AMERICAN ACADEMY *of* ACTUARIES

ISSUE BRIEF

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Key Points

- The policies used to establish funding for a public-pension plan should be formulated to maintain an appropriate balance among the competing objectives of benefit security, generational equity, and contribution stability.
- Policymakers should communicate how these objectives have been balanced, and how, when and whether or not all of the identified costs are expected to be met via the contribution-allocation procedure.
- The contribution-allocation procedure should include a funding target based on accumulating the present value of benefits for members by the time they retire, and a plan to make up for any variations in actual assets from the funding target within a reasonable time period.
- Any risks that could make it difficult to achieve the objectives should be identified, anticipated, and communicated, and the results of the contribution-allocation procedure should be monitored and adjustments made as necessary.
- The contributions determined by the contribution-allocation procedure should actually be contributed to the plan by the sponsor on a consistent basis.

Objectives and Principles for Funding Public Sector Pension Plans

Funding a pension plan involves determining appropriate contribution amounts at specific points in time and determining how to invest the assets of the plan until benefits are paid. In the private sector, minimum contribution requirements are set by federal law.[1] In the public sector, each state sets its own contribution requirements, and each local governing body (e.g., county, city, district) sets its own contribution levels within whatever requirements, if any, the state may have established for local jurisdictions. Decisions about what to contribute and when are usually made by a retirement board or plan sponsor within the boundaries of the contribution requirements noted above. The decision-making entity typically is advised by an actuary. In reality, there is wide variation in the policies adopted by different local governing bodies to fund their pension plans, reflecting a complex interplay between local legal or policy requirements, objectives, and other constraints or competing priorities. In recent years, there has been a great deal of public discussion about whether current policies are appropriate or prudent.

Since the Government Accounting Standards Board (GASB) issued Statements 25 and 27[2] in 1994, many local governing bodies, rating agencies, and other stakeholders have used the parameters in

[1]Employee Retirement Income Security Act of 1974 (ERISA) as amended.
[2]GASB Pronouncement No. 25: *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*; GASB Pronouncement No. 27: *Accounting for Pensions by State and Local Governmental Employers*.

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those pronouncements for determining the Annual Required Contribution (ARC) as a benchmark for contribution requirements.[3] In 2012, GASB issued Statements 67 and 68,[4] replacing Statements 25 and 27 effective for fiscal years beginning after June 15, 2013 and 2014 respectively, and it eliminated the ARC and clearly avoided providing guidance that might serve as a benchmark for contribution requirements.

Certain Actuarial Standards of Practice (ASOPs), as promulgated by the Actuarial Standards Board (ASB), identify what actuaries should consider, document, and disclose when performing an actuarial assignment, including, but not limited to, measuring pension obligations, selecting assumptions, and selecting methods to determine pension plan contributions. The guidance for selecting methods to determine pension contributions, however, is limited, focusing largely on ensuring there are adequate assets to pay benefits when due. Recognizing there are other objectives and issues in the public sector, the Pension Practice Council of the American Academy of Actuaries believes that a discussion of the fundamental objectives and principles for funding public-sector pension plans can inform actuaries practicing in the public sector, the decision-makers who set policies to fund pension plans, and the public at large as to some of the issues to consider in developing a funding policy.

Actuaries typically provide input with respect to the contribution allocation procedure and the assumptions used in that procedure to fund the pension plan. A contribution allocation procedure primarily consists of:

- an **actuarial cost method** that allocates the projected pension obligation among past, current, and future periods of service,
- an **asset smoothing method** that recognizes investment gains and losses over a period of time, and
- an **amortization method** that allocates the cost of benefit changes, assumption changes, and gains and losses over future years.

Although a plan's investment policy will affect the risks associated with a contribution allocation procedure,[5] the investment policy itself is generally not considered a component of the contribution allocation procedure.[6]

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[3]The ARC has been the basis for annual pension expense under GASB Statements 25 and 27. It was generally equal to the contributions determined for the plan provided the contributions fell within certain parameters. As a result, those parameters came to be viewed by some as guidance for appropriate contribution levels even though they were not intended to provide such guidance.

[4]GASB Pronouncement No. 67: *Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25*; GASB Pronouncement No. 68: *Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27*.

