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Local Government Pension And Other Postemployment Benefits Analysis: A Closer Look

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Local Government Pension And Other Postemployment Benefits Analysis: A Closer Look

Since the turn of the century, most U.S. public sector pension plans have experienced a sharp increase in unfunded liabilities due to several factors including demographic shifts primarily associated with the baby boomers, significant increases in life expectancy, and investment returns falling short of past performance amid a sustained low-interest-rate environment. As a result, there's been a dramatic rise in the contributions required to fully fund these plans within a reasonable time frame and if implemented may cause sizable budgetary strain for local governments (LGs) that may have limited flexibility and capacity to absorb these increasing costs. This strain often negatively impacts credit quality.

The struggle to balance substantial retirement benefits with their increasing costs has led plans and LGs to compromise on two primary fronts. First, the assumptions used to value liabilities are often aggressive and can downplay expected costs. Second, sound funding discipline techniques such as establishing prudent contribution requirements and amortizing unfunded liabilities over relatively short periods are infrequently and inconsistently applied. In addition, contractual and statutory contribution rates are common, such as a certain fixed percentage of payroll, and many have fallen out of sync with actuarially recommended contributions, leading to a deferral of costs and compounding of unfunded liabilities.

Many plans and participating LGs have started to address these challenges actively. A number have implemented pension reform, establishing lower benefits resulting in lower costs in the future. Often in tandem with reform, many have increasingly adjusted both their actuarial assumptions to reflect a more realistic view of future costs and their funding discipline to improve on past oversights.

In light of the challenges and changing environment surrounding local pensions, in this article S&P Global Ratings discusses the nuances of pension and other postemployment benefits (OPEB) analysis as part of the application of our criteria: "U.S. Local Governments General Obligation Ratings: Methodology and Assumptions" (Local GO criteria), published Sept. 12, 2013, on RatingsDirect. S&P Global Ratings also outlines how it incorporates pension and OPEB obligations into various aspects of its USPF LG rating methodology and expands on analytical considerations that create an important context for a comprehensive analysis of the inherent risks.

Preface

With U.S. LGs reporting a sharp increase in unfunded pension and OPEB obligations since 2000, it's important to be able to go beyond the reported financial information in order to understand the key drivers and assumptions behind the numbers to better assess and anticipate the impact on an LG's budget. It's also critical to analyze the plans that management teams have in place to address these challenges, and determine how effective they might or might not be. This report explains how S&P Global Ratings applies the criteria, "U.S. Local Governments General Obligation Ratings: Methodology And Assumptions" (published Sept. 12, 2013), to parse the potential future impact of pension and OPEB benefit, funding, and actuarial decisions on an LG's budget and overall financial strength.

Local General Obligation Criteria

Our methodology for assigning general obligation (GO) ratings to LGs starts with an assessment and scoring of seven key factors, each with a fixed weight. We apply a weighted average of these factors to determine an indicative rating. From there, we consider whether overriding factors or rating caps apply, and then use trend and peer analysis, among other factors, to arrive at the final rating.

Debt And Contingent Liabilities

The impact of pension and OPEB liabilities is primarily measured within our debt and contingent liabilities assessment, which accounts for 10% of the indicative rating. The initial debt and contingent liabilities score is determined by an analysis of the LG's net direct debt as a percent of total governmental funds revenue and total governmental funds debt service as a percent of expenditures. From there, we may adjust the initial score by looking at various additional factors including whether the LG has exposure to a large unfunded pension and OPEB obligation with risk of accelerating costs and budget stress, and if there is a credible plan in place to address the burden. When applicable, these adjustments will result in a worsening of our assessment of debt and contingent liabilities.

We focus on certain variables raised by the criteria when evaluating an LG's pension and OPEB liabilities: the magnitude of the obligation, asset and liability trends, the risk of budget stress due to rising costs or liabilities, and managerial actions.

Our analysis seeks to be forward-looking and identify risks for pension and OPEB plans that can affect costs over the medium term, which we view as three to five years. We recognize that plans do not use uniform assumptions or methods, such as a particular investment allocation and discount rate, or amortization schedule. Rather, these characteristics (and consequently, our analysis) are specific to the plan's funding scheme, demographics, and other idiosyncratic characteristics. This enables our evaluation to be specific and relevant to each individual LG and the retirement plans in which it participates.

