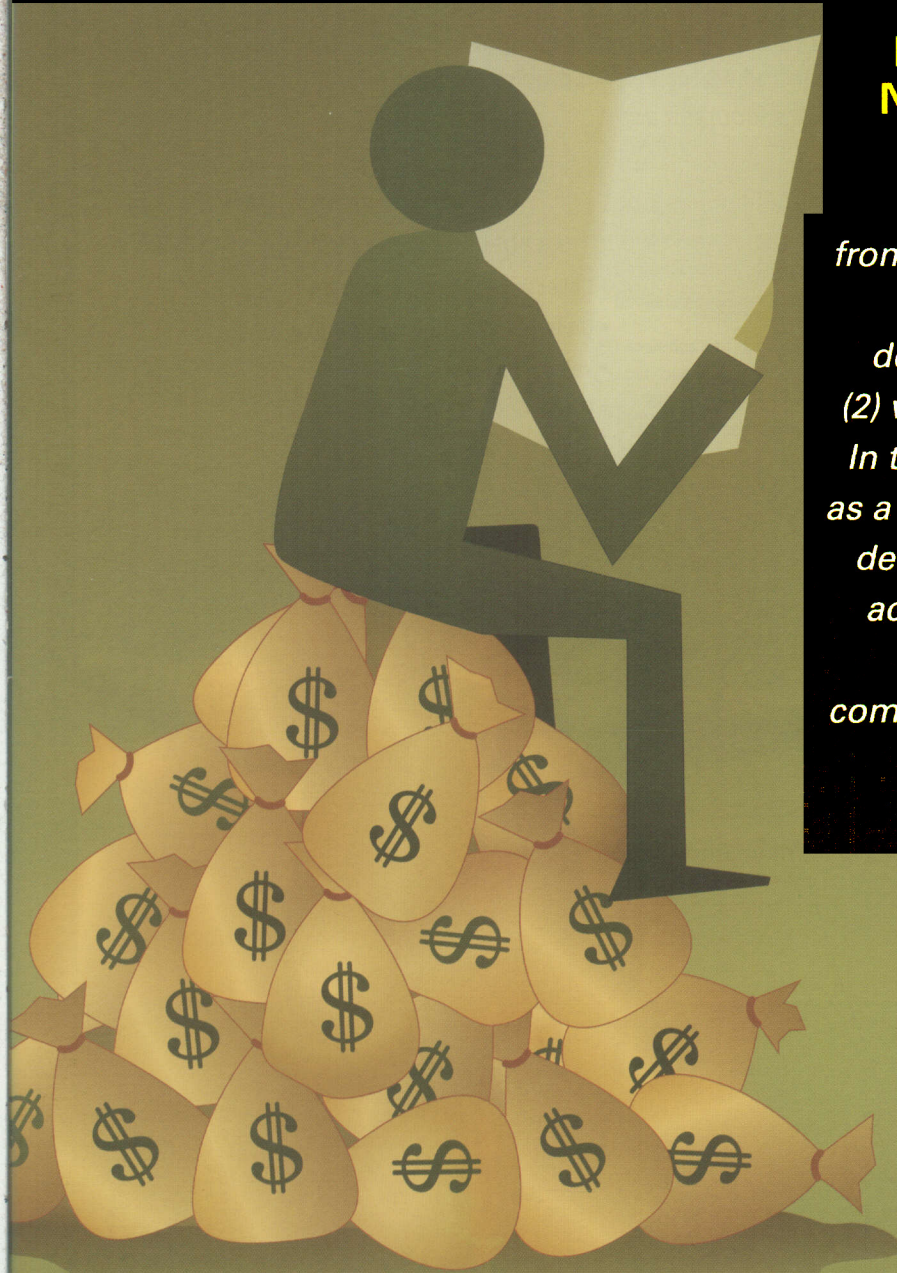


OPEB Ratio Analysis: Budgeting, Benchmarking and Better Communications

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*Finance professionals are on the
frontline of tackling legacy costs. There
are two prevalent questions from
decision makers: (1) can we afford it?
(2) what are other governments doing?
In this article we explore ratio analysis
as a way to quantify the budget impact,
develop benchmarks for comparisons
across jurisdictions, identify effective
practices, and provide a means to
communicate potentially unsustainable
commitments to elected officials,
citizens, and other stakeholders.*



What are Legacy Costs?

