American Academy of Actuaries

Issue Brief

Public Policy Considerations for Changing Single Employer Pension Plan Funding Rules

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Key Points

- Policies encouraging or requiring the funding of defined benefit pension plans have been debated for decades. Indeed, since minimum funding rules for single-employer plans were first codified by the Employee Retirement Income Security Act (ERISA) of 1974, those rules have been modified on many occasions.
- While the overarching goal of prefunding is relatively straightforward – to assure the payment of all promised benefits – there are many ways to define minimum funding rules, with a multitude of considerations.
- There are many stakeholders with either direct or indirect involvement with pension plans, all with diverse and intertwined interests as to the most appropriate approach to setting minimum funding standards. Policymakers are challenged to understand and seek an appropriate balance of these various stakeholder interests to achieve sustainable outcomes when modifying these funding standards.
- Minimum funding standards are understood to be countercyclical when required contributions increase during times of adverse business conditions – and when required contributions decrease during boom times.

American Academy of Actuaries

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1850 M Street NW, Suite 300
Washington, DC 20036
202-223-8196 | www.actuary.org

Craig Hanna, Director of Public Policy
Linda K. Stone, Senior Pension Fellow

Approaches to funding defined benefit pension plans have been debated for decades. The Employee Retirement Income Security Act of 1974 (ERISA) codified minimum required funding rules for many pension plans beginning in the 1970s, and these rules have since been substantially modified on many occasions, most recently in 2021 by the American Rescue Plan Act (ARPA) and the Infrastructure Investment and Jobs Act (IIJA). The objective of these policies is to require systematic prefunding of benefits so that retirees are paid on time and in full, but in a manner that does not create undue hardship for plan sponsors. Minimum funding requirements often receive greater attention in times of economic stress, when plan sponsors face other significant challenges and may struggle to dedicate the capital required by the rules in effect.

This issue brief presents high-level observations surrounding the current funding rules for single-employer pension plans and notes key considerations and challenges for policymakers when contemplating future legislation.

The overarching goal for regulating pension plans is straightforward: All benefits earned by participants are to be paid on time and in full. This outcome is more assured when funds are dedicated in advance of when payments are due. In fact, it is typical to fund the benefits as the employer is receiving the services of their employees rather than after they retire. On the other hand, setting aside capital for this purpose can limit the ability of a plan sponsor to pursue essential business objectives or respond to adverse financial circumstances. These observations can provide a basis for consideration of a broad spectrum of new prefunding requirements for pension plans. To illustrate the various impacts of potential proposals to modify minimum funding requirements, it would first be prudent to identify stakeholder groups and their interests.

Stakeholders and Their Priorities

Although sponsorship of a defined benefit pension plan may appear to be simply an agreement between an employer and employees covered by the plan, the reality is considerably more complicated. Various stakeholders have either direct or indirect involvement with the pension plan, and each has an interest in the standards applied to plan funding. Analysis of alternative pension funding rules should consider the potential impact on all affected stakeholders for purposes of sustainability. A more comprehensive list of significant constituencies includes:

- *Plan sponsors*: Employers are constrained when strong prefunding requirements provide limited flexibility to adjust funding to meet near-term economic needs. The short-term effects of modifying funding rules to provide greater flexibility (as has happened a number of times in recent years) are relatively straightforward. However, longer-term consequences can be less apparent. Reducing current funding requirements shifts the cash demands to the future if the promised benefits are ultimately to be paid. The issue for plan sponsors is thus flexibility about when funds are committed, rather than the total outlay necessary. Another significant concern is the predictability of these requirements. The capital markets can be volatile, and sudden changes in bond yields or asset values—leading to significant increases in short-term minimum contribution requirements—can disrupt business plans. Plan sponsors benefit from rules that buffer these effects, allowing them to budget their contributions further in advance and with greater predictability.[1]

1 The buffering can also benefit plan participants in the sense that the plan sponsor may be less likely to freeze or terminate the plan when future contributions are more predictable/less volatile.

