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Defined Benefit Plans and COVID-19: Immediate Challenges for Plan Sponsors

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Section 1: Introduction

As part of its ongoing effort to provide useful information on COVID-19, the Society of Actuaries (SOA) recently launched a series of reports exploring the impact of COVID-19 on retirement risks. The first report in this series, *Impact of COVID-19 on Retirement Risks*, released in April 2020, was informed, in part, by online conversations of the listserv the SOA maintains for its Committee on Post-Retirement Needs and Risks and the Aging and Retirement Strategic Research Program. The listserv is comprised of professionals involved in retirement security issues from a wide variety of disciplines and perspectives, including actuaries, economists, attorneys, financial advisers, benefit plan sponsors, demographers, academics, and policy researchers, among others. Other reports in this series may be found at SOA COVID-19 Research.

This report is based on a follow-up conversation among actuaries from the Retirement Section Council and the Retirement Section Research Committee who are currently actively working with defined benefit plans in the United States and Canada. This report summarizes observations raised during the conversation about current issues being discussed with clients to address immediate concerns as well as broader considerations about defined benefit plans. Its primary purpose is to assist defined benefit plan actuaries and plan sponsors with these issues and to stimulate further thinking and inform readers on how COVID-19 may reshape retirement in the future.

The context for this report series is not only to address the impact of the emergence of COVID-19 on retirement programs, but also to reflect the environment that existed before COVID-19. Some key points about that environment include the aging population and the trend away from employers bearing nearly all of the risk for employee benefit plans. There has been a major move away from traditional defined benefit pension plans so that most active employee benefit retirement programs offered in the private sector are defined contribution plans. Many private sector defined benefit plans have been frozen, and there have been a wide variety of de-risking strategies used for these plans. In contrast, public sector employers continue to primarily use defined benefit plans, and their plans are often contributory. Some public sector plans have introduced risk sharing arrangements.

This report is divided by the major topics that were raised and provides background and a synthesis of the discussion.

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Section 2: Background on COVID-19 and U.S. and Canadian Defined Benefit Plans

For defined benefit plans in general, any market downturns because of COVID-19 may reduce their funded status because of the plans' investment allocation to equity and other return-seeking assets. Reduced funded status will likely require increased contributions if assets have not recovered prior to the next actuarial valuation date, although many of the valuation rules permit a degree of smoothing which could work to dampen and defer the full impact of any asset reductions. As of this writing, there has been a significant rebound in the markets from earlier downturns at the start of the COVID-19 outbreak.

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Plans may experience a greater mismatch between their assets and liabilities going forward. Most defined benefit plans rebalance their asset allocations to fall within banded allocation targets. A sharp decline in equities and other return-seeking assets accompanied by a rise in fixed-income prices due to reduced interest rates could necessitate the sale of fixed-income securities, which often better match the interest rate profile of the liabilities. This rebalancing would thus cause an increased duration mismatch and consequently increase the plan's risk profile.

Defined benefit plans with positive net cash flow (i.e., contributions exceeding benefits and administrative expenses) may be able to avoid selling assets at low prices to pay benefits and/or expenses.

In addition, plans may experience other burdens, depending on their regulatory environment.

There are three major categories of defined benefit plans in the U.S. and Canada: private sector single employer plans, multiemployer plans and public employee plans. In the U.S., private sector single employer plans and multiemployer plans are governed by U.S. federal regulations whereas public employee plans are governed by state and local regulations. In Canada, there is federal regulation as well as provincial regulation for private sector single employer and multiemployer plans. Public plans in Canada are subject to the same federal and provincial regulation. Readers interested in further details on the differences among the types of plans discussed in this report are encouraged to review the SOA research report, Pension Valuation Methods and Assumptions. Section 1 of this SOA research report provides a detailed set of tables summarizing the major aspects of each plan type, including tables for both U.S. and Canada.

Economic declines and fluctuations have a number of different impacts on defined benefit plans. In addition, if there are layoffs, this can change the plan population and, in some cases, directly impact contributions to the plan. The economic situation linked to COVID-19 is dramatically different by type of entity. For example, airlines have lost most of their customers for now, but they have some federal assistance. Tourism has temporarily stopped in many locations and may be significantly impacted for an unknown period because of future virus concerns. In contrast, some technology companies and certain manufacturers may have more business than ever as a result of needs directly associated with COVID-19 and similar outbreaks in the future. Hospitals and universities have undergone many shifts in their operations, which affect their revenue streams. Some not-for-profits have seen major declines in revenue. The defined benefit plan issues linked to each entity reflect its situation and any environmental changes that COVID-19 has caused for the entity.

