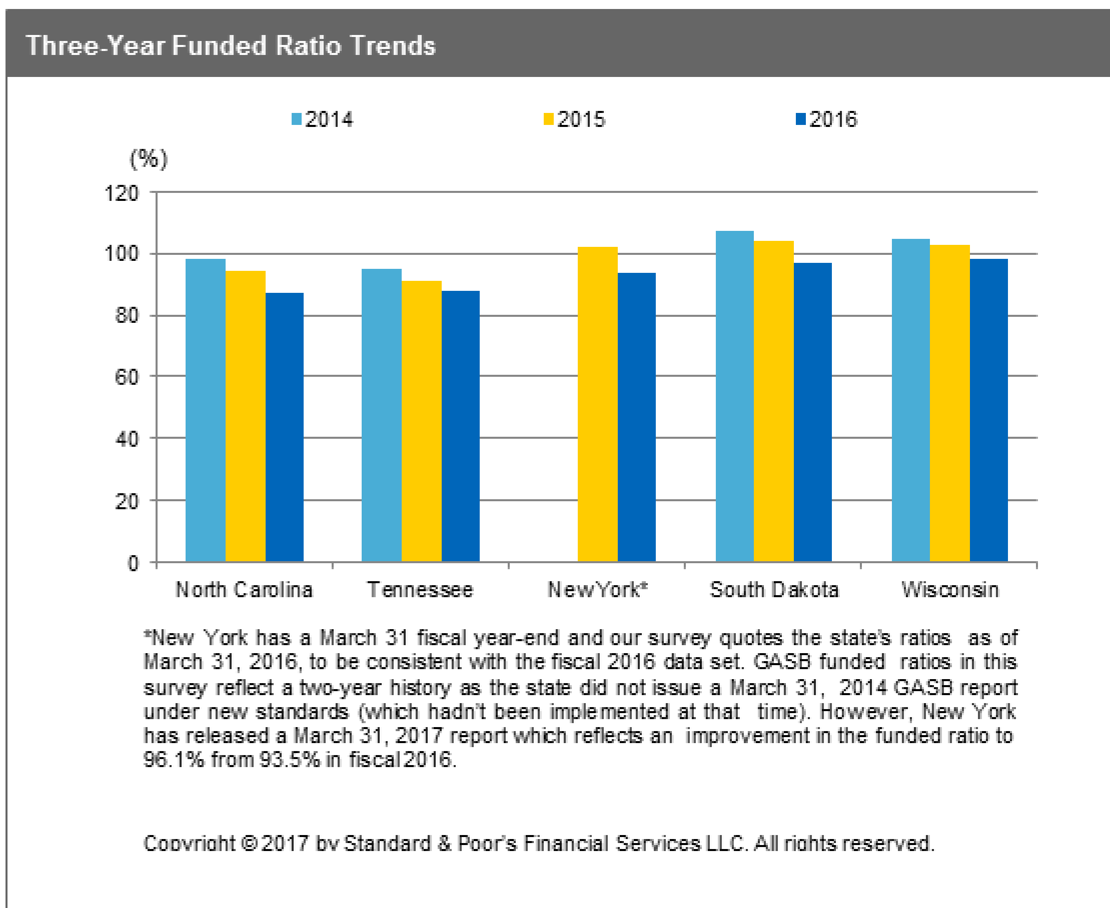
Three-Year Pension Funded Ratios

In the last years, as states have been rolling out Governmental Accounting Standards Board (GASB) Statement No. 67 financial statements for most pension plans, a majority of plans (including four of the top five states) have reported a decline in funded ratios due to relatively weak market performance. For some states, changes in actuarial assumptions have led to even higher reported liabilities. However, New York, North Carolina, South Dakota, and Wisconsin continue to lead states with the highest-funded pension ratios. New York in particular, which has released its 2017 plan audit, has shown an improvement in funded ratio to 96.1% compared with 93.6% in 2016, although this remains lower than the 102.3% pension funded ratio of 2015. Compared with our last pension survey, Tennessee rose to the top five, benefiting from the market valuation of assets under the new reporting standards, which did not decline as steeply in states such as Florida and Oregon, which were better funded previously. Although Florida had ranked among the top

five states with the highest-funded ratios in the prior year, it fell out of the ranking after the plan adopted a lower, 7.6% rate of return assumption from 7.65% to better align with projected future capital market returns, which we view favorably as a sign of proactive management despite the increase in unfunded liabilities.