Although we take into account an LG's aggregate liabilities for all pension and OPEB plans, the analytical focus will be on the plans with a large proportion of the LG's respective liabilities.

Large unfunded obligation with exposure to accelerating costs and budget stress

The first determination we make when analyzing an LG's pension and OPEB profile is if the liabilities constitute a large unfunded obligation leading to the potential for accelerating payment obligations and increased budget stress. This determination is based on three main areas:

- Exposure to large unfunded obligations;
- Risk of acceleration of payment obligations; and
- Magnitude of the budgetary stress due to increasing payments.

If we determine these factors to be present, we will negatively adjust our assessment of debt and contingent liabilities. Following is an explanation of how we evaluate each of these factors.

Large unfunded obligation. For pension plans, the funded status of each plan provides the first indication of a large unfunded obligation. We view a plan with a funded ratio below 80% by Governmental Accounting Standards Board (GASB) 67 and 68 standards to have elevated unfunded obligations. We complement the analysis of the funded status with a review of the pension plan assumptions because aggressive assumptions can lower perceived liability. For instance, a plan at 80% funded with aggressive assumptions could be exposed to a larger unfunded obligation than a 70%-funded plan with conservative assumptions.

Specifically, the discount rate and mortality assumptions (particularly mortality projections) strongly affect calculated liabilities. We will consider if the discount rate significantly exceeds past investment performance and returns, or if it implies an asset allocation that takes undue market risk that could leave an LG overly exposed. In addition, we view generational mortality projections as the conservative industry standard to anticipate life expectancy changes over time. As an illustration of a funded ratio's sensitivity to these assumptions, we note that for a typical plan (with average demographics and funded ratio) in the current climate, each 0.25% decrease in the discount rate can lower the funded ratio by about 2.5%-3.0%, and a strong update to mortality projections (for example, changing to fully generational projections from a limited static projection) can cause a one-time decrease in the funded ratio of about 5%-10%.

In most states, OPEB plans are treated in a more flexible manner than pensions, often viewing health benefits as non-contractual and more easily adjusted when needed, resulting in many LGs funding OPEB plans on a pay-as-you-go basis with no assets invested to match liabilities. Thus an 80%-funded threshold does not provide an illustrative and defining standard when it comes to OPEB plans. However, due to legal, political, and practical difficulties that LGs would encounter in attempting to significantly alter OPEB benefits, we continue to account for OPEB liabilities in our analysis. Thus we focus on the size of the unfunded OPEB liability as established under GASB standards. We have also observed that evaluating unfunded OPEB liabilities per capita in relation to peers is a useful indicator of a large unfunded obligation. Upcoming GASB 74 and 75 accounting standards will provide additional disclosure on the net OPEB liability that could provide increased comparability and transparency of unfunded OPEB liabilities for LGs.

Acceleration in payment obligations. If we determine that there is a large unfunded obligation, the second risk we assess is whether it is likely to lead to an acceleration in required payments. Once again, the funded status of the plan provides a useful indication of this risk. The lower the funded status is, the larger the contributions must be to reach full funding. For example, when working towards full funding, a 50%-funded plan is anticipated to have a significantly greater acceleration in contributions than an 80%-funded plan over the same time horizon. In addition to the funded status, we also assess an LG's funding discipline within its pension plans. Specifically, we will consider whether the LG consistently pays 100% of its actuarially determined contribution (ADC) for each plan. LGs that fail to pay their full ADC, as well as LGs that contribute statutory (or other) amounts that are lower than what is recommended by the plan actuary, have effectively been deferring contributions, increasing the payment obligation acceleration risk.