The Pension Committee, which authored this issue brief, includes Elena Black, MAAA, FSA, FCA, EA—*Chairperson*; Grace Lattyak, MAAA, FSA, FCA, EA—*Vice Chairperson*; Michael Antoine, MAAA, FSA, FCA, EA; Michael Bain, MAAA, ASA, FCA, FSPA, EA; Rachel Barnes, MAAA, FSA, FCA, CERA, EA; Margaret Berger, MAAA, FSA, FCA, EA; Maria Carnovale, MAAA, FSA, EA; Jonathan de Lutio, MAAA, EA; C. David Gustafson, MAAA, FCA, EA; Scott Hittner, MAAA, FSA, FCA, EA; Lloyd Katz, MAAA, FSA, FCA, EA; Maria Kirilenko, MAAA, ASA, FCA, EA; Tonya Manning, MAAA, FSA, FCA, EA; Maria Moliterno, MAAA, ASA, EA; James Ritchie, MAAA, ASA, FCA, EA; Mark Shemtob, MAAA, FSA, FCA, EA; Mary Stone, MAAA, FSA, FCA, EA; Todd Tauzer, MAAA, FSA, FCA, CERA; Hal Tepfer, MAAA, FSA, FCA, MSPA, EA

The committee gratefully acknowledges the contributions of Bruce Cadenhead, MAAA, FSA, FCA, EA, and Aaron Weindling, MAAA, FSA, FCA, EA.

- *Plan participants*: This group includes active employees (addressed in more detail in the next section), individuals who have terminated employment and are currently receiving benefits, and individuals who have terminated employment and will commence benefits in the future.[2] Generally, participants prefer significant prefunding of retirement plans because their benefits are better funded and could be more secure. However, the Pension Benefit Guaranty Corporation (PBGC) provides substantial protection for benefits earned under single-employer plans and participant concerns about inadequate funding can be somewhat allayed to the extent that sufficient PBGC funding is assured.
- *Employees*: Although they could overlap, the employee group differs from the plan participant group. Employees have considerable interest in the success of the overall business, as this enables their continued employment and facilitates career success. Money set aside for the pension trust does not directly support these goals. While employees who are also plan participants care about benefit security, their receipt of pension benefits is deferred until their retirement. Many may prioritize their current compensation, employment opportunities, and other employer-provided benefits, which may be enhanced by devoting capital to business operations. Those employees who do not participate in a legacy defined benefit plan are unlikely to benefit from a significant diversion of cash from business operations to fund the pension plan liabilities.
- *Shareholders*: Shareholders of companies with defined benefit plans seek return on investment and therefore are concerned with after-tax profits, dividend payments, and company growth. Increased plan funding may be viewed as an unwelcome diversion of capital from efforts more aligned with these priorities. It may, however, yield secondary benefits as part of risk management strategies or increased appeal to investment analysts. Severely underfunded plans are typically viewed unfavorably.
- *The PBGC*: The PBGC assumes responsibility for plans that terminate with insufficient assets to cover all PBGC-guaranteed benefits. Ensuring that plans are adequately funded reduces PBGC's exposure. Providing contribution flexibility to plan sponsors to respond to urgent business needs could be beneficial to the PBGC if doing so means plan sponsors are more likely to remain solvent and can pay for future obligations. It is noteworthy that plans with lower funding levels are charged larger PBGC premiums, although these variable premiums may be insufficient to cover the additional risk.[3]

2 More broadly this group includes plan participants' beneficiaries, entitled to current and future benefits.
3 See https://www.pbgc.gov/wr/benefits/guaranteed-benefits. Although intertwined with the issue of minimum funding requirements, PBGC premiums are beyond the scope of this issue brief. Further information on this topic may be found in the Academy issue brief *PBGC Single-Employer Premiums and Their Impact on Plan Sponsorship* (October 2020).

- *Taxpayers*: Because contributions to qualified pension plans are tax-deductible, reduced plan funding requirements increase tax revenues. In principle, this could lower the burden for other taxpayers, provide additional services or reduce government debt. However, determining the extent to which these consequences occur as opposed to being merely theoretical implications is difficult. This is particularly true because a current reduction in contributions necessitates an increase in future contributions, along with a corresponding increase in future tax deductions. Another taxpayer consideration is whether the PBGC would receive support from general revenues if necessary. (This is neither required nor permitted under current law but has been a matter of considerable speculation.) If so, taxpayer interests would also include protection of PBGC interests. Although the single-employer PBGC program is currently well-funded, this could change in the future.
- *Society*: Society benefits from having a system by which individuals can transition from employment with sufficient means to support a secure retirement. This reduces the burden on government welfare programs, alleviates financial strain on family members, facilitates orderly progression of the workforce and contributes to general satisfaction. These interests are advanced by ensuring the payment of all promised benefits and promoting trust in the retirement framework. Although a balance must be struck with the important objective of supporting employment, broad societal interests support the strong prefunding of pension plans.

The interests of these stakeholders are intertwined, but diverse. Changing funding rules could introduce downstream impacts to various parties. To achieve sustainable outcomes, policymakers seeking to modify funding rules will have to perform a complex analysis to balance the interests of various parties.