Most of the plans saw a drop in the GASB funded ratio in fiscal years 2015 and 2016, reflecting relatively weak market returns realized immediately under GASB's required market valuation of assets. On average, funded ratios for the highest funded plans fell year over year by about 6.2% in fiscal 2016. With better market performance in the fiscal year ended June 2017, S&P Global Ratings expects most pension plans will see a slight uplift in funded ratios for next year, but long-term annualized returns will continue to pressure funded ratios over time.

Chart 1



Funding Discipline Matters

Pension liabilities are estimates of long-term benefit obligations that need to be managed over time to avoid significant future costs and credit pressure. The primary indication of a sustainable funding strategy is a gradual decrease in unfunded liabilities. Although GASB 67 and 68 accounting standards no longer require the calculation of an actuarially required contribution (ARC), we have observed most plans have not materially changed their funding policies since the implementation of GASB 67 and 68. Plans that had previously used an ARC-based funding policy now disclose an

actuarially determined contribution (ADC), which is the same as the ARC calculation for most plans.

In general, we found that states with high funded ratios participate in plans that have historically calculated pension contributions on an actuarial basis and regularly made contributions that met the ADC, thereby outperforming those that had not. Contributing according to a prudent ADC corresponds with covering the annual service and interest costs, as well as some productive amortization of the unfunded liability.

In assessing funding discipline, we review whether total annual plan contributions are designed to anticipate and cover yearly costs associated with providing benefits, as well as a baseline annual amortization component of the unfunded liability. For most of the five highest-funded states, the state contribution has met its service cost, interest cost, and amortization for at least two of the last three years. North Carolina did not make enough contributions to cover these costs in 2014, but resumed making adequate contributions and exceeded these costs in the two subsequent years. Notably, for Wisconsin and South Dakota, contributions have only needed to go primarily toward service costs because both plans have been almost or entirely funded for the last three years.

Trend Of Assumptions

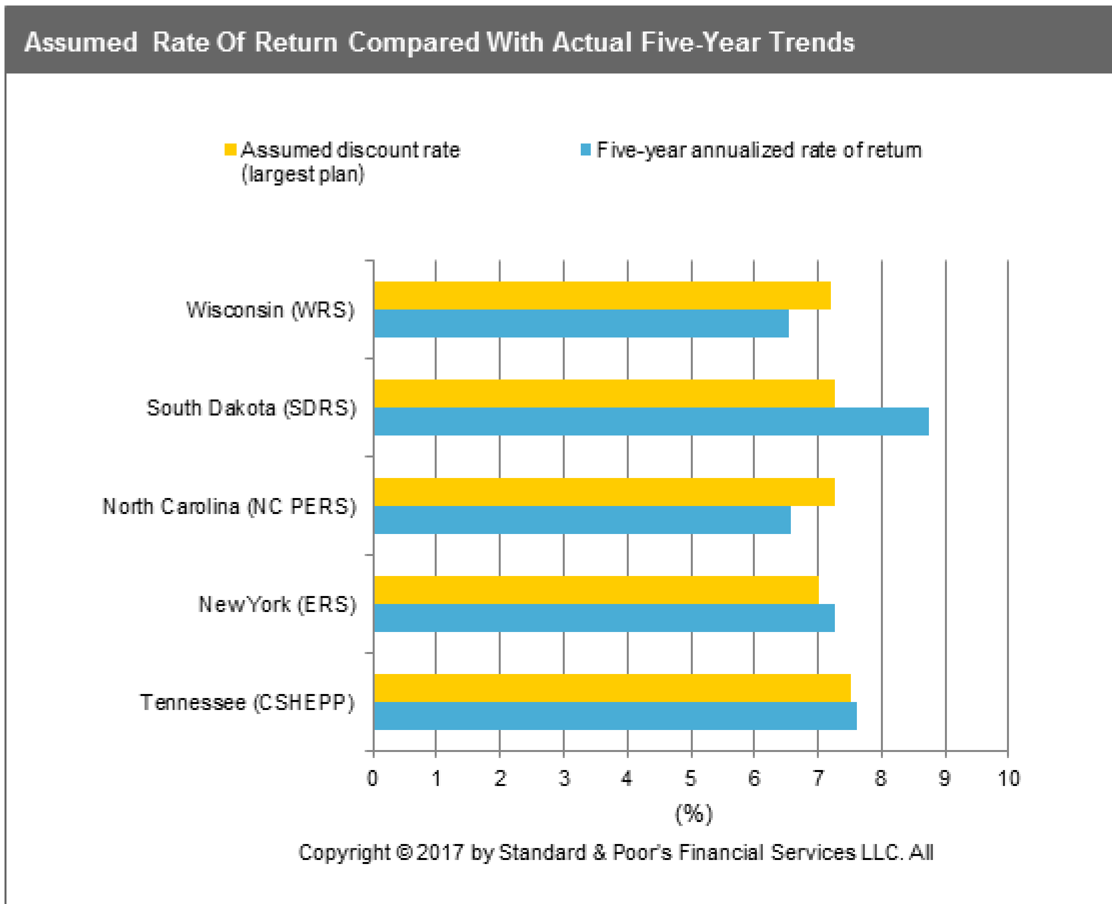
The effectiveness of a plan to reduce the overall pension liability is only as good as the assumptions used to calculate it. There remains a broad range of actuarial assumptions used by pension plans, and interest earnings assumptions differ by state. Required contribution amounts to demonstrate progress in plan funding could be greatly underestimated depending on the actuarial assumptions behind the respective funding policies. In our view, states that are consistent in funding required contributions based on funding policies that use conservative actuarial assumptions demonstrate an overall commitment to funding the estimated long-term liability and plan sustainability. Generally, assumptions are updated to fall in line with plan experience based on results from experience studies. Thus, the frequency of experience studies can determine how quickly a plan can align its assumptions with actual trends that affect the plan's liabilities. We typically view plans with experience studies conducted at least every five years as proactively evaluating their liabilities. The five states with the largest plans have all completed an experience study within the last five years.

