AMERICAN ACADEMY *of* ACTUARIES

Issue Brief

'Surplus' Considerations for Public Pension Plans

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Key Points

- Caution is recommended when using the term "surplus" or other similar terms (such as "overfunded" or "excess-funded") to describe a plan with a funded ratio greater than 100%. Such plans are simply "at or ahead of their funding schedule," and the "surplus" in this context differs from the everyday meaning of the term as "an amount left over after all requirements are met."
- A "surplus" management strategy should be established well in advance and integrated into the system's funding policy.
- A "surplus" management strategy may include contribution adjustments, risk reduction strategies, and benefit enhancements, which are intended to preserve the current plan "surplus" and/or reduce the risk of future funded status and contribution volatility.

Introduction

In 2021, public pension plans reached the highest funded ratios since the Great Recession, and for some plans, the highest funded ratios this century.[1] In the prior two decades, two deep recessions combined with the growing headwinds of maturing plan demographics and lower expected investment returns to produce lower funded ratios. This scenario led to actuarial white papers and other guidance focusing on improving funding policies to restore plan funded ratios.[2] However there is a lack of corresponding discussion and analysis regarding how funding policies should change when funded ratios reach 100% or higher. Even if recent higher funded ratios may fluctuate, a plan's funding policy should consider how to preserve high funded ratios once achieved, through discussion and mutual understanding between the plan and the plan sponsor.

This issue brief examines plan "surplus,"[3] what it means and does not mean, historical lessons for public plans regarding "surplus," and considerations for plans at or approaching 100% funding in the future.

Actuarial funding methods establish the actuarial accrued liability, which is the target level of assets for the plan. The funded ratio is assets divided by liabilities, so when assets and liabilities are equal, the plan's funded ratio is 100%. This basic funding goal is well-covered in the American Academy

1 Based on data from Publicplansdata.org.

2 Examples include: the California Actuarial Advisory Panel's *Actuarial Funding Policies and Practices for Public Pension and OPEB Plans*, the American Academy of Actuaries' *Objectives and Principles for Funding Public Sector Pension Plans*, the Conference of Consulting Actuaries' *Actuarial Funding Policies and Practices for Public Pension Plans*, and the GFOA's *Best Practice: Core Elements of a Funding Policy*.

3 Caution in using this terminology is reinforced by using quotation marks around the word "surplus" throughout this issue brief.

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of Actuaries issue brief *The 80% Pension Funding Myth*, which notes the importance of a strategy to attain 100% within a reasonable period of time. It also reminds stakeholders that a funded ratio, defined as a single point-in-time comparison of two numbers, can be measured in different ways and does little to indicate the nuances and trajectory of total plan health over time.

The same concept is true at or above a 100% funded level. For ease of reference within this paper, the term "surplus" will represent the funded percentage above 100%—e.g., plan assets in excess of actuarial accrued liabilities. However, it should be noted that a ratio of 100% simply means that a plan is on track to fund its promised benefits. It does not mean that contributions are no longer needed, but instead that contributions must cover current ongoing costs for benefits attributable to current and future years of service (the Normal Cost), with an equal likelihood that contributions could increase or decrease at any point in the future due to plan experience or assumption changes. **Thus, caution is recommended when using the term "surplus" or other similar terms (such as "overfunded" or "excess-funded") to describe a plan with a funded ratio greater than 100%. Such plans are simply "at or ahead of their funding schedule," and the "surplus" in this context differs from the everyday meaning of the term as "an amount left over after all requirements are met."**

Historical Experience

Over the years, public pension plans experienced periods of improving and declining funded status, impacted by investment performance, plan experience, and the periodic recalibration of actuarial assumptions and methods. In periods with improving results, many plans implemented benefit and contribution changes, which at times proved detrimental to a plan's long-term sustainability.

During the 1990s, for example, many public plans averaged investment returns in the double digits. The "surplus" generated by these investment returns often was used to finance permanent benefit enhancements, contribution rate reductions, or both. In many

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cases, the “surplus” that provided the basis for the benefit enhancements or contribution reductions turned out to be temporary, but the benefit enhancements were contractually, or even constitutionally, protected and the contribution reductions proved difficult or slow to reverse.