[5]One of the key points of the Academy's recent issue brief, *Measuring Pension Obligations*, was that "Plans funded at the budget level and invested in a diversified portfolio are likely to experience either insufficient or surplus assets, and benefit security is affected by the plan sponsor's ability to make additional contributions if an adverse investment experience materializes."

[6]It is intended that this issue brief will be supplemented in the future with a Practice Note for actuaries that discusses the elements of a contribution allocation procedure in more detail.

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Objectives

In establishing the policies used to fund a public sector pension plan, three primary objectives need to be balanced:

- Benefit Security
- Contribution Stability and Predictability
- Generational Equity

Benefit Security

Pension plans provide a form of compensation in which benefits are paid many years after the period of employment that entitled the recipient to those benefits. Consequently, it is important for plan members to be confident that the promised benefits will be paid. The key factors that determine the security of the pension promise are the legal obligation of a plan sponsor[7] to provide the benefit, the level of assets in the pension plan, the manner in which those assets are invested, and the financial resources of the sponsor to make any necessary additional contributions if and when those contributions come due. The policies established to fund the pension plan should be premised on the assumption that the obligation to provide the promised benefits must be met. Since the financial resources of a sponsor can change over time, the policies used to fund the pension plan should target the accumulation of sufficient assets over the working lifetime of a plan member, at least equal to the present value of the plan member's future benefits on a basis consistent with the level of risk affordable by the plan sponsor. The contribution allocation procedure should pay for any difference between actual and anticipated experience in some reasonable period of time that is not too long.[8]

Contribution Stability and Predictability

The annual contribution to a pension plan is a budgeted expenditure for the plan sponsor. Significant changes in the contribution amount from one year to the next can have significant repercussions on other parts of the budget, particularly if those changes require an increase that is not or cannot be anticipated. While benefit security may be best served by adjusting for adverse deviations from expected experience over a very short period, the volatility and lack of predictability in contribution amounts that can result (depending on the manner in which assets are invested) could be unsustainable. Consequently, investment strategy, benefit policy, and margins for adverse deviation in the selection of assumptions are considered to control the exposure to significant adverse changes in contribution amounts. The contribution allocation procedure should pay for any difference between actual and anticipated experience in some reasonable period of time that is not too short.8 The period selected should allow sponsors reasonable time to adjust to events that affect the contributions to the plan.

Generational Equity

From an economic perspective, each generation of taxpayers ideally should pay for the compensation of the public employees who provide services to those taxpayers, including the funding of pension benefits that accrues during the period. If all pension plan assumptions are met, the contribution allocation procedure should accumulate assets in an orderly manner to the present value of future benefits by the time a plan member retires.

Actuarial cost methods generally do a good job of allocating the expected cost of an employee's benefit in a manner consistent with the

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[7]In a public pension plan, it is common for there to be multiple sponsors and in many cases these sponsors share the cost of providing pension benefits to the employees of all of the plan sponsors. In this issue brief, the word "sponsor" should also be interpreted as encompassing multiple sponsors.

[8]"Too long" and "too short" are subjective terms and are used here to emphasize the competition between these objectives. Improving benefit security requires that differences be made up over a relatively short period of time while improving contribution stability requires that differences be made up over a relatively long period of time.

objective of generational equity. The significant challenges to accomplishing the objective of generational equity arise when there are gains or losses (particularly on benefits and the assets intended to provide the benefits for former employees or retirees), assumption changes (again, particularly for inactive members), or prior generations that did not fully pay for the cost of the benefits for the employees who provided services to that generation.

Balancing the Objectives

Each of these objectives is important, but they naturally come into conflict at times. The policies used to fund the plan should seek appropriate balance among the conflicting objectives, and an appropriate balance is likely to differ from one plan (and sponsor) to another. Some plan sponsors may need more contribution stability than others (for example, plans may vary in terms of their size relative to the size of the sponsor resulting in different relative budget impacts for the same change in contribution amount). Different characteristics will cause decision makers to strike different balances among the competing objectives. However, no objective should be weighted to the exclusion of any other objective.

Principles

In balancing their objectives, plan decision-makers have a fair amount of flexibility. However, there are certain principles to which all policies should adhere, regardless of how the objectives are balanced.

