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## Reducing Risk For Multi-Employer Plans

By: Stephen Johnson & Joan Johansson

Multi-employer **pension plans** (MEPPs) have unique characteristics, quite different from traditional corporate plans, which require them to be more cautious. However, a properly **invested** plan can help protect the **pension benefit** by making use of strategies already adopted by some of the largest plans in Canada.

**Pension** risk really boils down to one question: Can we pay the promised **pension** to our **retired** members?

In striving to meet this promise, the trustees of these plans need to understand the risks and attendant consequences. Most trustees think of risk in terms of losing money due to the performance of an **investment**. For example, **investments** in Canadian stocks will drop in value when the Toronto Stock Exchange declines.

A further risk lies with interest-bearing investments such as bonds. As interest rates increase, the value of bonds decrease. Whereas, as interest rates fall, the value of bonds increase, but it then becomes increasingly difficult to find bonds that will generate sufficient interest to match the outflow of cash needed to fund the pension promise.

It all comes down to investment decisions and therein lies an interesting history as to how we reached where we are today. In the early years of pensions, starting in the 1950s, plans were largely invested in long bonds, most via annuity contracts provided by insurers. The assets in the plan always equaled the liabilities (the pension promise) as they were matched with the annuity contracts. The insurance companies simply matched the liabilities with long bonds and made a profit for taking on this 'risk.' Eventually, however, trustees began to take on control of their investments, realizing that they were paying a premium for purchasing long bonds via annuities. This trend away from annuity funding began in the 1960s. With this new level of control came changes to policy allowing for a broader array of investment alternatives. The trustees began investing in the stock markets understanding that, over time, stocks were proven to outperform bonds. By the early 1970s, stocks represented about 30 per cent of plan assets with long bonds at 70 per cent.

### How We Strayed

During the 1980s and through much of the 1990s, we enjoyed a period of incredible growth, and falling interest rates, during which stocks performed so well that trustees began to move investments away from under-performing bonds and into the stock markets. The benchmark for success became how well one fund performed against its peers in the marketplace. In effect, we began chasing returns and investment management opportunities were won based on which horse had been near the front of the pack the longest. At this same time, although the general population was now living longer than in the 1950s when pensions first became popular, investments in bonds were for shorter durations, usually in mid-term bonds, as the return on long bonds was simply too low. Pensions developed more and more of a mismatch between the duration of their liabilities and the duration of their fixed income investments.

Reality set in when the markets experienced a major adjustment in the early 2000s and the 'tech bubble burst.' Unfortunately, not all plans were in a position to weather this storm. In pursuing returns, the trustees had forgotten their primary concern: Can we pay the promised pension to our retired members?

The mismatch born in the 1980s and 1990s still persists today. The average pension plan has a 60 per cent exposure to the more volatile stock market investments and 40 per cent in mid-term bonds.

This mismatch is reflected in the misnamed 'asset and liability' studies, often undertaken by pension plans. The name is backwards. To properly answer the question of whether we can pay the promised pension to our plan members, we need to first look at the liabilities inherent in this promise and then at the assets which are needed to fund those liabilities.

Only by assessing the liabilities first, can we determine how much of a mismatch we can withstand. What is the duration of the liabilities and do the assets, then, match that duration?

### **Impact Of A Mismatch**

First, we need to define duration. Duration is a measure of how sensitive an investment (or liability) is to interest rate movements. The impact of a mismatch can be huge. Let's assume that a plan's liabilities have a 14-year duration. Let's further assume that, like 80 per cent of trustee funds, this particular plan has the Scotia Capital Bond Universe (or SCU) as the benchmark for bond performance. The SCU has a duration of six years which is similar to a mid-term bond. As mentioned above, 40 per cent of the plan's assets are likely invested in mid-term bonds (a far cry from the 14 year match required by the liabilities). In fact, the entire pension liability of 14 years duration is only offset with a 2.4 year duration asset (arrived at by multiplying the 40 per cent in bonds times the six year duration). Over time, numerous plans have stumbled into this glaring degree of vulnerability. Trustees should be aware of the 'hidden risk' of this liability/asset interest rate mismatch.