Discount rates

The weak market returns over the past 10 years have caused many systems to re-examine their rate-of-return assumptions and there has been a general movement to lower them. While the national average of discount rates for pensions plans has moved to a median of 7.45%, the discount rates for the states with the highest funded ratios have a lower median of 7.25% with New York, North Carolina, South Dakota, and Wisconsin all below the national median. The Tennessee plan's discount rate was higher than the median at 7.5% but was reduced to 7.25% effective July 1, 2017 . Additionally, all five states have a history of revising discount rates in response to trends in long-term investment returns. Although lower discount rates have generally increased liabilities and lowered funded ratios for these stronger pension plans, we generally view the realignment of assumptions as a sign of proactive management, especially when accompanied by increased pension contributions or adjustment of benefits to strengthen funded ratios. An example is South Dakota, whose funding policy incorporates certain cost-of-living adjustments (COLA) limits as necessary to maintain at least a 100% funded ratio. Beyond comparing with the median, the true test of

accuracy is how it compares with the plan's experience. Discount rates that are higher than annualized rates of return over the long term can understate pension liabilities. When comparing discount rates with five-year annualized rates of return, all states but Wisconsin have outperformed their assumed rate of return as of fiscal 2016.

Chart 2



Mortality assumptions

Mortality assumptions are needed to determine current life expectancy and project changes in life expectancy for all members in the plan (retirees and active) and their potential beneficiaries as accurately as possible. This is critical to pension plan funding in particular because active employees may be receiving benefits over half a century from now. Additionally, the aging of the baby boomer cohort has led to a sharp increase in employees reaching ages eligible to receive benefits--where mortality assumptions and changes thereof affect liabilities the most. Underlying mortality assumptions are based on mortality tables, which are statistical tables of expected annual mortality rates. We note that generational (continuously updating) mortality projections tend to be much more conservative and stable than static projections. Recently, we have observed changes to outdated mortality assumptions as another contributor to noticeable increases in liabilities. Current tables (generally within the last decade) reflect longer life expectancy assumptions that will likely increase defined benefit retirement liabilities for funding purposes, especially when taking into account projections for future life expectancy changes. New York projects mortality generationally using scale MP-2014, and North Carolina and Wisconsin project generationally based on scale MP-2015; all of these scales are

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current and reflect best practice for mortality projections. Other states such as South Dakota and Tennessee use less current tables, but also project improvements generationally for active plans, and expect further updates based on the next experience study. When New York updated mortality assumptions in 2015, annual contribution rates in the fiscal 2016 budget proposal increased to 18.2% from 14.2% for the Employee Retirement System and to 24.7% from 20.8% for the Police and Fire Retirement System.

