



## ADDRESSING UNDERFUNDED PENSION PLANS WITH CONTINGENCY RESERVES

How well-funded is your pension plan? A pension plan's funded status is an indication of its financial health. Most plans' funded positions were adversely affected by the economic crisis of 2008 but have improved since then. This article will help you better understand pension funding deficits, what caused them, and how to avoid them moving forward.

### What is an Underfunded Pension Plan?

A pension plan is considered to be underfunded when its assets are less than its liabilities. The funded position of a pension plan can be calculated on a going-concern basis, which assumes that the plan continues indefinitely; and on a solvency basis, which assumes a hypothetical immediate plan termination. Plans can be overfunded on one basis but underfunded on the other. Multi-employer pension plans (MEPPs) are usually primarily funded on the going-concern valuation for funding purposes, although the solvency position is also determined and communicated.

### How Well-Funded are Multi-Employer Pension Plans?

The statistics below regarding the funded positions for MEPPs in Ontario are also similar in other jurisdictions across the country. The majority of MEPPs across Canada are currently faced with deficits.

Going-Concern Basis	Solvency/Wind-up Basis
<ul style="list-style-type: none"><li>• Median Funded Ratio (assets divided by liabilities): 98%</li><li>• Proportion<ul style="list-style-type: none"><li>• Underfunded: 60%</li><li>• Fully Funded: 40%</li></ul></li></ul>	<ul style="list-style-type: none"><li>• Median Funded Ratio (assets divided by liabilities): 77%</li><li>• Proportion<ul style="list-style-type: none"><li>• Underfunded: 90%</li><li>• Fully Funded: 10%</li></ul></li></ul>

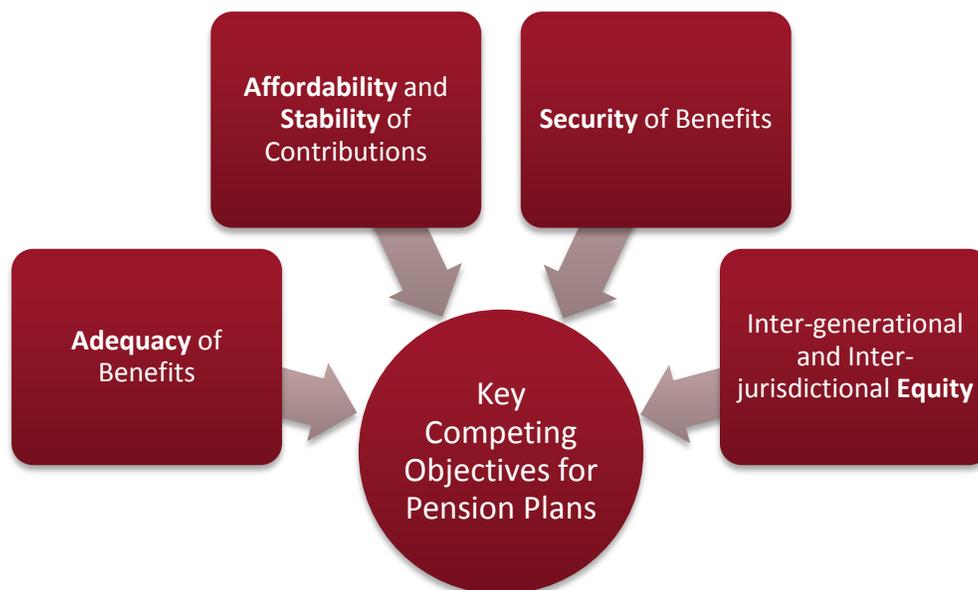
Source: Financial Services Commission of Ontario: 2014 Report on the Funding of Defined Benefit Pension Plans in Ontario.

### Preventing a Deficit

One way to deal with a deficit is to not have it in the first place, but that is easier said than done and could involve sacrificing other key plan objectives. Strategies like liability-driven investing and different plan designs (such as defined contribution pension plans) can minimize or even eliminate the possibility of deficits, however, benefit security, adequacy, and affordability must also be carefully balanced.



## Most Plans Have to Balance key Competing Objectives



## Fundamental Pension Equation

$$\text{Contributions [C] + Investment Income [I] = Benefits [B] + Expenses [E]}$$

When the fundamental pension equation above gets out of balance and B+E exceeds C+I, pension plans become underfunded. When this happens, the plan can adjust one or more components in order to get the plan balanced again, and MEPPs in particular possess unique options. To rebalance, contributions can be increased; however this is usually difficult in the case of MEPPs because they are fixed by the collective bargaining agreement. Alternatively, a change in investment strategy could be implemented, but care is needed when managing the additional risk and this is not usually a short-term approach. A change to expenses would have minimal impact since expenses are normally a very small proportion of the total cost. A change in benefits is the only lever that can have an impact on past service as well as future service and thus the funded position can be immediately improved if accrued benefits are reduced. While the other three levers change the future of the plan, this is the only component that can potentially have an effect on the present. Unlike single-employer pension plans (SEPPs) that are not permitted to reduce accrued benefits, MEPPs have this special ability that enables them to adapt to changing economic conditions. By design, Target Benefit Plans (TBPs) can also take advantage of this same provision. However, while allowable, reductions to accrued benefits are not “fun” and cannot be taken lightly.

