Looking at Pension Costs Through a Long-Term Lens

Introduction

Pension plans must take a long-term view when managing their members' assets. Similarly, the accounting practices for pension plans should be viewed through a long-term lens. Some observers blur the differences between "cost measurement" accounting practices and the economic reality of maintaining and measuring plan sustainability.

The vagaries of actuarial accounting and the way these costs are maintained are not of great interest for most pensioners and taxpayers. Ultimately, what matters most to pensioners is that their pension will be there when they retire and that they will receive stable benefits after years of making consistent contributions. In the case of jointly sponsored pension plans (JSPPs), where the government makes contributions to employee plans, people want to know their tax dollars are used responsibly — in the manner and for the reason they have been told — as pension contributions to keep a plan sustainable.

This paper discusses two different methods to discount the measurement of a pension plan's future liabilities used to meet the needs of present-day accounting. Discount rates reflect what a plan's assets can reasonably expect to earn over the long term. One method used by public-sector plans, is to employ the expected rate of return on assets. The other method, used by private-sector plans, is to apply current market interest rates.

Critics of the public-sector approach of using expected returns believe it creates an inflated discount rate, which estimates future liabilities to be lower than they really are. They believe this so-called inaccurate estimate is not transparent and does not reflect the commitment made by government to these plans on behalf of taxpayers.

In contrast, OPTrust and HOOPP believe the use of current market interest rates does not reflect the long-term view required to meet plan members' needs. Not only is this approach short-sighted, it creates a discount rate that is lower than it should be, inflating the measurement of future liabilities and creating volatility in a plan's funded status. These factors impact the decisions of pension managers, affecting their ability to make suitable investment decisions.

Different Ways to Measure Liabilities

Private-sector plans use market interest rates as the discount rate to value liabilities. If interest rates decline then liabilities grow, in accounting terms, and the plan's funded status deteriorates. If the funded status deteriorates to insolvency, the sponsor is required to move to solvency through increased payments made over five to 15 years.

On the other hand, if interest rates rise then liabilities shrink, in accounting terms, and the funded status improves. However, sponsors are not permitted to allow their funded status to exceed 120 per cent and they may be forced to stop funding their pensions by taking a contribution holiday. This is potentially imprudent over the long term as the cumulative effect of the contribution holiday will result in fewer assets in the plan.

By comparison, public-sector plan members continually make contributions through the life of the plan no matter the state of current market interest rates. Under the current structure, if a surplus accrues over a long period of time, contributions may eventually be reduced.

Public-sector plans use a long-term expected rate of return on assets as the discount rate in valuing liabilities. This means liabilities are less sensitive to market interest rates and the funded status is less volatile, which is more in keeping with the long-term view pension plans are expected to take.

For example, if market interest rates are five per cent at one point in time, then a plan's defined benefit, 25-year liability of $100 would be valued at $29 present value, which would be accounted as the pension expense. If the market interest rates decline to four per cent in the next year, the now 24-year liability of $100 would be recorded as $39.01. Therefore, a 20 per cent drop in interest rates (from five to four per cent) would lead to an increase in pension expense of 32 per cent. This approach creates pension plan volatility and concrete challenges to budget planning due to the extra contributions that would be needed to maintain solvency. If the valuation was based on a long-term expected rate of return on assets that can be reasonably achieved, it would not have changed as materially over the two-year period used in this example.

Protecting Taxpayers

Some observers suggest the current public-sector pension cost measurement lays a burden on future taxpayers at the benefit of current taxpayers. They argue discounting liabilities using a longer-term expected rate of return on assets will leave underfunded plans to be salvaged through tax increases for future taxpayers, while current taxpayers will benefit from accounting lower pension costs.

This argument however, is one dimensional. It only considers the context of low interest rates and does not account for higher rates. A more complete picture would include a scenario where current market interest rates are higher, in which case current taxpayers would pay more for benefits accrued to future taxpayers.

This one-dimensional argument defends the rights of future taxpayers but neglects the interests of today's taxpayers. OPTrust and HOOPP believe the accounting practices of private-sector pensions can place a burden on current taxpayers while benefitting future taxpayers. As outlined above, low interest rates lead to a higher measurement of pension liabilities, which means the sponsor has a higher pension cost. This higher pension cost means private-sector sponsors pay less corporate income tax, which equates to a cost borne by current taxpayers through the loss of government revenue that could be spent on public services. Furthermore, using current market interest rates to calculate liabilities in public-sector plans would generate a higher pension cost to current taxpayers.

Applying the private-sector approach of pension accounting to public-sector pensions would result in a substantial amount of funded-status volatility, which would extend into overall government expenses. This would hold implications for setting and implementing a stable tax policy, creating challenges for current taxpayers. While some observers argue public-sector accounting practices benefit future taxpayers at the expense of current taxpayers by downplaying future liabilities, they fail to recognize the instability in the tax system created for current taxpayers. This situation is compounded by having current taxpayers pay for the benefit of future taxpayers because of inflated future liabilities.

