#### AMERICAN ACADEMY of ACTUARIES

**Key Points** 

### **Issue Brief**

## The Impact of the **Public Pension Plans**

**DECEMBER 2020** 

# COVID-19 Pandemic on

The severity of the impact of the pandemic is likely to vary significantly from plan to plan depending on the economic disruption in the plan's geographic region and the exposure of the plan's members to COVID-19.

The impact of the COVID-19

pandemic on public pension plans is still emerging. The pandemic has the potential to affect plan

contributions, investment returns, and demographic experience.

- In the near term, the most significant impacts to public pension plans are likely to be driven by the economic disruption caused by the pandemic. State and local governments are exploring measures to balance their budgets, which may directly or indirectly affect pension contribution levels.
- The long-term impacts are uncertain, but continued budgetary pressures—combined with persistent low interest rates that may force plans to reduce expected investment returns—could make it even more difficult for plan sponsors to make the needed level of contributions.

The COVID-19 pandemic has been responsible for over 300,000 deaths in the U.S. as of the date of the publication of this issue brief, according to Johns Hopkins University School of Medicine.<sup>1</sup> In addition to this tragic loss of life and the health effects for those affected by the virus, it has disrupted our daily lives and the economy. Investment markets declined precipitously in March, but recovered very quickly. Along the way, there have been some reported warnings about the impact the pandemic is having or will have on public pension plans. While some already-struggling plans may face an acute crisis, many public pension plans are positioned well enough to manage these impacts and recover over time.

As the pandemic continues, its impact on investment markets, government revenues, and the outlook for public pension plans can change significantly. The future of the pandemic and the response to it are highly uncertain despite recent news on vaccine development, so forecasts vary significantly. Different parts of the country have experienced different levels of pandemic severity at different times, and the economic impact of the pandemic on industries has varied greatly. Similarly, the direct and indirect impacts on public pension plans also vary significantly by locality. Some plans may experience direct impacts on participant mortality, disability, or retirements due to the pandemic, while other plans may not experience any material change. Some government budgets may be severely strained, while others may only require a moderate adjustment.



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1 https://coronavirus.jhu.edu/

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Public pension plans also vary in their ability to absorb and recover from different types of shocks. Well-funded plans rely heavily on investment returns while poorly funded plans rely much more heavily on contributions to maintain or improve their financial condition. So far, investment returns have been below expectations, but not significantly. However, the impact the pandemic will have on government budgets and resulting contributions to their pension plans appears to be much more significant than investment returns (although still developing) and currently poses the greater threat, particularly to poorly funded plans. Several governments have already canceled supplemental contributions<sup>2</sup> or scheduled contribution increases that had been intended to shore up the funding of their pension plans.

#### **Investment Returns**

Most public pension plans are heavily reliant on investment returns, and there has been some speculation on how the severe drop in the capital markets in March might have endangered the solvency of public pension plans. The few public pension plans at risk of insolvency in the near term do not have sufficient assets invested for investment losses to make much difference. An immediate investment loss of 10% would reduce a plan that is 100% funded to 90%, but it only reduces a plan that is 30% funded to 27%. While an investment loss is still painful, the risk of insolvency for these plans primarily depends on the ability of the sponsors to make sufficient contributions, not investment returns. Investment losses are a much more significant issue for mature and well-funded pension plans whose sponsors may not be able to afford the additional contributions needed to make up for the investment loss. This risk, however, plays out over a long period of time, and does not lead to immediate insolvency.

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The committee gratefully acknowledges the contributions of past Chairpersons Sherry Chan, MAAA, FSA, FCA, EA and Bill Hallmark MAAA, ASA, FCA, EA.

<sup>2 &</sup>lt;u>Public Pension Investments Largely Recover After Pandemic-Related Slide</u>; Pew Charitable Trusts; Aug. 25, 2020.

Additionally, the vast majority of public pension plans operate on a fiscal year that ends on June 30. The precipitous drop in investment markets in March 2020 was preceded by significant gains since June 30, 2019, and was followed by a relatively quick recovery such that by June 30, 2020, median plan returns for the fiscal year were about 3.2%.<sup>3</sup> While this return is less than the median assumed return of 7.25%, when spread over many years (typically 20 to 25 years), the resulting annual impact may be relatively small compared to total plan contributions.