Payroll growth

Many plans choose to amortize their unfunded liabilities over 20 to 30 years as a level percentage of pay to keep costs aligned with their active payroll. To the extent that the payroll growth rate assumed is higher than actual experience, the amortization payments will fall short of projections, deferring additional costs into the future. We have found that in this post-recession slow-growth environment, many plans have had to revisit their payroll assumptions to better reflect current trends.

Three of the five states described here include payroll growth assumptions of around 3% to 4% of payroll, which are slightly higher than recent experience and may need minor adjusting in the future. North Carolina and Tennessee, however, amortize their unfunded liabilities as a level-dollar payment, which ensures contributions aren't dependent on payroll and can't be deferred.

How Does Plan Design Affect Liabilities?

Increasing costs, life expectancy, and volatile financial markets demand careful planning and creativity to ensure that the design of a pension plan will meet the long-term needs of the participants at a sustainable cost. Plan design refers to the structure of a retirement plan, defined by participation requirements, required contributions by the employer and employees, and benefit levels. While a defined-benefit plan requires the employer to provide pre-specified employee benefits based on several parameters, the level of employee benefits for the defined-contribution plan is based on market return while the employer makes a pre-specified contribution to the plan. Traditionally, states have participated in defined-benefit plans but we've seen a move toward defined-contribution and hybrid plans as well as other retirement income programs as states deal with growing pension costs. States vary in the way they structure their pension systems, but some are transitioning new employees into defined-contribution or hybrid plans rather than more traditional and generally more costly defined-benefit ones. Defined-contribution plans place investment and longevity risk solely on their employees, while defined-benefit plans promise employees predetermined lifetime benefits. This move toward defined-contribution plans can be a step toward fiscally sound pension plans for states, but it doesn't address existing pension obligations.

While plan design can help manage long-term costs for a state, a consistent and sustainable commitment to funding seems to be the stronger indicator of overall health for the highest-funded plans even as they vary on the spectrum of design details. North Carolina and Wisconsin participate primarily in defined-benefit plans but are positioned to remain at very healthy funding ratios through strong funding discipline. New York and South Dakota still participate mainly in defined-benefit plans, although to varying degrees they have set up new tiers for newer employee benefits. Starting in fiscal 2015, for example, Tennessee's newly hired employees and teachers participate in a hybrid plan that has two components: a defined-benefit plan and a defined-contribution plan. Under the new defined-benefit plan, new

employees receive significantly lower benefit levels, and the state now has benefit flexibility to help curb future costs.

State Pension Plans And Recent Reforms

New York (AA+/ Stable)

New York's primary pension fund is the New York State and Local Retirement System. The system consists of two major pension plans: the Employees' Retirement System (ERS) and the Police and Fire Retirement System (PFRS). The retirement system is a cost-sharing, multiemployer, defined-benefit pension plan. There are six tiers of membership based on date of first employment, with different vesting, benefit, and contribution levels, which have been implemented over time to help manage retirement costs. New York uniquely funds its plans using the aggregate cost method, which spreads both the expected future normal costs and unfunded liabilities over the average remaining career of its employees. This generally accelerates payments when underfunded compared with traditional, longer amortization schedules. Currently, the ERS amortizes unfunded liability over a relatively short 10 years using a level percentage method. Despite the state's well-funded plans, we view the state plan's unique smoothing policy as a risk to maintaining its funded levels. Since 2011, New York State and local authorities are allowed to defer ADC pension payments, with each annual deferral repaid and amortized over the following 10 years at interest rates comparable to taxable fixed income investments of comparable duration. The interest rate for amounts amortized in fiscal year 2017 is 2.33%, as set by the state comptroller. While this program helps the state and local authorities smooth contributions, especially during periods of significant budget pressures, we believe its practice raises annual payments and could undermine future funding levels.

North Carolina (AAA/ Stable)

The state administers several defined-benefit pension plans. The Teachers' and State Employees' Retirement System (TSERS) is the largest. While the state has been revising actuarial assumptions to more conservative levels, the liabilities and resulting unfunded liabilities are expected to increase, leading to lower funding levels. To prepare, the North Carolina retirement board adopted the Employer Contribution Rate Stabilization Policy, under which the contribution rate recommended to the legislature for the next five years will be no less than 0.35% of payroll greater than the appropriated contribution from the prior fiscal year, with an ADC as its lower bound and an alternate required contribution using a treasury bond-indexed discount rate as the upper bound. In essence, contributions will be no less than the ADC and will often be more. The policy resulted in contributions of $64.1 million in excess of the ADC for fiscal 2016. TSERS also amortizes its unfunded liabilities over level-dollar 12-year periods, ensuring rapid progress toward 100% funding when underfunded, which is not dependent on payroll growth.