Accounting for Shared Risk

Some take issue with the government recognizing a valuation allowance that reflects improvements in funded status as provincial revenue. Public-sector accounting rules — and accounting rules in general — are intended to and should result in a faithful representation of the economic realities of public pension plans. This includes their governance, decision-making structure and contractual arrangements, as well as, in the case of JSPPs, the manner in which plan funding and plan risks are in fact shared between the plan's sponsors.

A central concept behind JSPPs is the sharing of risk between the employer and employees. Any accounting standard used to value the obligations and cost of the plan must appropriately recognize the existing risk-sharing agreement between the sponsors. The failure to fully recognize risk-sharing in accounting would raise questions about the plan's governance and possible outcomes. It would also bring into question the appropriateness of "joint defined benefit plan" accounting that has historically been applied. That is because joint defined benefit plan classification requires equitable sharing of costs and risks – if the sharing is not equitable (e.g. the government is responsible for deficits but the plan members benefit from surpluses) then that definition may not be met.

To the extent the plan sponsors are required to fund plan deficits and are entitled to benefit from plan surpluses, any interpretation of accounting rules and the resulting accounting must be transparent to stakeholders, including taxpayers, and must treat deficits and surpluses in a uniform manner. Furthermore, a surplus is protected in two ways. First, the surplus is an accounting benefit – not cash on hand – to government and cannot be used for other spending. Second, a surplus does not provide the sponsors with a contribution holiday.

Unlike private sector plan sponsors, public-sector plan sponsors are themselves taxing entities, which helps to mitigate sustainability risk. However, it is wrong to assume that this is the sole "guarantee". In fact, beneficiaries also share in this risk because if funded status was to wane, they may see their benefits curtailed or contributions increased.

Surpluses and deficits should both be recognized on the Province's balance sheet. Not recognizing a surplus on the balance sheet, when the plan's documents, legislation, and governance enable the plan sponsors to benefit from such surplus, not only leaves a large amount of assets off the Province's balance sheet but also means that the Province's accounts do not reflect the economic substance of the arrangement. This weakens disclosure as well as transparency by giving those that read the Province's financial statements an incorrect perception of how the plan functions. There is no question that public interest is best served by recognizing any accounting surplus of the plan in the Province's accounts.

Focus on the Long Term

The global economy is experiencing a sustained period of low interest rates, but in the context of a longer history, relying on current circumstances to determine pension valuations is an example of short-term thinking.

Short-term thinking does not fit with pension plan management because pension plans constitute long-lived liabilities. Pension managers should manage their plan assets with a long-term view and should not be overly influenced by short-term market factors. Too great a focus on the short term produces extreme behaviours. Pension managers should not swing from one extreme to the other during economic cycles.

They should strategize by thinking through several different economic cycles that can take place over several decades. If current low interest rates are applied to value long-term pension liabilities, then it is likely pension managers would become overly conservative in risk-taking. They could make decisions that fail to capture the returns required to meet their long-term pension liabilities.

Conservatism in managing plan assets is, in most cases, a virtue. However, during extreme cycles virtues can become vices. In investment markets, the greatest drops in asset values tend to occur during extreme swings. At the top of a cycle, people succumb to euphoria and overextend. At the bottom of a cycle, people become afraid and overly conservative. These are powerful behavioural biases that test the will of even the best investors. The right strategy is to avoid making investment decisions from a position of any type of vulnerability, which leads back to using the right tools to measure liability.

Higher interest rates equate to a better funded status, which leads to a greater willingness to make aggressive investing decisions with plan assets. Later, if the cycle turns, lower interest rates lead to more conservative investing decisions. OPTrust's and HOOPP's position takes no issue with either conservative or aggressive investment decisions but does confront the possibility of over-aggressive and over-conservative decision-making. OPTrust and HOOPP believe using the right measurement tools creates stability and avoids these extremes and that path is the best one for both pension plan members and taxpayers.

Overall, focusing on near-term market interest rates results in a substantial amount of volatility in the plan's funded status. We think it is reasonable and more prudent for pension managers to focus on longer-term needs of the plan and take appropriate risks. Less volatility in funded status means pension managers can focus on long-term plan sustainability rather than short-term market moves and thereby make investment decisions that span several market cycles. This approach aligns with the long-term interest of the plan's members.

At OPTrust, our philosophy and approach to plan management is reflected in our mission statement — paying pensions today and preserving pensions for tomorrow. As a pension management organization, our focus is on the health of our pension plan's funded status. Our investment and management strategies have been designed to fully align with our members' interests and have resulted in the development of a member-driven or liability-driven investing strategy.