Many local governments are strained to fund massive liabilities left by previous administrations. These legacy costs represent commitments made in the past that will be paid by future generations. Generally they take the form of pensions and other postemployment benefits (OPEB) such as retiree healthcare. Mid twentieth century beliefs that fiscal and economic growth would continue indefinitely served as the basis for establishing these benefit levels. By the time subsequent periods of economic decline occurred, public sector benefit design was based on benefit comparability among jurisdictions rather than fiscal sustainability. Efforts to scale back legacy commitments were incremental at best. In the worst scenarios, legacy cost commitments were expanded through binding arbitration decisions despite an entity's proven ongoing fiscal crisis.

As a result of the Great Recession of 2007-2009, significant public attention was placed on the adequacy of public pension funding in light of market losses. Despite the market setback, fiscal year 2010 financial reports reflect an aggregate funded ratio of 77% based on data compiled by the Center for Retirement Research at Boston College.¹ In stark contrast, OPEB liabilities are often not funded beyond the current year. From an employer's standpoint, OPEB is especially vexing. This is best understood by looking at the benefit equations for defined benefit pensions as compared to OPEB for retiree healthcare.

In its most basic form, a defined benefit pension is often based on a three part formula that includes the retiree's years of service, final average compensation, and other variables such as a pension multiplier. The pension equation utilizes factors that are quantifiable and known. Despite a myriad of other actuarial assumptions involved in calculating the defined benefit pension liability, the

bottom line is that when an employee terminates service, each of the three key variables are known.

Conversely, the formula used for calculating OPEB can vary widely among local governments. Benefit provisions may include a vesting schedule, specific insurance carriers, rate subsidies, opt-out provisions based on a percent of plan costs, and rate subsidies. Many of these benefit provisions, and the related actuarial calculations, are based on the *future* cost of healthcare for 30 years into the future. The uncertainty of predicting future retiree healthcare costs is an additional risk in the OPEB calculation that cannot be ignored. The combined effect of added risk and lack of prefunding expose all stakeholders involved. Retiree healthcare benefits do not carry the same legal weight as pensions in many states. Elected officials faced with rescinding benefit levels become acutely aware of the impact of a no prefunding policy. Because of these complexities, we focus our efforts on addressing the OPEB problem.

Searching for Answers

To meet the objectives of quantifying the budget impact of OPEB, identifying sources for effective practices, developing benchmarks to provide context, and emphasizing a rational analysis of fiscal sustainability, it was determined that a set of financial ratios would lead to potential answers. Since financial statements are readily available, required disclosure information would provide the data needed for analysis. Five ratios were selected for analysis.

1. Funded Status – The funded status is calculated as the Actuarial Value of Assets (AVA) divided by the Actuarial Accrued Liability (AAL). This basic ratio defines the degree to which sufficient resources have been set aside in an irrevocable trust to pay future benefits when they become due.

2. Annual OPEB Cost as a Percent of Government-wide Revenue and General Fund Revenue –

The annual OPEB cost as a percent of government-wide revenue is calculated by dividing the cost (expense) by government-wide revenue from the statement of activities (net of capital grants and contributions). This ratio fosters the discussion about allocation of resources. What percent of the government's budget should be allocated to OPEB versus other services?

The OPEB cost as a percent of general fund revenue is calculated by dividing OPEB cost by total general fund revenue from the statement of revenues, expenditures, and changes in fund balances. While it can be argued that this ratio over-emphasizes the burden on the General Fund, this ratio may provide an early signal of potential fiscal stress. This is especially important if there is long-standing reliance on operating grants, intergovernmental revenues, or resources recognized in other funds that become diminished.

3. Percent of Annual Required Contribution (ARC) Funded –

The percent of annual required contribution funded is calculated by dividing the actual contribution by the annual required contribution as determined by the actuary. This ratio measures the annual contribution shortfall. By quantifying the underfunded amount, budget what-if scenarios can be evaluated. What would happen to services if 70% of ARC was funded rather than 50%? Or 80%? These exercises could reveal the existence of an unsustainable commitment. The actuary can provide further insight by providing cash flow projections and sensitivity analysis to demonstrate the impact of prefunding.