This hidden risk shows itself when interest rates move. A good maxim to remember is:

- 'Liabilities drop as interest rates increase,
- Liabilities increase as interest rates drop'

Remember our definition: Duration is a measure of how sensitive an investment (or liability) is to interest rate movements. In our example where liabilities had a 14 year duration, a move upwards in interest rates of, say, 0.5 per cent would actually reduce the liability by seven per cent (one simply multiplies the duration times the change in the interest rate). Although this improvement in liabilities is slightly discounted by the fact that 40 per cent of the assets were in bonds which would also fall. Unfortunately, the reverse is true should interest rates increase. Depending upon the asset mix, small fluctuations in interest rates can send a plan into either a surplus or a deficit.

### **The Specific Risks Of MEPPs**

This leads us to the special exposure of multi-employer pension plans.

For corporate plans, a mismatch may be a deliberate, and even appropriate, strategy. The company may recognize the interest rate mismatch and 'bet' on a rise in interest rates to improve the funded position of their plan. To make this 'bet,' the firm must be confident that it can withstand the penalty should rates fall. To make up any such shortfall, a company may be able to find relief from a variety of sources such as using profits, borrowing from their bank, issuing stocks and bonds, and so forth.

This is definitely not the case for multi-employer plans or Union Trusts.

There are only two remedies available for a shortfall in these situations, the trustees must either:

- Cut benefits
- Ask members to increase contributions

Neither of these remedies is easily adopted. Members will rarely tolerate increased funding. However, even less acceptable is to reduce benefits to members who are relying on the pension for their standard of living in retirement. This constitutes the breaking of the pension promise and few members will have the resources to offset this sort of loss.

This is the unique challenge of Trustee Multi-employer Plans. They must meet their liabilities without taking on the same degree of risk as can be tolerated by corporate plans.

With this conundrum, what can these plans do to manage mismatch risk and what is being done today? Some trustees do not recognize this problem or simply ignore it, hoping that no one notices under their watch.

Some see the problem, but may believe that interest rates will start to rise, reducing their liabilities, and thereby rescuing them from these risks. However, can their members afford to gamble? Some trustees are taking steps to resolve this interest rate mismatch risk to ensure the plan can pay the promised pension. How is this done?

### **Immunitization – Not Just a Health Benefit**

Immunitization is the term used in the pension industry for ensuring your assets will move in lock step with your liabilities no matter what the market does. To do this, the plans must buy long bonds, which are a match to your liability duration and thereby end the interest rate mismatch. This is called Liability Driven Investing (LDI).

LDI seems like the perfect answer. However, on its own, there are still noteworthy problems. Currently, long bonds are yielding just over four per cent whereas most plan valuation rates are at six per cent to 6.5 per cent. While the duration may be matched and while the liabilities and assets may fluctuate in tandem, the interest rate still has a sizable mismatch leaving the plan about two per cent short of funding requirements. This could only be tolerated by a plan with a massive surplus. In fact, most multi-employer plans would still have to cut benefits or ask members to contribute the difference. LDI, on its own, is not currently able to solve the entire problem. You still have a funding gap.

### **Steer to Port – How The Big Guys Are Sailing Out Of The Storm**

A number of the larger pension plans around the world have recognized this issue and, in combination with LDI, have successfully made adjustments to their asset side to better match their liabilities today and going forward. One alternative these plans have been implementing is called 'Alpha Porting.'

Alpha can be defined as valued added performance over the market. The market return itself can be viewed as beta. Basically, we hire fund managers not just to repeat what a market can do on its own (which is the beta), but to add value through wise management practices (the alpha). Fund managers try to generate as much alpha as they can. However, it is important that when they do this, it is without adding significantly to the risk of the portfolio. This is where savvy investment managers can eliminate the beta (market risk) in their equity portfolio and transfer the alpha through the use of a derivative, such as a swap, to a new bond beta.

If carefully constructed, these solutions can reduce risk while increasing performance. The trustees, therefore, task the fund manager, on the one hand, with matching their liability's duration and, on the other, with finding the excess return through alpha to pay for the funding gap. The use of these alternative investments to generate alpha (over-r-performance) from equities or other asset classes, while maintaining the original investments in bonds, is called alpha porting. Such strategies often reduce risk by increasing the diversification within the portfolio. As these solutions become increasingly used by pension plans in Canada, the alternatives will be packaged into pooled funds which are accessible to a variety of pension plan types. We are aware of opportunities today where some of these alternatives are already being made available to meet the needs of a variety of plan sponsors, including multi-employer plan sponsors and their trustees.

These solutions cannot evolve quickly enough for the Canadian market which still currently faces too great a risk from the liability interest rate mismatch and the funding gap. ■

Stephen Johnson and Joan Johannson are partners at Integra Capital Management Corp.