Furthermore, the ADC established by the plan can be conservative or aggressive. Aggressive ADCs establish methodologies that promote the deferral of contributions, which compound unfunded liabilities and forthcoming costs. The primary method for deferring payments is through ineffectual amortization of the current unfunded liability. Open amortizations (an unfunded liability that is "refinanced" each year) are never expected to fully pay off the unfunded liability. In our view, open amortization, particularly beyond schedules of 15 years, demonstrates poor funding discipline. Closed amortizations by definition pay off the unfunded liability over time. However, closed amortization schedules based on a level percentage of payroll of at least 25 years typically result in many years of negative amortization--where the unfunded liability grows while payments are being made, exposing an LG to heightened risks. Furthermore, if the payroll growth assumption is unrealistically high, amortization schedules based on a level percentage of pay will fall far short of projections, further compounding the unfunded liability. We believe that a prudent payroll growth assumption should not significantly exceed the inflation assumption.

A secondary method that can accelerate costs is the employment of the projected unit credit (PUC) funding method in setting contribution rates instead of the entry age normal (EAN) funding method. EAN assigns relatively more cost to employees early in their career, allowing greater accumulation of investment returns to help fund benefits promised, while PUC assigns relatively more cost to employees at the end of their career, causing more reliance on additional employer contributions over time, driving up costs. Finally, we note that when a plan employs asset smoothing, we believe that prudent practice would be to keep the actuarial value of assets (AVA) closely linked to the market value of assets (MVA). Plans that smooth assets over more than five years, with no corridor to align the AVA with the MVA, can be exposed to significant contribution acceleration when the AVA is significantly above the MVA. In addition, the presence of other plan characteristics, such as deferred retirement options or partial lump sum options, could increase the risk of large payouts, especially when inflexible or overly generous.

In cases where aggressive actuarial assumptions are combined with weak funding discipline, there is increased risk of plan asset depletion that could lead to a sharp increase in required contributions.

For OPEB plans, we note that pay-as-you-go funding directly exposes an LG to the risk of large swings in contribution requirements due to medical cost changes and plan experience in any given year. In our view, virtually all pay-as-you-go plans have exposure to accelerating costs over time (particularly when considering that healthcare costs have routinely exceeded general economic growth and accelerate rapidly as retirees age and live longer). To the extent that an LG works toward pre-funding OPEB plans, we view this as a positive step toward both reducing the unfunded obligation and managing costs over time. A pre-funded OPEB plan is subject to the same analysis as pensions described above, but is certainly in a better position than if it were pay-as-you-go.

Increased budgetary stress. The third risk we evaluate is the degree to which accelerating costs from large unfunded obligations pose stress to an LG's budget. The primary measurement of budgetary stress is the total carrying charge calculated as the ratio of the sum of all required annual payments to retirement benefit plans divided by the total governmental funds expenditures. In general, we consider a carrying charge of 10% or higher elevated and an indicator of budget stress. However we consider this level in the context of actuarial assumptions. For instance, an LG with a carrying charge of 5%-10% could be exposed to budget stress in cases of aggressive actuarial assumptions or poor funding discipline practices. In contrast, an LG could have a 10% carrying charge because of notably conservative assumptions or from proactively paying off the outstanding unfunded liability, which we would view more positively. Note that plans closed to new entrants have shorter investment and funding horizons than open plans. Assuming the same discount rate and amortization schedule for a closed plan will cause that plan to be more susceptible to cost accelerations resulting in budgetary stress from current liability than a comparable ongoing plan.

Determining if a local government has a credible plan to address risks

After we have evaluated an LG's exposure to unfunded liabilities, rising costs, and resulting budgetary stress, we evaluate whether an LG has a credible plan in place to address these risks. In cases where we determine that the LG does not have a credible plan in place, we will apply an additional negative adjustment to our assessment of debt and contingent liabilities.

We first note that, where possible, adopting realistic assumptions to value liabilities and employing strong funding discipline lay the foundation for developing a credible plan. Without these first steps, alternative actions to account for and curb rising retirement costs will likely prove inefficient. However, in many cases, implementing these foundational steps will not lower costs in the medium term, due to the large backlog of deferred contributions many plans face.

Evaluating further actions that could reinforce a potential credible plan is not a simple task, given the different forms and capabilities of retirement plans that exist. GASB defines three general types of retirement plans: single employer plans, which stand alone; agent multiple employer plans, which pool only administrative and investment related activities but not costs, assets and liabilities; and cost-sharing, multiple-employer plans, which pool all risks, rewards, and costs associated with providing benefits within the plan. The following are examples of positive actions LGs can take that are particular to the type of retirement plan(s) in which they participate.