Because the financial practices, legal constraints, and actuarial structures that apply to these three types of plans are quite different, the report is organized to provide separate considerations for the three types of plans plus some content related to specific issues that are common to all three. Depending on the section, U.S. and Canadian content are covered together or separately as needed. There are many parallel issues between the two countries.

The immediate concerns of actuaries working with plan sponsors can be summarized by several immediate questions:

- How is required funding affected?
- Will the charge to entity earnings for the year be affected?
- Do investments fit a plan's needs?
- How will any previous plans for future de-risking change?

There are longer term issues such as whether the benefits are right for the organization, but generally those issues will not be revisited in the short term.

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Section 3: Single Employer Defined Benefit Plans Discussion

The immediate concerns outlined above all impact single employer defined benefit plans, with impact varying by plan sponsor. The actuaries participating in the discussion talked about these issues and raised substantial concerns in some situations.

Single employer pension plan funding comments:

- The recent turmoil for businesses and pension plans from the COVID-19 pandemic has placed strain on the funding system. The situation is exacerbated because it comes at a time when increased U.S. funding requirements are scheduled to phase-in over the next few years as interest rate stabilization[1] wears away.
- The CARES Act permits U.S. single employer pension plans to defer contributions due in 2020 to January 1, 2021. This is welcome liquidity relief for many organizations.
- Funding relief proposals which had already been circulating before COVID-19 will likely get more focus and support. Before the Pension Protection Act of 2006 (PPA), funding requirements allowed amortization of changes in unfunded plan liability over varying periods up to 30 years. PPA requires seven year amortization of changes in unfunded plan liability. In hindsight and considering all the relief provided since PPA (including extended amortization relief included in the Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 and addition and subsequent extension of interest rate stabilization provided by the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Bipartisan Budget Act (BBA), and the Highway and Transportation Funding Act (HAFTA)), some regard the PPA amortization period as too short for the long-term nature of pension plan liabilities.
- Funding requirements will also be impacted by the demographic consequences of COVID-19 such as changes in turnover patterns, retirement patterns, and mortality.
- In Canada, the federal government has announced that it will provide funding relief to federally regulated defined benefit pension plans in the form of a moratorium, through the remainder of 2020, on solvency payment requirements. The government will also be looking at 2021 funding relief options for federally regulated defined benefit plans.
- Single employer Pension Benefit Guaranty Corporation (PBGC) insurance premiums include a variable rate premium based on funded status (subject to a cap). Plan sponsors utilizing the contribution deferral opportunities under the CARES Act could end up paying higher PBGC insurance premiums in 2020. Higher variable rate premiums may also be due in 2021 if asset values do not recover market losses.

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[1] Interest rate stabilization provides that the 24-month average interest rates used for plan funding fit within a corridor surrounding the 25-year average of interest rates. The corridor currently provides that the interest rates be no less than 90% of the 25-year average, as these rates currently exceed the 24-month average. This corridor is scheduled to begin widening by 5% in 2021 through 2024 when the lower bound of the corridor attains its ultimate level of 70%.

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- The business hardships presented by COVID-19 vary significantly by industry. Although the single employer PBGC program is viewed as strong financially[2], this could be in jeopardy if large pension plans, such as those from the hospitality and airline industries, are unable to weather the financial strains of COVID-19.

Single employer pension plan accounting comments:

- Fluctuations in interest rates and widening of corporate bond spreads have presented some unusual results for discount rates under U.S. GAAP and IFRS. For example, in March there was a greater divergence between the median and above-median yield curves for corporate bond rates. This may change if companies that appear in the above-median yield curve universe drop in credit rating to below the high-quality level required for establishing accounting discount rates leading to an increase in accounting obligations.

- Companies with fiscal years ending February 29 or March 31 will likely have large increases in balance sheet underfunding in 2020. This may also arise for interim reporting, especially under IFRS which requires interim reporting. Although interim reporting may usually be prepared on a principles-based approach, it's unclear how precise the IFRS interim reporting is expected to be under the current unusual environment.

Investment considerations:

- Pension plans that have a liability-driven investing strategy are likely to be less affected by the recent market turmoil since the assets are invested to match or align with the liabilities creating a more stable funded status.

- Pension plans that are on a glidepath to de-risk as funded status improves may be considering whether to re-risk if funded status has dropped below a glidepath trigger point.

- Pension plan sponsors that have adopted an Outsourced Chief Investment Officer program will likely be nimbler in responding to market conditions than those who need to convene a pension plan board to adopt changes in asset allocation.

- The uncertainty surrounding the depth of the downturn and the length and path to recovery present challenges for investment decision making. Credit spreads widened at the beginning of the market turmoil and have since tightened, presenting opportunities in fixed income securities.

- Market turmoil is not a new event. COVID-19 represents the fourth major market event in the last few decades: 1987 market crash, dot.com crash of the early 2000s, the great recession of 2008-2009, and now COVID-19. The impact of COVID-19 on the economy and financial markets could rival the Great Depression.