4. Unfunded Actuarial Accrued Liability (UAAL) as a Percent of Governmental Activities Debt – The Unfunded Actuarial Accrued Liability (UAAL) as a Percent of Governmental Activities Debt is calculated by dividing the UAAL by the governmental activities long term debt. Debt includes bonds, notes, loans, and capital leases as shown on the statement of net assets or in the footnotes. The purpose of this ratio is to provide an internal benchmark of the magnitude of OPEB liabilities compared to other long-term obligations. The dollar amount of debt obligations are defined when incurred while OPEB tends to grow over time. In addition, there are further controls on municipal debt including statutory restrictions and pledged revenues. In contrast, there is no measure to address how large the OPEB commitment can be or how it will be funded. By providing an internal benchmark, the municipality is in a better position to identify if and when its commitments exceed its capacity.

5. Unfunded Accrued Actuarial Liability (UAAL) Per Capita – The Unfunded Accrued Actuarial Liability (UAAL) Per Capita is calculated by subtracting Actuarial Value of Assets from the Accrued Actuarial Liability (AAL) then dividing the difference by the

government's population. The per capita measure addresses fiscal capacity. It is particularly useful when tracked over time. For governments that have not prefunded OPEB and experienced a loss of population, it highlights the fiscal burden that is placed on current taxpayers to pay for services provided to prior taxpayers.

In addition to the unique characteristics of each ratio, there are three additional components to the OPEB ratio analysis. First, further insight is gained by calculating these ratios for both OPEB and pension. The entity's own pension ratios compared to OPEB provide an internal benchmark. Second, these ratios provide the greatest level of insight when compared to similar governments. Third, once ratio analysis variances with similar governments are identified, the next step is to understand why. A ratio higher or lower than a similar entity is not necessarily good or bad.

Testing the Ratios

To determine the effectiveness of these ratios in addressing the four objectives, we utilized fiscal year 2010 audited financial reports and related actuarial data from the 30 largest cities based on the 2010 U. S. Census. These cities are located in 21 states in addition to Washington, D.C. and range in population from 584,000 to

8.2 million. Some of the cities experienced population growth and others significant decline. Cities with multiemployer plans presented a challenge for data analysis; therefore, not all ratios could be calculated for all cities. In addition, one city's financial report was rescinded and therefore not available. Twenty one cities had all data available. In aggregate those cities had an OPEB AAL of \$113 billion funded at 6.3%. Their aggregate defined benefit pension liability of \$315 billion was 73% funded.

Answers Found (and more questions)

Applying the ratios yielded insight into the fiscal impact of OPEB. Investigating the ratio variances with a basic Internet search resulted in lessons learned from other governments addressing OPEB. Even the cities that lacked data led us to state policies that are worthy of further analysis. Finally, the range of resulting values begins to shape what may be an acceptable level of OPEB fiscal impact versus a potential loss of sustainability.

FUNDED STATUS

As expected the majority of OPEB plans are 0% funded. There are notable exceptions. Five cities have begun prefunding. Los Angeles, for example, is at 50%. This level of funding is the result of a prefunding policy that began in 1987 for the general employee plan and in 1991 for police and fire plans.

FIGURE 1:

CONCEPT	CALCULATION
Funded Status	$AVA \div AAL$
Use of Resources	$AOC \div \text{Government Wide Revenue}$ $AOC \div \text{General Fund Revenue}$
Annual Funding Effort	$\text{Actual Contribution} \div ARC$
Context	$UAAL \div \text{Governmental Activities Debt}$
Fiscal Capacity	$UAAL \div \text{Population}$

AAL: Actuarial Accrued Liability
AOC: Annual OPEB Cost
ARC: Annual Required Contribution

AVA: Actuarial Value of Assets
UAAL: Unfunded Accrued Actuarial Liability



The analysis revealed that Columbus participates in statewide multi-employer OPEB plans. Although city specific data was not available, the actuarial reports for the statewide plans revealed that the aggregate funding level is at 33%. Similarly, Portland participates in Oregon's statewide OPEB plan that is 41.9% funded. In searching for effective practices, it appears that policies in those states are moving in a sustainable direction.

ANNUAL OPEB COST AS A PERCENT OF GOVERNMENT-WIDE REVENUE AND GENERAL FUND REVENUE

OPEB cost as a percent of government-wide revenue ranges from 1% to 17% with the mean at 5%. Eighteen of 29 cities were less than the mean of 5%. Cities on the high end are known to be experiencing severe fiscal stress. The City of Detroit, at 13%, has experienced significant population loss.