In retrospect, the economic environment of the 1990s was a unique opportunity for some public pension plans to maintain an ongoing “surplus” or at least a stronger continuous funded level. If the “surplus” had been managed differently, the accumulated gains of that decade could have helped mitigate the investment losses of the 2000–2002 dot-com bust and the 2008–2009 financial crisis, as well as the impact on future expected investment returns predominantly driven by lower interest rates following the Great Recession. Instead, the consumption of most, if not all, of the decade’s substantial gains for benefit enhancements and contribution reductions, combined with these significant economic events, contributed to over two decades of unfunded liability growth for many public pension plans.

Attempts to mitigate the impact of these economic events on public pension plans were often constrained by law as well as the political difficulty of rapidly adjusting budget priorities. These reactive efforts in the form of reduced benefit tiers or graded contribution increases for many public plans left current and future generations of the workforce to carry the burden of paying down liabilities largely attributable to prior generations.

This history suggests the design and implementation of a better “surplus” management strategy would incorporate more measured changes and proactive risk management strategies into public plans’ funding policies.

Strategies to Manage ‘Surplus’

A well-crafted “surplus” management strategy serves both governance and communication purposes. As a starting point, it defines the term “surplus” and how it is measured for the plan, so all interested parties begin from a common framework.

Such a strategy may take different forms but will typically include multiple considerations. This approach avoids the temptation to reflexively spend down a “surplus” by lowering contributions too far or improving benefits too quickly, which may prove problematic if future experience is unfavorable. Potential elements may include consideration of:

- Key assumptions
- Risk reduction strategies
- Contribution adjustments
- Targeted, conditional, or temporary benefit enhancements

The "surplus" management strategy should be established well in advance and integrated into the system's funding policy. This allows stakeholders to understand there is a specified, measured process to be followed in the occurrence of a "surplus" funding position.

Key Assumptions

Before considering other changes based on the existence of a "surplus," plans may conduct a detailed review of important actuarial assumptions (e.g., the long-term investment return) to ensure they solidly align with the middle range of reasonable and contemporary future expectations. This initial step ensures that "surplus" management decisions are based on a realistic or even somewhat conservative view of the plan's current financial status. Outdated or overly optimistic assumptions can inflate a plan's measured "surplus" and encourage premature actions that undermine long-term funding progress.

After reviewing assumptions to confirm that a pension plan has reached a "surplus" position, there are several strategies to consider and evaluate. The remainder of this section discusses "surplus" management strategy components such as contribution adjustments, risk reduction strategies, and benefit enhancements, which are intended to preserve the current plan "surplus" and/or reduce the risk of future funded status and contribution volatility. As mentioned earlier, the "surplus" management strategy is itself a component of the overall pension funding policy.

Risk Reduction Strategies

As part of the proposed adoption of a "surplus" management strategy, pension plans could consider other approaches intended to reduce future contribution volatility and stabilize funded status. These may include:

- Reducing investment portfolio risk so that the expected return volatility falls within a narrower range. This approach may be relevant especially for mature pension plans that reflect a large asset-to-payroll ratio or where a large portion of the plan's liability is attributable to current retirees, which can make the plan more susceptible to higher contribution volatility. This exercise could include immunizing all or a portion of the liabilities with a laddered bond portfolio or similar strategy.
- Adding a margin for adverse deviation to certain assumptions (e.g., expected return or anticipated cost-of-living adjustments) to improve the long-term likelihood of achieving those expectations. Note that pension plans should carefully consider what

is an appropriate level of conservatism for assumptions and the resulting effect on employee contribution rates and intergenerational equity.

- Updating the plan's funding policy regarding amortization methods and periods to pay down unfunded liabilities more rapidly when/if they occur.

Note that reducing the investment portfolio risk in the first bullet above will often lower the assumed investment return and discount rate, which then lowers the funded ratio. Plan sponsors will need to carefully consider this trade-off and potential solutions while also considering the plan's general risk tolerance. For example, a plan could reduce its portfolio risk to maintain a funded ratio no higher than 100% and increase its portfolio risk if the funded ratio falls below 100%.

There are many different strategies for reducing investment risk such as those that transition from the current level of risk to a lower level of risk over time (e.g., glide path). However, a complete discussion of these approaches is beyond the scope of this issue brief.

Before evaluating the benefits of risk reduction solutions, stakeholders will need to have a clear understanding of plan risks. Many of these potential risks will be addressed in the actuarial valuation report's risk discussion. However, there may also be value in performing an enhanced risk analysis. The objective of this supplementary review would be to provide additional insight on which risk reduction strategies are the most practical and effective specific to the plan.