De-risking considerations:

- Although some insurance companies are no longer in a position to implement an annuity purchase, there are still companies in this market. There are a smaller number of deals, leading to more competition among the insurers in the market. Plan sponsors that are preparing for an annuity purchase usually hedge the liability in anticipation of the annuity purchase. It's likely that asset-in-kind transfers will be favored during this turbulent period.

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[2] Most recent actuarial report may be found on the PBGC website: https://www.pbgc.gov/sites/default/files/pbgc-fy-2019-annual-report.pdf

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- Some annuity purchases or plan spin-offs continue to be pursued as a strategy to reduce PBGC premiums.

- In Canada, there are increased restrictions on commuted values transfers and annuity purchase transactions based on jurisdiction and impact of change in funded status. A full freeze on portability transfers and annuity purchases relating to defined benefit provisions of pension plans has been implemented for federally regulated private plans. However, as of May 7, 2020, portability transfers are allowed for certain retirement-eligible members, but with stipulations on the payment amount or required deficiency contributions from the employer. Saskatchewan has also implemented a full freeze on portability transfers and annuity purchases for Saskatchewan-registered pension plans. Quebec now requires that a commuted value payment be based on an up-to-date funded position.

Section 4: Multiemployer Pension Plan Discussion

Many of the multiemployer plans are continuing to accrue benefits (unlike single employer pension plans, which are largely frozen and not offering continued accrual of benefits), but a number of them were severely underfunded prior to COVID-19.

- Multiemployer plan contributions are based on negotiated rates based on hours worked. Given the disruption in many industries, hours worked are down sharply. Although the reduction in hours worked leads to lower benefit accruals, this drop in benefit accruals will be less than the drop in contributions. This will further increase underfunding in plans, many of which are already underfunded. It is unclear at this time which industries will recover, and which will be permanently impaired.

- Although the funded status of many multiemployer plans is expected to deteriorate, this does not affect the premiums paid to the PBGC which are based solely on beginning plan year participant count. PBGC premiums for the next plan year will be reduced if there is a reduction in participant count.

- Severely underfunded multiemployer plans will likely go bankrupt sooner. While many multiemployer pension plans were in good financial positions prior to the pandemic, it is well documented that more than 100 U.S. multiemployer plans are likely to run out of money within 20 years, included in a research report by the SOA*:* *U.S. Multiemployer Pension Plan Pending Insolvencies*.

- The increased underfunding of these plans is expected to cause the collapse of the multiemployer side of the PBGC. Although some drafts of the bills that became the CARES Act included multiemployer pension plan relief, the law that was enacted did not provide any sort of relief for multiemployer pension plans.

- In Canada, multiemployer plan funding regulations are in transition to new target benefit plan rules, with no protections against benefit reductions and a permanent exemption from solvency funding but more carefully monitored and complex long-term funding approaches. Although these plans may have lower funding levels than single employer plans, the multiemployer plans in Canada are in a better funded position than similar plans within the U.S.

Section 5: Public Pension Plan Discussion

In the U.S., state and local governments differ greatly in how much their services and budgets are affected by COVID-19. Public employee plans may cover employee groups throughout a state or they may cover a very small group in one local area. They face a variety of challenges:

- State and municipal revenues are down and will likely take multiple years to fully recover, especially in tourist areas. This has caused some municipalities who participate in state-wide systems to negotiate for

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contribution relief. Although some delays in contributions may be permitted, the contributions will need to be made at some point. If an agency stops making contributions to the plan, this can lead to benefit cuts and in extreme cases potentially termination from the plan. In some instances, the loss of revenue may lead to municipal bankruptcy.

- Many public sector plans have employees that provide “essential services” to their communities, and thus may be more exposed to COVID-19 than the average population. Some public plans that consist of safety employees (police, firefighters, etc.) are particularly exposed as their members are largely in “first responder” classifications for health incidents. Relatedly, many public plans have adjusted benefits to provide “duty” death benefits to those who have died contracting COVID-19 on the job.

- As with private pension plans, asset values are down for public plans. Most public plans worked with their actuaries following the 2008-2009 recession to adopt or adjust their asset smoothing methods which help moderate the impact of asset losses on a single year’s contribution determination (public pension plans have greater flexibility to smooth asset losses than private sector plans). Through these asset smoothing techniques, many had deferred gains from previous years of strong investment returns that will help offset losses from COVID-19 to some degree. Most public pension plans have July 1 fiscal years, which gives time for potential recovery of some of the initial asset losses from March 2020. Plans which are rebalancing to their strategic asset allocation will also benefit by buying equities at a lower price when the depressed equities market value leads to additional purchases to regain the strategic allocation to equities.