Once the desired trade-offs have been determined, however, they must be implemented in specific rules and calculation approaches, which leads to the next topic: the current version of minimum funding requirements.

Summary of Current Funding Rules

The current framework for minimum contribution requirements was established by the Pension Protection Act of 2006 (PPA). Although this issue brief does not include many details, PPA generally determines minimum funding requirements using the following steps:

- Calculate a normal cost (called the "target normal cost" by PPA), which is the value of pension benefits participants are expected to earn in the current year.
- Calculate the liability for benefits earned as of the beginning of the current year (called the "funding target").
- Compare the funding target to the fund's asset value to derive a net shortfall or surplus.
- Calculate an annual amortization payment of any shortfall.
- Calculate the minimum required contribution as the target normal cost plus the amortization of shortfall.
- If contributions in excess of the minimum have been made in prior years, the "prefunding balance" so created can be applied against the minimum requirement.

These calculations include mechanisms that moderate the volatility of results, providing a degree of predictability and stability. Using these mechanisms is typically called "smoothing," a term that will be used in the remainder of this issue brief. Modification of the degree of smoothing or its manner of application is often included in proposals to change minimum funding rules. Approaches to smoothing found in the current framework include:

Normal Cost and Liabilities—Actuaries utilize many assumptions when calculating the liability. Most of these describe the expected experience of the plan: the future compensation that participants will receive if benefits are based on compensation; their rates of termination, retirement, and mortality; the choices that retirees will make when electing benefits; and others. The assumption that typically affects the outcomes most significantly, however, is the interest rate used to calculate the present values of payments expected to be paid at future dates. PPA refers to this rate as the "effective interest rate."[4] The target normal cost and funding target will be smaller at higher effective interest rates.

4 The PPA mandates a more complex approach to interest rates but for the purposes of this discussion, it suffices to consider only the effective interest rate.

The effective interest rate is based on the yields of corporate bonds. In theory, this would result in a plan liability equal to the market price of a corporate bond portfolio, if the coupons and principal payments for that bond portfolio equaled the plan's expected benefit payments. This approach is sometimes described as "market-consistent." PPA and subsequent funding rule modifications, however, call for these yields to be extensively smoothed. Various mechanisms average the yields over periods as long as 25 years, resulting in effective interest rates that can differ significantly from prevailing market yields.

Asset value—The asset value used for funding purposes need not be the fair market value as of the calculation date. PPA allows the value to be averaged over periods of about two years.

Amortization period—The assets and liabilities are compared to determine the plan's funded status, which is either a shortfall or surplus. Any shortfall need not be remedied immediately; each year's change in funded status is amortized over 15 years.[5] The various smoothing elements operate in combination. The smoothing of interest rates defers the reflection of current yields in the liability measurements, and with the minimum interest rates implemented by ARPA and extended further by the IIJA, market interest rates may never by fully reflected. The amortization period further slows their impact on the minimum required contribution. Similarly, the asset values are first smoothed using a separate mechanism before they are used to determine an amortization amount, which creates further smoothing.

Countercyclicality

Plan funding rules generally increase minimum contribution requirements when the markets experience a downturn and decrease contributions when markets are performing well, assuming everything else is equal. This phenomenon results in increased funding requirements when plan sponsors' core business may be struggling and could be experiencing cash constraints. This dynamic, sometimes called "countercyclicality," is challenging for plan sponsors. An unexpectedly large increase in contribution requirements when a company has limited access to funding can have severe adverse consequences.

5 Prior to the passage of ARPA, this timeframe was seven years.

This dynamic has the opposite effect in beneficial environments: The funding rules require less funding during extended bull markets when plan sponsors are likely to have capacity for increased plan funding. Plan sponsors can contribute significantly greater amounts and, by so doing, establish a prefunding balance to offset future minimum funding requirements. This would enable plan sponsors to build up a cushion to draw upon in times of adversity. However, a number of plan sponsors make only the minimum required contribution. Management of some companies may be concerned that their access to the prefunding credit balances created from excess contributions will be limited or that surplus cash may be trapped in an overfunded plan. Although plan sponsors can recapture surplus assets at plan termination, this recapture is subject to corporate taxes and an excise tax that could be as high as 50% of the surplus unless the surplus is used to fund a "qualified replacement plan." These taxes could effectively eliminate the majority of the excess access payable to the employer.

Management at other companies may simply prefer to deploy the cash in a different manner.