Cost-sharing, multiple employer plan. This type of plan has the least amount of flexibility for a participating government. However, an LG might still:

- Create a separate irrevocable trust in which to set aside assets dedicated to fund retirement liabilities;
- Be actively involved in understanding cost projections of the plans in which it participates and prepare future budgets accordingly; and
- Participate in pension and OPEB reform offered at the plan level.

Agent multiple-employer plan. This type of plan offers a moderate amount of flexibility for a participating government. Typically, an LG might:

- Employ any method described under cost-sharing, multiple-employer plans;
- Enhance its funding discipline, particularly through proactively paying off unfunded liabilities; and
- In some cases, enact pension and OPEB reform at the LG level.

Single-employer plan. This type of plan offers the most amount of flexibility for the LG because it runs the plan. Typically, an LG might:

- Employ any method described under agent multiple employer plans;
- Implement conservative assumptions to value liabilities; and
- Implement various methods of pension and OPEB reform.

Within all three types of plans, we view pension and OPEB reform as one of the primary methods for reducing both the unfunded liabilities and accelerating costs. Notable forms of reform include increasing employee contribution rates or reducing benefit levels within legal limitations, the latter by the following common methods:

- Lowering the benefits offered;
- Lowering the salary measure (for example, determining a final salary for retirement based on many years of service averaged together);
- Lowering the cost-of-living adjustments (COLA) provided in retirement;
- Applying a service cap to benefit accrual; and
- Increasing the retirement age.

Regardless of the plan type, LGs can further demonstrate their commitment to a credible course of action by dedicating revenues, taxes, or even surplus to help cover increasing contributions. Finally, if an LG closes a retirement plan to new entrants appropriately by taking into account a shorter investment and funding horizon over time it might anticipate a future reduction in liability and costs because new employees will not accumulate benefits or add to the current liability.

Context is crucial to understanding the significance and efficacy of potential actions an LG can take to improve its funding situation. Proactively planning and preparing for increasing costs and dedicating specific sources of funding toward those costs are certainly prudent measures and could help manage additional budgetary stress; however, in themselves they do not stem actual increases in costs over time. In contrast, pension reform measures work to stem increases in costs over time, with benefit formula, COLA, and retirement age changes generally resulting in the most meaningful impact on costs. However, most pension reform actions can only be applied to new hires, which take 30-40 years to fully replace the current employee population, and as a result, often take many years to generate significant savings. In the medium term, an LG will only realize a small portion of the total resulting cost savings. Therefore, adopting realistic assumptions and employing strong funding discipline is the cornerstone on which these additional actions can build to establish a credible plan to address accelerating costs and increased budget stress.

Assessing Pension And OPEB Risks Elsewhere In LG Criteria

The debt and contingent liabilities assessment provides the most direct framework for evaluating pension and OPEB risks. However, S&P Global Ratings' evaluation of risks related to pension and OPEB obligations is not confined to this assessment. The criteria provide for a potential one-notch rating adjustment based on sectorwide data, trends, and comparisons with similarly rated peers that could further incorporate other strongly positive or negative pension and OPEB characteristics we observe. Our LG methodology also addresses these risks within the Institutional framework (IF), management, budget flexibility, and budgetary performance sections of our criteria.

Institutional framework

The IF score represents 10% of the indicative rating and assesses the legal and practical environment in which an LG operates. All LGs of the same type within a state will receive the same IF score. Within the IF assessment, pension and OPEB risks are most often reflected in two of the four sub-factors: predictability, and revenue and expenditure balance. Specifically, LGs participating in state-administered, cost-sharing, multiple-employer plans could experience increased pressure if contributions the state previously covered were passed down to the LGs. In an environment where such unanticipated cost increases have occurred or have a strong potential to occur, and LGs are unable to sufficiently plan for such increases, our view of predictability could be negatively affected. In regard to the revenue and expenditure balance analysis, if an LG participates in a substantially underfunded state-administered plan over which it has no control, we might consider this an unfunded expenditure mandate. It could be exacerbated when state and LGs participate in a single plan in which the state is underfunding its portion of the required contributions. In an environment where such conditions exist and LGs have limited flexibility to raise revenues to cover required contributions, our view of revenue and expenditure balance could be negatively affected. If we determine these pension and OPEB risks to be present in our sub-factor scoring, it is likely to lower the overall IF assessment.