- In most states, benefit guarantees are strong, often protecting benefits from date of hire. Court cases in California challenging these strong vested rights have reached the California State Supreme Court. It will be important to watch as the COVID-19 impact on state and plan finances may have greater weight on this decision.

- Although some states may be requesting assistance from the federal government, it appears unlikely that any assistance would be approved for funding public pension plans.

In Canada, with some important exceptions, public plans involve risk-sharing amongst participating employers, employees and pensioners and are subject to the same federal and provincial regulation as would apply to corporate plans with these features. Funding shocks due to COVID-19 will lead to higher employer and employee contributions and reduced post-retirement indexation. In some cases, the effect will simply be to postpone the elimination of temporary contribution increases that were implemented in response to prior financial crises.

Section 6: General Discussion

The following are topic areas raised during the discussion that have implications across plans.

Mortality considerations:

- In addition to the deaths directly attributable to COVID-19 (especially among the older population), there likely will be broader implications due to higher rates of depression and suicide stemming from the shelter-in-place restrictions. Delays in treatment for cancer and other medical conditions to free up resources to treat COVID-19 patients is also likely to lead to higher mortality. These other effects may last well beyond the current pandemic.

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Workforce considerations:

- The healthcare industry is bringing retired employees back to work. This is prompting an examination of policies for suspension of benefits (payments to retirees cease upon reemployment based on level of hours worked) and continued accruals for working past age 65.
- The CARES Act added flexibility for distributions from pension plans. The provisions are complex and it's not clear whether many plan sponsors will adopt them.
- Some employees are being pushed in to retirement earlier than planned due to layoffs at the beginning of the COVID-19 shutdowns. In addition, some employees who become ill with COVID-19 may retire earlier due to lingering illness or disability.
- Employees in industries deemed essential or where remote working is possible may now start to feel uneasy about job security and their own financial security. This could lead to delayed terminations and delayed retirements due to fear of the unknown future. It's unclear what impact these delays will have on normal talent flows through the organization and how long these delays will last before employee confidence and security returns.

Future implications:

- Past market events led to a decline in corporate-sponsored single employer defined benefit pension plans. The COVID-19 pandemic is likely to lead to further reductions in future benefits through plan freezes of single employer plans that still are accruing benefits. Potential accrued benefit reductions as a result of bankruptcy are also more likely, especially for multiemployer plans.
- Defined benefit plans provide valuable protection to plan participants through protection against longevity risk and investment risk, among other factors. Whereas, these risks are borne entirely by participants in defined contribution plans. Perhaps the COVID-19 pandemic will encourage a move to adopt risk-sharing plan designs, although it's unclear whether employers will be willing to sponsor defined benefit plans even with a lower level of risk.

Section 7: Conclusion

COVID-19 will almost certainly have long-lasting ramifications for defined benefit plans. The future outlook for U.S. multiemployer and public sector defined benefit funding security is challenging without a strong safety net at the federal level (PBGC for multiemployer) or state level. The security of participant benefits is likely in jeopardy for some plans.

It is too early to predict with certainty the changes that will likely follow. Open questions include:

- Will single employer funding reform be enacted, lowering required contributions to a more sustainable and stable level?
- Will multiemployer legislation be passed granting relief to plans and strengthening the multiemployer PBGC program?
- How will state and local governments respond to improve the funded level of their programs?
- As fewer employees are covered by well-funded defined benefit plans, how will employees have a secure retirement?

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- Will the current situation encourage rethinking how retirement risk should be shared and managed in society?
- Will the role of the employer in providing retirement security change?
- Will the trend away from traditional defined benefit plans in the private sector be accelerated?
- What immediate changes in risk management policies will be implemented for defined benefit plans as a direct consequence of the current pandemic versus longer term structural changes that will be considered to mitigate future extreme events?
- Will pension reform encourage more options for risk sharing and will risk sharing arrangements gain more favor in the U.S.?
- Will a potential further decline in the number of defined benefit plans as a result of COVID-19 propel a public push for expanded Social Security benefits?
- Will the exposure and increased leakage of defined contribution plans during this pandemic cause renewed interest in defined benefit (DB) or DB-like plans that provide pooling for longevity and investment timing risk?
- Will the heavy reliance on defined contribution plans cause a large number of employees to defer retirement, fearing that they need to recover their losses and build a larger cushion to protect against the next crisis? What will this mean for employer workforce management and the role of the retirement plan in that management?

This report has provided perspectives as of June 2020 and raised many issues to contemplate in the face of COVID-19 as the situation evolves. It has also signaled the importance of reevaluating the best ways to plan for and manage retirement risks in the future. With the COVID-19 situation rapidly evolving, the SOA is monitoring it closely and continuing to provide research communications that further explore the impact of this pandemic.

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