Contribution Adjustments

As part of the "surplus" management strategy, plans may feel pressure to consider contribution reductions. It can be tempting to declare victory once a plan passes a 100% funding ratio, but the "surplus" may be temporary—so plans should consider any reductions in contributions carefully.

Historical experience has shown that once pension contributions have been significantly reduced or removed from government budgets, the prior pension contribution levels are difficult to restore. So, as the need for pension contributions declines, consider gradual or conditional reductions to account for the possible need for future increases.

A "surplus" management strategy should anticipate reaching a 100% funding level and clearly articulate to what extent contribution rates may be adjusted once that condition is achieved. The intent of these strategies is to manage future contribution volatility and maintain a strong funding level when unfavorable actuarial experience or economic downturns occur.

When contemplating potential contribution reductions, some important considerations include:

- What is the current contribution policy? There may be substantially different approaches to contribution adjustments depending on whether plan contributions are fixed rate, actuarially determined, or based on other requirements.
- How will contribution reductions apply to employer and employee contributions?
- Should there be limits on the potential contribution reductions? For example, the contribution policy may require that contributions not be less than the Normal Cost rate until a certain level of "surplus" is attained, or a target funding ratio is achieved.

If the current contribution structure includes a substantial component to pay off the unfunded liability, it may be appropriate to phase out that component over a reasonable time period rather than eliminating it all in the first year a "surplus" is attained. This approach can better control immediate reductions in contributions due to "surplus." The "surplus" management strategy may amortize the "surplus" differently. For example:

- Over a longer period (e.g., a 30-year period) than unfunded liabilities.
- Restarting as an open/rolling amortization base.

Another approach that may provide additional flexibility is for the plan sponsor to consider establishing a separate reserve fund, such as an Internal Revenue Code (IRC) §115 trust, outside of the primary pension trust. The adoption of a secondary account would require legal research, possible statutory approval, as well as mechanisms for accumulating assets, investing, and using the fund. However, an external trust could provide plan sponsors the desired budget flexibility to help absorb the impact of future pension contribution volatility. There also may be less incentive to spend dollars isolated in a separate account versus more visible "surplus" funds accumulated within the pension trust.

Benefit Enhancements

While most plans normally do not play an active role in the design or adoption of benefit enhancements, recommendations may be requested of the governing board. A "surplus" management strategy could encompass parameters to be fulfilled prior to consideration of benefit enhancements. Some stakeholders historically have advocated for benefit increases as soon as a plan's funded ratio reaches 100%, regardless of the perceived adequacy of the current benefit levels. Given the experiences of the last two decades, a more measured approach is encouraged if plans return to a "surplus" position.

For plans that substantially reduced benefits and/or substantially increased employee contributions, enhancements to these reduced benefits may be a priority once the plan achieves a "surplus" and appropriate contribution levels are addressed (as discussed

above). Measured improvements may also include non-permanent or variable structures (e.g., a contingent cost-of-living adjustment or 13th checks) that would be less likely to jeopardize the plan's future funded status.

In the evaluation of a potential benefit enhancement, a cost analysis typically is performed, which may be influenced by the plan's "surplus" management strategy. Stress testing under multiple scenarios can help demonstrate the exposure various benefit enhancement scenarios might create for the plan. This exercise can demonstrate how the cost of a design change could vary depending on whether future experience is more or less favorable. Plan change costs could then incorporate a policy element such as a higher funding requirement (or "cushion") in their development to avoid surprises in the future. For any benefit improvement, the plan should consider whether it would be appropriate to increase the contributions regardless of the plan's funded status.

Any significant proposed benefit enhancements should be evaluated carefully and thoroughly to ensure the potential impact on current and future funded status and contributions is understood by all parties to the decision and sufficiently communicated to all stakeholders.

Conclusion

Funded levels of public sector pension plans have generally improved since the Great Recession.[4] These improvements predominantly are the result of tightened benefit levels, strong investment returns, and improved contribution policies. To reduce risk to future funded levels, public pension plans should consider developing a "surplus" management strategy that is incorporated into the plan's funding policy. In addition to setting a path to attain a 100% or greater funded target, the policy could provide a strategy to preserve funded status once the target is achieved.

Historically, "surplus" often has been used to enhance benefits and reduce contributions. Funding policies should start by considering using "surplus" to manage or reduce risks to the plan. Balancing alternative uses of "surplus" may result in more measured contribution reductions, a more thorough analysis of the risks related to permanent benefit enhancements, and, ultimately, more stable funding of public pension plans.

4 Based on data from publicplansdata.org.

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