Plan sponsors that seek additional flexibility in minimum contributions could first fund in excess of minimum requirements when able to do so. It may also be appropriate to consider a legislative change that would allow recapturing surplus that exceeds the amount needed to fund accrued benefits but with less onerous tax implications.

Despite the countercyclicality, increasing contributions when funded status declines is not a flaw, but rather a logical, necessary feature of a responsible minimum contribution requirement. One approach for plan sponsors that wish to avoid countercyclicality is to obtain additional flexibility in minimum contributions by funding in excess of minimum requirements when able to do so and building up a cushion.[6] In addition, sometimes countercyclicality can be further moderated without unduly compromising the interests of other stakeholder groups, and this leads to further consideration of smoothing approaches.

6 Current law imposes significant tax penalties on employers that try to recapture plan assets not needed for benefits. Removing this penalty would remove the disincentive it creates for building up a cushion. This in turn would both help employers avoid countercyclicality and protect plan participants (and the PBGC) from loss of benefits when economic downturns force a company to terminate its plan.

Modifications to Smoothing

Various proposals for smoothing the contribution have been put forth on several occasions, and some of them were incorporated into ARPA.[7] These include:

- Modifying the effective interest rate
- Lengthening the period for smoothing assets
- Modifying the amortization periods of gains and losses
- Limiting the annual change in minimum contribution requirements

Each of these approaches would reduce the countercyclicality of minimum funding requirements. By doing so, though, each would allow the funded status of a plan to deteriorate further in adverse conditions. As noted earlier, this would be favorable to plan sponsors (at least over a short time frame) but would have consequences for other stakeholder groups.

Modifying the effective interest rate—Some recommendations involve establishing a minimum for the effective interest rate. In fact, ARPA effectively implements a minimum effective interest rate of 3.5%.[8] The rationale is often based on observations that interest rates are at historically low levels, or that unusual market circumstances have affected current yields, and that as a result, the liability values that PPA assigns to a given benefit promise are considerably greater than they would have been at some other times.

Nonetheless, imposing a minimum effective interest rate distorts the liability measure used in pension funding calculations. Current values for assets—in particular fixed income securities—are consistent with their current yields. Increasing the effective interest rates lowers pension liabilities but does not adjust asset values. The resulting funded status, which drives minimum contribution requirements, may be further distorted. Moreover, a low-interest-rate environment is often associated with reduced investment return expectations. When funding rules are modified to reduce minimum contribution requirements in such an environment, the risk of future shortfalls (or higher future contributions) grows considerably.

7 Ideas that are more sweeping have also been offered, including approaches that are now used outside the United States. These are beyond the scope of this issue brief, as they would affect the nature of the benefit promise itself rather than the way in which that promise is funded.
8 The effective minimum rate is currently higher than 3.5%, but a 3.5% floor will apply in the long term. Once again, the interest rate provisions of pension rules (including those of ARPA) include nuances not described here.

Other proposals call for increased allowable smoothing of effective interest rates to reduce the potential annual change. ARPA and IIJA extended interest rate smoothing mechanisms incorporated in prior modifications to the funding rules. As a result, the effective interest rate for most plans can be predicted with a high degree of certainty through 2026 or even later, and the changes in that rate over that period may have little relationship to how the market interest rate environment actually changes. One theoretical justification for smoothing observable market data may be a belief in "mean reversion" in capital markets, although that premise is not universally accepted. According to this justification, smoothing can be an effective tool when the values being smoothed are believed to be fluctuating around a stable, average value. On the other hand, if interest rate movement is due to a persistent trend instead of random volatility, smoothing would simply delay the recognition of this pattern. Assets would reflect current interest rates but liabilities would not, distorting the measured funded status. Interest rate smoothing may also lead to a significant delay in funding requirements and create an increasing contribution requirement over time, which may prove challenging for many plan sponsors in the future.

Lengthening the period for smoothing assets—Another common proposal has been to allow recognition of asset gains and losses over a longer period. Increased smoothing of the asset value would moderate the speed at which these changes flowed into the minimum contribution requirements. This introduces similar issues with clarity and comparability as does the smoothing of interest rates.

Modifying the amortization periods of gains and losses—Some proposals have suggested lengthening the amortization period to create more smoothing. ARPA recently increased the amortization period from seven to 15 years. This regulates the change in contribution requirements, slowing its increase in unfavorable periods and slowing its decline in more favorable conditions. Additional variations on amortization approaches are also conceivable. Prior pension legislation provided for amortizing amounts differently depending on their source (e.g., different amortization periods for changes in unfunded liabilities attributable to gains or losses, assumptions changes or plan amendments.). Offsetting amounts could reduce existing amortization bases or could create new ones. These approaches have the advantage of retaining meaningful asset or liability measurements, or at least not distorting them further.