Its financial stress has resulted in a Financial Review pursuant to the State of Michigan's Emergency Manager Law (Public Act 4 of 2011). Even cities with population increases present a higher ratio such as Nashville/Davidson County at 12% and Boston at 10%.

OPEB cost as a percent of general fund revenue ranges from 1% to 33% with the mean at 10%. Fourteen of 28 cities are below the mean. For some cities, this ratio highlights the potential burden placed on the general fund resources. Detroit's ARC is equivalent to 26% of general fund revenue. For Memphis, OPEB ARC equates to 5% on a government-wide basis. As a percent of general fund revenue, however, that ratio increases to 25%. The reason is that business-type activities, specifically related to utilities, are more than double the revenue from the City's governmental activities. This internal relationship flags the need to review rate setting methodologies to

prevent a shift in burden to the general fund or inequitable utility rate increases in the future.

PERCENT OF ANNUAL REQUIRED CONTRIBUTION (ARC) FUNDED

The percent of ARC funded ranges from 10% to 132% for 27 of the cities. The City of Los Angeles is the highest at 132%. The City's footnote disclosures reveal that the phasing-in of new actuarial funding assumptions created this anomaly. The City of Indianapolis, at 10%, is funding its OPEB on a pay-as-you-go basis. Benefit changes in previous years have allowed it to control the current cash flow. The City's civilian retirees may continue their healthcare coverage but contribute 100% of the premium, while police and fire retirees contribute 60% of the cost. Since retirees pay the same amount as active employees, the retirees receive an implicit rate subsidy which gives rise to the OPEB liability.

REAL SOLUTIONS FOR REAL PROBLEMS

PROBLEM: A Federal agency had to adopt a new funding structure and convert to a new central accounting system when it moved to a different Department. The converted trial balance carried unsupported and unreconciled balances which resulted in auditors reporting a material weakness.

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UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL) AS A PERCENT OF GOVERNMENTAL ACTIVITIES DEBT

The UAAL as a Percent of Governmental Activities Debt ranges from 4% to 1228% for 25 cities with a mean of 144%. Ten of those cities have an unfunded OPEB that exceed its governmental activities debt. For the City of Boston, this ratio revealed that its OPEB liability is 4.95 times the size of the governmental debt load. In researching Boston's efforts to address this liability, a potential best practice was uncovered. In April 2011, the City, its employee groups, and retirees entered a memorandum of understanding resulting in a voluntary modification of benefits for current employees and retirees to manage healthcare costs.

Explaining the magnitude and significance of unfunded OPEB to stakeholders presents a unique challenge for the finance professional. In many cases, the numbers are so large that they are hard to comprehend. Further compounding the problem is the widespread use of the pay-as-you-go system. Even cities with the most conservative budget mindset have delayed prefunding. By relating the OPEB liability to debt financings, understanding the depth of the funding shortfall may evolve.

UNFUNDED ACCRUED ACTUARIAL LIABILITY (UAAL) PER CAPITA

The OPEB UAAL per capita from the sample ranges from \$169 to \$8632 with a mean of \$1,983 among the 25 cities. For the five cities that are more than twice the mean ranging from \$4,338 in Nashville/Davidson County to New York at \$8,632, this ratio highlights the potential need for a fair and sustainable plan to address the significant costs being placed on constituents. Both of those cities include school system liabilities and one is a city/county. This presents examples of unique characteristics that should be considered when selecting benchmark communities.

A city on the low end of UAAL per capita is Chicago at \$375. That city utilizes a premium sharing plan design. Those who retired prior to July 2005 receive a 55% City subsidy. Subsequent retirees receive a city subsidy that ranges from 50% to 0% based on years of service.

Conclusion

Ratio analysis aids the finance professional in addressing the OPEB problem in three ways. First, underlying resource allocation decisions become evident when comparing OPEB expense to resources. Second, the ratio analysis highlights differences among governments to target the search for effective practices. Finally, ratios can be used to identify and communicate the possibility of unsustainable commitments. ▮

Endnote

1. Public Plans Database. Aggregate Funding for All PPD Plans. Center for Retirement Research at Boston College and Center for State and Local Government Excellence.



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