Embedded in this approach is recognizing that risk-taking is necessary to achieve our objective. We take risk to generate sufficient returns, but not so much risk that we jeopardize the stability of contributions and benefits. The MDI strategy strikes a balance between the two objectives of sustainability and stability.

A defined benefit (DB) plan possesses some structural advantages that help extracting rewards for risks taken. DB plans benefit from the law of large numbers and the ability to pool mortality risk, which means the plan can take on more risk than any one individual member could on their own. In addition, the long-term investment horizon offers many advantages. These include the ability to ride out shorter-term volatility in markets and access to a wider set of investment options such as illiquid assets, while also offering the opportunity to buy when others are forced to sell.

It is reasonable for government actuaries to use the expected return on assets as a long-term discount rate for pension liabilities. The rate embeds a real (inflation-adjusted) return that can be reasonably earned by holding a diversified portfolio of risky assets over a long period. Several studies have shown the stationarity and persistence of such term premia. Since pensions, both public and private, are long-lived assets (or liabilities), government actuaries have been thoughtful in determining the appropriateness of discount rates.

A long-term investment horizon means plan managers can harvest risk premia, which is the compensation earned from an investment over and above a risk-free rate. Risk premia exist for economically intuitive reasons. An investment is a transaction where risk is referred from one party to another. For someone to assume risk, they must be appropriately compensated or else there would be no economic incentive to do so. While one can reasonably expect risk premia to vary over the shorter term, they demonstrate persistence over the long term.

While the persistence of risk premia are an attractive proposition for investors, they require pension managers to understand the nature of the risks they are accepting and whether the compensation is adequate. Consequently, using an expected return on assets methodology to discount a plan's liabilities is the appropriate reflection of the return expectations within an asset portfolio. Harvesting risk premia requires skill and diligence, and a culture focused on risk management.

An important enabler of prudent risk management is the use of leverage. Leverage is a tool, that is neither good or bad inherently. It is a tool that affords greater flexibility in the efficient management of risk. As a simple illustration, money can be borrowed to buy government bonds and lower the funding risk of a plan.

If we imagine a scale, with plan assets on one side and liabilities on the other, funding risk is represented by the up and down movement (volatility) of the scale. More movement equates to higher funding risk and vice versa. We know liabilities are sensitive to interest rate movements. As interest rates fluctuate, so does the scale as the value of liabilities changes, causing volatility in funded status.

However, borrowing money to buy government bonds can counteract the effect interest rates have on liabilities. This is because the key risk exposure in government bonds is interest-rate risk, similar to that of the liabilities. More government bonds in the asset mix offset the impact interest rate fluctuations have on liabilities. This helps to limit the range of movement on the scale, which lowers volatility and funding risk.

This is just one example of how using leverage can help employ risk more efficiently. Focusing on the long term involves focusing on risk-management to ensure pension managers are neither overly aggressive nor conservative — they are balanced in their approach to risk-taking.

Conclusion

At OPTrust and HOOPP, we manage in a manner that supports our member-driven and liability-driven strategies. The overall risk appetite for the plans are set by independent boards under risk metrics focused on the funded status and not investment returns. We determine the "acceptable" risk around a funding return to ensure the chance of a contribution rate change remains within a risk-tolerance level. Our investment decisions are aligned through the development of success metrics that emphasize absolute performance over relative performance, and measure our ability to employ risk purposefully and efficiently. This strongly held belief has been codified through our investment philosophies, and keeps us aligned and moving forward in the face of economic uncertainty.

We face challenges — from low interest rates to demographics, to the fact that resources are not unlimited. Yet with these challenges come opportunities. To be a successful investor, it is important to have an edge. We are building cultures that face challenges head on — that embrace innovation and continuous improvement. Through innovation, we can redefine that edge and develop a mindset of doing things differently, boldly moving in a new direction.

The decisions made by pension managers affect the lives and retirements of plan members. It is no longer enough to simply do better than the market. Pension certainty, sustainability and stability demand more. They require managing risk through thoughtful decisions, diligence and skill.

The management of a pension plan requires a long-term view. The global economy happens to be experiencing a period where interest rates have remained at a relatively consistent level for several years in a row, but this is not a trend that applies to the long-term view of pension plans. On the other hand, the expected returns over the long term taken by pension plans, can be expected to be fairly consistent. Relying on current market interest rates to set pension accounting discount rates constitutes a very short-term approach, which has significant long-term implications.

The use of current market interest rates for measuring a pension plan's liabilities and its funded status is a flawed approach. It produces a needlessly volatile measure of plan health and impacts how plan managers invest plan assets, while also creating inequities between different generations of taxpayers. Recall the recently announced proposed private-sector plan changes by the Ontario government – private-sector plans now only need to be 85 per cent funded versus 100 per cent previously. The impact of using current market interests to measure funded status has forced officials to ease the rules around how well-funded the plans are required to be. OPTrust and HOOPP believe this is a direct result of having a faulty measurement approach.