Management

Financial management assessment. The management score receives a 20% weight, making it the second largest individual factor in the criteria. The score begins with the financial management assessment (FMA), but can then be adjusted upward or downward, or be capped, based on certain considerations. An LG's administration and awareness of pension and OPEB risks may inform two of the seven sub-factors we assess within the FMA framework: revenue and expenditure assumptions, and long-term financial planning. For instance, if we determine that an LG is using unrealistic assumptions within pension or OPEB valuations over which it has control, and that this could in turn mask probable shortfalls, it is likely to temper our assessment of revenue and expenditure assumptions. Our view of management's long-term financial planning could likewise be negatively affected when a government experiences rising pension and OPEB costs that cause budget stress, yet we feel the LG has not realistically considered or planned for these costs.

Management score cap. Based on LG criteria, we will cap the management score at '4', on a scale of '1' to '5', where '1' is the strongest score and '5' is the weakest, when certain conditions exist. This, in turn, will result in a rating cap at the lower of 'A' or one notch below the indicative rating. In the context of pension and OPEB risk, one condition that can cap the management score at '4' is when an LG has very high combined debt, pension, and OPEB costs, with no credible plan in place to address the situation (see debt and contingent liabilities assessment). Our criteria cite some characteristics of such a high burden. In addition, we may also apply this cap in cases where costs are relatively high (but below 50%), causing significant budget stress, and an LG has very limited ability, whether due to capacity or willingness, to increase revenues or reduce expenditures. Another scenario is when the costs are relatively high and we believe that an LG has overly optimistic assumptions in its pension or OPEB plans or that these plans' amortization schedules are not conservative enough as discussed in the debt and contingent liability section. In these scenarios, the current ratios may underestimate the true burden the fixed costs present, which could likely accelerate significantly in the medium term if assumptions and amortization schedules are adjusted to what we consider more realistic levels.

When we believe an LG is currently in a state of structural imbalance, with what we view as no credible plan in place to address the imbalance, obth the management score is capped at a '4' and the overall rating is capped at a 'BBB+'. Once an LG has resolved its structural imbalance the 'BBB+' cap is removed, but the management score will remain capped at a '4' during the three-year period thereafter when management is rebounding from the structural imbalance condition. When assessing a potential structural imbalance, we will consider if an LG is consistently underfunding its pension and OPEB obligations. This could come in the form of routinely paying less than required annual contributions, or when proper funding discipline techniques do not exist, exposing the government to steep accelerations in annual costs over the medium term to correct funding deficiencies. In our view, routine underfunding of pension and OPEB obligations is often a sign of existing or potential future fiscal strain.

In some instances, LGs will issue pension or OPEB obligation bonds in an attempt to address unfunded liabilities or to curb accelerating costs. If we observe that a government is using proceeds from these bonds to help pay annual contribution costs instead of paying down its unfunded liability, it could be a sign of structural imbalance because the LG is essentially borrowing to pay for ongoing operations.

Management score adjustment. We may also factor in pension and OPEB obligations when assessing scenarios where an LG demonstrates a consistent inability to execute on approved structural reforms over a period of two consecutive years. An example in which we might consider this negative adjustment is when a government approves pension or OPEB reform that is subsequently immobilized or rejected after the fact through collective bargaining, court decisions, or other factors.