Tennessee (AAA/ Stable)

Tennessee's only net pension liability relates to the State and Higher Education Employee Pension Plan that was closed to new membership effective June 30, 2014, and the State and Higher Education Retirement Plan for employees hired after that date. In 2014, the state also adopted a formal funding policy that, among other things, required 100% payment of the ADC, a conservative (relatively short and level-dollar) amortization schedule, a realistic measurement of liabilities, and experience studies conducted every four years. Tennessee is not responsible for any pension costs or liabilities associated with local governments or K-12 teachers. Starting in fiscal 2015, newly hired employees and teachers participate in a hybrid plan that has two components: a defined-benefit plan and a defined-contribution plan.

Under the defined-benefit plan, all employees (including state employees) who were previously noncontributory must contribute 5% of their salary. Eligibility to retire is based on the rule of 90 (which allows early retirement with no reduction to pension benefits if the sum of employees' age and years and months of service totals at least 90), employees are vested after five years, and retirees can receive up to a 3% COLA each year after retirement. The plan for new employees includes features that the state expects will allow it to control costs and limit unfunded liabilities. It creates a stabilization reserve account funded through excess employer contributions that can be used to smooth out periods of increased contributions. The maximum employer cost is 9% of salary with 4% targeted to the defined-benefit plan and 5% to the defined-contribution plan. The stabilization reserve can be used if an actuarial valuation determines that the employer contribution to the defined-benefit plan exceeds 4% or if the unfunded liabilities exceed 12.5% of a five-year average of Tennessee's general obligation (GO) debt. Additional measures the state can take include reducing or suspending the maximum 3% COLA, shifting defined-contribution plan contributions to the defined-benefit plan, increasing employee contributions to the defined-benefit plan by 1%, reducing benefit formula service accrual to less than 1%, and freezing the plan.

South Dakota (AAA/ Stable)

The state participates in the South Dakota Retirement System (SDRS), a multi-employer, defined-benefit pension system in which more than 470 public employers participate. The plan's actuarial 2016 valuation uses an assumed 7.25% rate of return for fiscal 2016 and then 7.5% thereafter. However, the board has recently made changes to its assumptions, effective in the 2017 actuarial report, that will reduce the assumed annual rate of return to 6.5% beginning in fiscal 2018. Senate Bill 13 of 2016 made changes for new hires that join the plan after June 30, 2017. Under the plan for new hires, employees will share in investment gains and losses and will not subsidize members of the current plan. No changes to contributions from employees or employers are expected.

To address its recent actuarial report showing that the system will not meet its funding policy as a result of changes in assumptions without corrective actions, the state implemented changes in February. Included in the 2017 legislative session was the determination of COLA based on the fair-value funded ratio of the system. The bill requires that when the funded ratio is at 100% or more, the COLA will be determined annually and is limited to a minimum of 0.5% and maximum of 3.5%. However, when the funded ratio is less than 100%, the maximum COLA is limited to the maximum adjustment that keeps the system fully funded. The state has also extended the period for calculating employees' final average compensation to five years from three, reducing spiking of benefits. Finally, we note that SDRS amortizes any unfunded liability over 20 years or less, aggressively paying down any unfunded liabilities that emerge.

Wisconsin (AA/Stable)

Wisconsin's unfunded pension liability represents its proportionate share of the Wisconsin Retirement System (WRS). The system as a defined-benefit-contribution plan is positioned to remain at very healthy funding ratios due to the plan's strong funding discipline. The system is funded through employer and employee contributions that are determined by an annual actuarial valuation in accordance with Chapter 40 of the Wisconsin Statutes. The employee required contribution is one-half of the ADC, and the employers are required to contribute the remainder. The employer may not pay the employee required contribution unless this is provided for by an existing collective bargaining agreement.

WRS applies a shared risk model where changes in active employee contributions and adjustments to benefit

payments offset investment performance fluctuations. The plan guarantees workers a minimum benefit based on years of service and final salary at retirement, but benefits can rise above the minimum level or decline back to the minimum if investments underperform or if the cost of benefits is higher than anticipated. Wisconsin also prudently ties its discount rate to plan demographics, using a higher discount rate (currently 7.2%) for active members who have a longer time horizon to cover investment volatility, and a lower discount rate of 5% for members after retirement.

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