Furthermore, investment returns in the 5 months following June 30, 2020 have continued to exceed expectations. Just as the severe drop in March did not significantly increase the risk of insolvency in the near term, the rise in capital markets since March has not significantly reduced the risk of insolvency in the near term. Any concerns about solvency should be focused on the ability of the sponsor to make contributions and not on immediate investment returns.

#### **Economic Disruption**

The pandemic has brought some industries to an almost complete halt while other industries have grown. On balance, however, economic activity has declined significantly, and with this decline, state and local government revenues have also dropped. The resulting projected revenue shortfalls as of this writing range from about 1% to in excess of 25%, depending on the state.<sup>4</sup> In one comprehensive study<sup>5</sup> in July, it was estimated that the aggregate state government budget shortfalls for the 2021 fiscal year would total \$290 billion, and in another study<sup>6</sup> in September, shortfalls of \$240 billion are estimated for the 2021 fiscal year. Local governments are facing similar challenges.

In response, governments are exploring all avenues to balance their budgets, including layoffs, furloughs, and salary freezes. In some cases, plan sponsors are considering early retirement incentive programs to reduce payroll costs. For the majority of public pension plans that collect contributions as a percentage of payroll, these reductions in payroll directly translate into a reduction in pension plan contributions received for the current year. Some of these workforce changes may reduce a plan's liability, but some may not,<sup>7</sup> and retirement incentive programs typically increase the plan's liability.

<sup>3</sup> Wilshire Trust Universe Comparison Service, June 30, 2020, Total Returns of Master Trusts—Public. Returns for the one-year period ending June 30, 2020 for the 111 master trusts ranged from -20.7% to 12.7% with 90% of trust total returns between -1.6% and 7.4%.

<sup>4</sup> States Grappling With Hit to Tax Collections; Center on Budget and Policy Priorities; Nov. 6. 2020.

<sup>5</sup> States Continue to Face Large Shortfalls Due to COVID-19 Effects; Center on Budget and Policy Priorities; July 7, 2020.

 <sup>6</sup> The COVID-19 Pandemic and the Revenues of State and Local Governments: An Update; American Enterprise Institute; September 2020.
7 During the Great Recession, for example, many furlough programs were designed to not impact pension benefits and many salary freezes were made up at a later date, either explicitly or implicitly.

For plans that are funded through a fixed statutory contribution rate, these reductions in contributions are not likely to be made up in the future and may lead to a deterioration of funded status. For plans funded on an actuarially determined basis, the contribution reductions will be made up with interest over time—but it could be a long time.

In addition to the reductions in contributions that are directly tied to reductions in payroll, there is likely to be growing pressure to further reduce pension contributions in order to free up resources for essential services within the reduced budgets. Minimizing layoffs (and salary reductions) is an especially high priority during a recession in order to preserve essential services and to stabilize the economy, and any reduction in pension contributions may prevent additional layoffs. This may give rise to pressure to make changes in the methodology used to calculate the actuarially determined contribution, or it may result in contribution reductions by legislative appropriation.

For the most poorly funded plans, reductions in contributions could imperil their sustainability, while making the full contributions may require undesirable reductions to essential services in order to balance the budget. Governments in these situations face some very difficult decisions if their revenues have materially declined.

Most public pension plans are in a better position—sponsors are still faced with difficult decisions, but essential services can be preserved without jeopardizing the viability of the pension plan. If the revenue shortfalls persist, however, the tension between funding the pension plan and funding essential services will become more difficult for all plans. Any deferred pension contributions and any forgone investment earnings will need to be made up over time. The length of time is a policy decision that should be considered carefully in the context of compounding costs and projected revenue growth.

Finally, some governments are borrowing in order to make their regular pension contribution or to make a more substantial lump sum contribution. With low interest rates, governments may see the cost of borrowing as attractive compared to the investment returns they expect from their pension plan. However, if actual pension investment returns do not exceed the cost of borrowing, these plans could be in even worse shape from the leveraged position caused by borrowing.