Budgetary flexibility

The budgetary flexibility score represents 10% of the indicative rating, and measures the degree to which an LG can look to additional financial flexibility in times of stress. The initial assessment is formed by measuring the available fund balance as percent of expenditures. It can then be adjusted upward or downward based on certain considerations. One condition we consider is if projections suggest that the available fund balance will deteriorate. In determining whether to apply this adjustment, we consider whether the LG has large unfunded pension and OPEB obligations with accelerating costs that are likely to lead to draws on the available fund balance. We believe this fund balance could be at risk when there are known accelerating retirement costs or when actuarial assumptions are being updated that could lead to increased liabilities and funding requirements, particularly when not met with budget adjustments. An LG could also put its fund balance at risk when using reserves to strengthen pension or OPEB assets in an attempt to improve low funding levels and limit increasing annual costs. In addition, the inherent volatility of taking a pay-as-you-go approach to funding OPEB, or even pension liabilities, could lead to significant cost swings from one year to the next, also jeopardizing the fund balance position. If we observe any of these scenarios and expect the available fund balance to deteriorate, our view of budgetary flexibility could weaken.

Additional adjustments consider an LG's capacity to cut expenditures or raise revenues. In our view, LGs burdened by high fixed costs (combined debt, pension, and OPEB costs) may have limited capacity to reduce other discretionary spending, making expenditures relatively rigid. In other cases, certain LGs have demonstrated an inability or unwillingness to raise revenues (often due to ongoing political resistance) to compensate for escalating retirement costs. When either of these conditions exists, we may apply an additional negative adjustment to our assessment of budgetary flexibility.

Budgetary performance

Measuring the current fiscal balance of an LG, the budgetary performance score also represents 10% of the indicative rating. The budgetary performance score begins with an analysis of the general fund net result and total governmental funds net result, measured against general fund and total governmental funds spending. We may then adjust the initial score upward or downward. Certain conditions that could cause us to negatively adjust the initial score include scenarios in which budgetary performance is being overstated due to our view of deferred spending or when we expect that performance will deteriorate in the future.

In determining whether to apply a deferred spending adjustment, we consider an LG's funding discipline toward its retirement plans and whether future retirement costs are likely to disrupt performance. If an LG is making annual contributions to its pension plans that are below actuarially determined levels, budgetary performance is likely being overstated. In addition, we consider the assumptions and methods used in determining ADC rates. Thus, in cases where we believe pension plans incorporate aggressive assumptions or exhibit poor funding discipline, or when a prudent ADC is used but is not being fully met, we may determine that current ratios hide significant underspending due to deferred payments, weakening our view of budgetary performance.

When we believe that the reported general and/or total governmental funds fiscal balance could be significantly affected by projections of increases to required pension contributions or volatility resulting from not prefunding OPEB costs, it could indicate structural deterioration. If this were the case, we would apply a negative adjustment to our assessment of budgetary performance.

Finally, we note that pension and OPEB plans conduct experience studies approximately every five years to ensure assumptions are in line with actual plan experience and actuarial standards of practice. In cases where we have determined that a plan has extremely poor assumptions and we anticipate that an experience study will be conducted within the next couple of years that will adjust liabilities strongly upward, we might consider this a unique exposure to event-related risk that could significantly accelerate required contributions in the medium term, and as a result negatively adjust our budgetary performance assessment.

Effective Management Is Key

This commentary highlights a number of areas within our LG GO criteria where pension and OPEB risks are captured. We do not suggest that each retirement risk identified automatically affects every assessment described. Rather, the type and magnitude of pension and OPEB risks determine which areas of our rating analysis are affected, if any. The bottom line is, LGs that consistently demonstrate strong funding discipline by fully funding required contributions on a prudent actuarial basis with conservative assumptions and methods are in turn more likely to effectively manage their pension and OPEB liabilities and the associated budgetary costs than LGs that don't.

Related Criteria And Research

Related Criteria

- U.S. Public Finance: Financial Management Assessment, June 27, 2006
- U.S. Local Government s General Obligation Ratings: Methodology and Assumptions, Sept. 12, 2013
- U.S. Public Finance Debt Statement Analysis, Aug. 22, 2006

Related Research

- Incorporating GASB 67 And 68: Evaluating Pension/OPEB Obligations Under Standard & Poor's U.S. Local Government GO Criteria, Sept. 2, 2015
- S&P Public Finance Local GO Criteria: How We Adjust Data For Analytic Consistency, Sept. 12, 2013