Make the Contributions Determined by the Contribution Allocation Procedure

Given an investment policy and a set of assumptions, the contribution allocation procedure is used to determine the amount to be contributed at specific points in time. The procedure is designed to balance the above objectives and is premised on the assumption that the contributions that are determined will be made. If the determined contributions are not actually made on a consistent basis, some or all of the objectives will not be met. While there will always be competing demands for the cash needed to fund the pension plan, and while the contribution policies used may be modified or amended periodically to reflect updates to the balance between objectives, the resulting contribution determined by the process should not be ignored. The contributions called for by the contribution allocation procedure need to be made consistently by the sponsor.

Once the plan sponsor takes on a legal commitment[9] to provide retirement benefits, then ideally the plan sponsor should also be subject to a legally enforceable contribution demand of plan members to prefund the benefits on an actuarially determined basis. A failure to make the contributions determined by the contribution allocation procedure has contributed to many of the situations in which a pension plan is now placing significant strain on budgets.

Pre-Fund All of the Expected Costs

The contribution allocation procedure should include a funding target based on accumulating the present value of benefits for members by the time they retire, and a plan to make up for any variations in actual assets from the funding target within a defined and reasonable time period. Among other conditions, this means the following equation should hold true.

Current assets of the plan

+

Present value of future contributions intended to finance the benefits of current plan members

=

Present value of future benefits for current plan members

This equation implies that normal cost contributions for expected new entrants should not be planned to be used to pay for the benefits of current members. Of course, the future contributions should always be made before the ben-

[9]As determined by state and local authority.

efits need to be paid so the assets of the plan are not depleted before the last benefit payment is made.

Enhance Transparency, Accountability, Credibility, and Objectivity

The policies used to fund a pension plan should be clear in their intent and effect. In particular, the parties responsible for setting the policies should communicate how the objectives have been balanced, and, how, when, and whether or not all of the identified costs of the plan are expected to be met via the contribution allocation procedure. Appropriate disclosures should be developed to assist in this communication and allow users to track the effectiveness of the contribution policies over time. Furthermore, the disclosures should report on the actuarial valuation results both before and after any contribution volatility management techniques (including fixed contribution rates) to clearly identify the effect of recent volatility on current and anticipated future contribution levels and measures of unfunded liability.

Furthermore, even if the actual contribution is not based on an actuarially determined contribution (e.g., fixed contribution rates), the contribution amount should be compared to an actuarially determined contribution amount.

The parameters of the policies used to fund the pension plan should be developed based on balancing the specific policy objectives for the long term, rather than just on immediate contribution results.

Identify, Anticipate and Communicate Risk of Not Achieving the Objectives

In managing a pension plan, there are risks that could make it difficult to achieve the policy objectives. The sources of the risk (investment, demographic, agency, other) should be identified, anticipated, communicated, and monitored. Awareness of these risks can foster policies to mitigate the risks and improve the sustainability and ongoing affordability of the system.

For example, it is important to acknowledge, identify, and manage situations when stakeholders might seek to influence contribution amounts in the short-term to achieve competing goals (e.g., public policy funding for other public needs, immediate fiscal deficits, etc.) to the detriment of achieving the funding objectives for the pension plan.

Monitor Results and Adjust

A critical part of any contribution allocation procedure is periodic monitoring to assess the status of the plan and to make any adjustments warranted. If the contribution allocation procedure has not produced results as anticipated, or risks (anticipated or unanticipated) have emerged that may make it difficult to achieve the objectives, adjustments to the procedure should be considered to achieve the objectives of benefit security, generational equity, and contribution stability.

Summary

The policies used to fund a public pension plan should be formulated to maintain an appropriate balance among the competing objectives of benefit security, generational equity, and contribution stability. The policymakers should communicate how these objectives have been balanced, how, when and whether or not all of the identified costs are expected to be met via the contribution allocation procedure. The contribution allocation procedure should include a funding target based on accumulating the present value of benefits for members by the time they retire, and a plan to make up for any variations in actual assets from the funding target within a reasonable time period. Any risks that could make it difficult to achieve the objectives should be identified, anticipated, and communicated, and the results of the contribution allocation procedure should be monitored and adjustments made as necessary. Finally, and perhaps most importantly, the contributions determined by the contribution allocation procedure should actually be contributed to the plan by the sponsor on a consistent basis.