#### **Demographic Impacts**

The most significant and immediate impacts of the pandemic on the financial position of public pension plans are indirect impacts to the sponsor's ability to make contributions. However, there are some direct impacts that may emerge as well. It is expected that these direct impacts will have a much smaller effect on public pension plan finances.

During the month of November, the U.S. averaged over 1,200 reported deaths from COVID-19 each day. The deaths, however, are not uniformly spread across the U.S. population, so it is not clear how many public pension plan members are affected. It also is not clear how long this increased rate of mortality will continue. Even with recent progress developing treatments and vaccines, the long-term impact on mortality is unknown. Nevertheless, plans with higher concentrations of at-risk populations may ultimately show greater impacts on mortality by COVID-19.

In some jurisdictions, deaths and disabilities due to COVID-19 are presumed to be jobrelated— especially for front-line workers—who therefore qualify for higher levels of benefits. The number of COVID-19-related deaths and disabilities and the impact of these presumptions is likely to vary significantly from plan to plan depending on the local severity of the pandemic and the plan provisions for job-related death and disability benefits.

Finally, there are some emerging signs of increased retirements and terminations related to the pandemic. These changes may be due to budget reductions, the need to care for children at home, concern about the safety of returning to work, or other factors. It isn't yet clear how strong these trends are, how long they may last, and whether they will have a positive or negative financial effect on public pension plans.

#### Potential Long-Term Implications

The long-term effects of the pandemic on public pension plans bring even more uncertainty. If the economy and tax revenues recover slowly, there may be ongoing budgetary pressures that add additional challenges to maintaining an effective funding policy.

Persistent low interest rates may make it difficult to achieve current assumed investment returns. Historically, public pension plans have reduced their expected rate of return and increased the risks in their investment portfolios to make up for declining interest rates. In response to the effects of the pandemic, interest rates have declined again. Unless interest rates increase to their pre-pandemic levels, pension plans may again be faced with the choice of further increasing the risks in their portfolios or accepting lower expected investment returns. It isn't clear how much additional investment risk plan sponsors can bear, and any reductions in future investment returns will require additional contributions in order to sustain the pension plan.

If governmental budgetary challenges persist, there will be pressure to reduce pension benefits in order to lower costs over the long term. Some jurisdictions may be able to act quickly and get immediate financial relief through raising employee contributions or reducing certain benefits like cost-of-living adjustments. Many jurisdictions, however, can change benefits only for newly hired employees, so any financial relief due to benefit changes will take many years to materialize.

#### **Conclusions**

At this time, it appears the most significant financial impact of the COVID-19 pandemic on public pension plans is not investment returns or mortality, but the indirect impacts of the economic recession on state and local government budgets that may lead to obstacles in maintaining sufficient contributions to fund the benefits. Poorly funded pension plans rely heavily on contributions from their sponsors, and to the extent their sponsors cannot maintain contribution levels during the pandemic, plans could suffer irreparable harm. In severe cases, the payment of promised benefits may be in peril. Some poorly funded plans may even require increased contributions—above pre-pandemic levels—to avoid a crisis, which may prove challenging.

Most public pension plans, however, will likely be able to absorb the short-term impacts of the pandemic. These plans may experience periods of increased contributions to return to full funding, particularly if any contribution shortfalls that arose during the pandemic are not made up in a relatively short amount of time, as the economy and tax revenues recover.

If the economic recovery is long and slow, the budgetary pressures affecting public pension plan contributions may persist. Continued low pension contribution levels in response to these pressures may compound the long-term impacts on plan funding levels and the plan sponsors' budgets.

If the current, extremely low interest rates persist, pension plans will likely need to further reduce their assumed rates of return, further increase the risk in their investment portfolios, or perhaps both. The long-term impacts of lower investment returns and increased volatility could be significant for all public pension plans.

The COVID-19 pandemic is ongoing, and its impact on public pension plans is still developing. The future course of the disease and how it will ultimately affect investment markets, the economy, government employees, and public pension plans remains to be seen.

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