<u>*Limiting the annual change in minimum contribution requirements*</u>—Another approach for stabilizing the required minimum contribution is to smooth the contribution amount itself, not the items used in its calculation. (This is sometimes referred to as "output smoothing" rather than "input smoothing.") Under this approach, the liability and assets would be valued at current market values and market interest rates. The contribution smoothing could be achieved by limiting the annual change to a certain percentage of the liability, for example, although many constructs would be possible. It may also be reasonable to ensure that the contribution requirement covered at least the normal cost and the interest on any unfunded liability. Such an approach can achieve any degree of smoothing desired, and it would provide the greatest clarity about the effect of that smoothing on final contribution requirements. In addition, this approach would provide a more consistent and understandable measure of each plan's funded status.

The Evaluation of Proposals for Change

To encourage understanding and support from various stakeholders, policymakers might consider linking any pension funding proposals to relevant analysis of its effects, including both short-term effects as well as longer term effects that may play out over many decades.

Evaluating the cost of such proposals is also necessary. Plan sponsors are entitled to deduct contributions from taxable income—thus taxpayers subsidize single-employer qualified defined benefit plans. The cost or savings of modifying the system derive from changes to these deductions. Higher contributions generate greater tax deductions when made and reduce general revenue; contribution reductions have the immediate effect of lowering deductions and increasing revenue.

However, there are further complications as illustrated by the following observations:

- Funding requirements that are more stringent accelerate contributions and the tax deduction, which represents a cost to taxpayers. Conversely, less stringent requirements appear as a cost savings. However, only the timing of these deduction changes; the ultimate total requirements are relatively stable. Shifting the deduction into or out of the 10-year scoring window that Congress uses to measure the cost of legislation will have a near-term effect, but it does not have as much of a long-term economic effect.

- Failures in the retirement system, either from benefit promises insufficient to provide retirement security or from default on those promises, can impose a significant burden on beneficiaries. In addition to the human cost of this shortfall, the financial implications can increase demand on the social safety net. A breakdown of the retirement system can disrupt government programs thereby increasing their expenditures. (This effect would be moderated to the extent that PBGC can replace the defaulted payments, but ultimately this may increase costs to other plan sponsors or to taxpayers.)
- A system that imposes insufficiently flexible requirements on plan sponsors can also be damaging in ways that are difficult to quantify. To the extent that these requirements inhibit the success of plan sponsors, they cause downstream effects. Less-successful businesses will pay lower taxes and offer reduced employment opportunities. They may also choose to discontinue defined benefit plan sponsorship.
- Although PBGC premiums cannot be used for other purposes, they are counted as general revenue. This can create a misleading impression that larger PBGC premiums have a beneficial effect on the federal budget.

Rigorously quantifying each of these effects may not be possible, but they are important considerations when evaluating potential legislation.

Conclusion

To achieve optimal results benefiting various stakeholders, the minimum contribution requirements for pension plans must strike a sustainable and appropriate balance. Potential objectives can include benefit security, the efficient use of corporate capital, and the predictability of future requirements.

Managing the volatility of minimum required contributions is critically important, particularly in light of the inherent countercyclical nature of these requirements. Although plan sponsors can contribute in excess of minimum requirements to establish a prefunding balance, smoothing can also be used. Some variations of this technique directly smooth market observations, such as interest rates or asset values. By doing so, these input smoothing approaches reduce the transparency and usefulness of important information about pension plan funded status. Alternative approaches would use output-smoothing techniques. These can be deployed in a manner that can achieve the desired volatility management without distorting measurements of liability, assets, or funded status. They also provide greater clarity about the approach used to achieve the desired stability.

Nonetheless, to the extent current contributions are reduced, it is likely that future contributions must increase to fulfill obligations or additional plan benefits will decrease or be discontinued. Rules can impose constraints on the timing of required contributions, but the total amount that must ultimately be contributed is relatively unaffected if the plan is to be maintained indefinitely. Evaluation of any proposals should consider this dynamic even if the scoring methodology applied to proposed legislation does not.

This issue brief is intended to present a broad overview and for simplicity intentionally omits many of the complexities inherent in the current intricate pension regulatory framework. The Pension Committee of the American Academy of Actuaries recognizes that handling of those complexities is a critical factor when considering any action and is eager to assist policymakers as they consider this important topic.