When it becomes necessary to implement a change in one of the four components, it may be difficult to know which component to change and how to do it. The plan's Funding/Benefit Policy can provide some guidance to the Trustees in this regard by outlining the priorities specific to that plan. The usual considerations for MEPPs in order of priority are:

- Contribution Increases (impacts active members only)
- Benefit Reductions
  - Base benefits versus ancillary benefits
  - Future service – impacts active members only
  - Past service – active members/deferred vested members
  - Past service – retired members (typically the last resort)

### **Deficits – Not Necessarily a Bad Thing**

The ability to fund deficits is a fundamental advantage that MEPPs, TBP, and Defined Benefit (DB) plans have over Defined Contribution (DC) plans and RRSPs. They have a built-in mechanism to “fund” deficits which restores potentially lost benefits in turbulent market conditions, whereas money purchase arrangements have no choice but to reduce benefits at the end of the day if there is no further contribution room. Furthermore, the existence of a deficit does not necessarily trigger an action to be required – the real trigger is when the contribution rates are not sufficient to cover the cost of benefits currently accruing, administrative expenses, and the deficit amortization payments.

### **The Additional Lever: Contingency Reserves**

There is one more important lever that can be used for both multi-employer and single-employer plans: the contingency reserve. A contingency reserve is a flexible cushion held as a liability that helps protect against adverse experience. Thanks to its dynamic nature, it can be built-up in good times and drawn down in bad times, thus softening the volatility in funded status (and the associated potential required benefit and/or contribution rate changes). Generally, any margin held in the discount rate can be lowered with the establishment of a contingency reserve. By implementing a contingency reserve, a pension plan moves toward attaining two key objectives: security and stability.

When a pension plan with a contingency reserve becomes underfunded, the plan can reduce the contingency reserve, thereby reducing its liabilities and immediately improving its funded position. By doing so, the plan has avoided having to increase contributions, or worse, reduce benefits. Normally, the contingency reserve will be the first lever to be adjusted if available. In the case where the contingency grows to be very healthy, it can be used to improve benefits.

### **Determining the Right Level of Contingency Reserve**

It can be hard to know what level of contingency reserve is appropriate, since it is based on a number of plan-specific characteristics, such as:

- Funded status
- Investment assets allocation
- Member demographics
- Balancing of competing objectives by the Board of Trustees: adequacy, affordability, stability, security, and equity

A contingency reserve is typically based on stochastic projections with varying scenarios for investment performance and benefits earned. It is important to forecast many years into the future and not just look at the short-term, as pension liabilities are long-term by nature. The usual range for a target contingency reserve is anywhere from 5% to 20% of accrued liabilities. Depending on plan specifics, implementing a contingency reserve will have anywhere from a 60% to a 90% likelihood of success over a 3 to 15 year period, where success is defined as not having to increase contributions or reduce benefits (by more than a predetermined fixed percentage). Often the objective is defined as 75%, otherwise the contingency reserve requirement can become too onerous.

### Different Forms of Contingency Reserves and Other Margins

Explicit dollar reserve as a percent of liabilities

Cents per hour or as a percent of payroll

Margin/Provision for Adverse Deviation (PfAD) in valuation discount rate

- Typically in the range of 0.25%-1.00%

-Inflexible

### Communication Considerations with Contingency Reserves

A pension plan's funded position will be considerably different depending on if it does, or does not, include the liability related to the contingency reserve. Clear communication to members concerning the going-concern funded position with contingency reserve, the going-concern funded position without contingency reserve, and the solvency funded position is essential.

#### In Brief

At first glance, an underfunded pension plan can appear to be bad news. In fact, there is a silver lining, which is that for MEPPs and TBPs (and defined benefit plans in general) their ability to fund deficits provides them the flexibility to weather harsh economic conditions where other retirement savings strategies may suffer. A dynamic contingency reserve can be an effective lever (and for trustees and actuaries, the most "fun" lever) to adjust for a plan's underfunding. In 2014, many plans boasted significant positive returns on their funds, which makes now the perfect time to set up or build up that rainy day fund: a contingency reserve.

### ABOUT PBI

PBI Actuarial Consultants Ltd. is a dynamic and growing company focused on providing actuarial, administrative and investment consulting services for pension and benefit plans, as well as various trust funds. PBI serves clients across Canada from offices in Vancouver, Montreal and Toronto with a focus on multi-employer plans, non-profit and public sector organizations.

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