

DE-RISKING DB

Operating defined benefit (DB) pension plans involves risk. Although this risk is often not visible in upward-trending equity markets and favourable interest rate environments, it becomes obvious in situations such as the current market as the funded status of DB plans continues to deteriorate.

Organizations need to continually monitor plan risks in all market environments. But because plans have experienced significant downside in the recent environment, it is now critical for sponsors to conduct a de-risking review to address the painful cash and accounting volatility that is threatening the future viability of these plans.

Although every plan is different, sponsors should consider a skillful combination of risk transference, risk sharing and risk mitigation to lessen the adverse impact of the volatility of global capital markets.

Review Objectives

As with any management exercise, the first step in a de-risking review is to define the objectives for each major stakeholder. What can a de-risking review accomplish?

Looking beyond the current recession, HR will want to retain current employees, keep the company competitive to attract skilled employees and increase employee appreciation. Finance will be looking to lower the pension plan's ongoing cost, manage volatility and stay within the organization's tolerance for risk. The key objective of employees will be to confirm that the fiduciaries are managing plan risk prudently in their best interests. And shareholders will want a cost-effective plan that enhances employee engagement as a means of driving shareholder value.

Especially in a downturn, defined benefit plan sponsors need to understand and address the risks associated with their plans. **BY RON OLSEN AND MIKE MACPHERSON**

The next step is to analyze the various de-risking options in light of the stakeholders' objectives and decide what course to follow. Depending on the de-risking solution selected, it may be necessary to seek approval from the sponsoring organization's board before implementing and communicating the approach.

Data Quality

It's important to remember that a de-risking review is, by nature, a data-intensive operation that relies on the quality of an organization's data. Accuracy, integrity, consistency, completeness, validity, timeliness and accessibility are all significant attributes of an organization's data. The first five of these attributes pertain to the content and structure of data; the final two address the data's usability and usefulness.

Any organization that undertakes a de-risking review needs to be certain about the quality of its data. One way that an organization can ensure data quality is to conduct an initial data quality management audit at the start of any de-risking analysis project. Such an audit will examine all attributes of an organization's data quality and, if necessary, take steps to correct the problems—thereby ensuring that the plan can attain the accuracy, efficiency, confidence and cost savings that the review is aiming for.

Risk Management Strategies

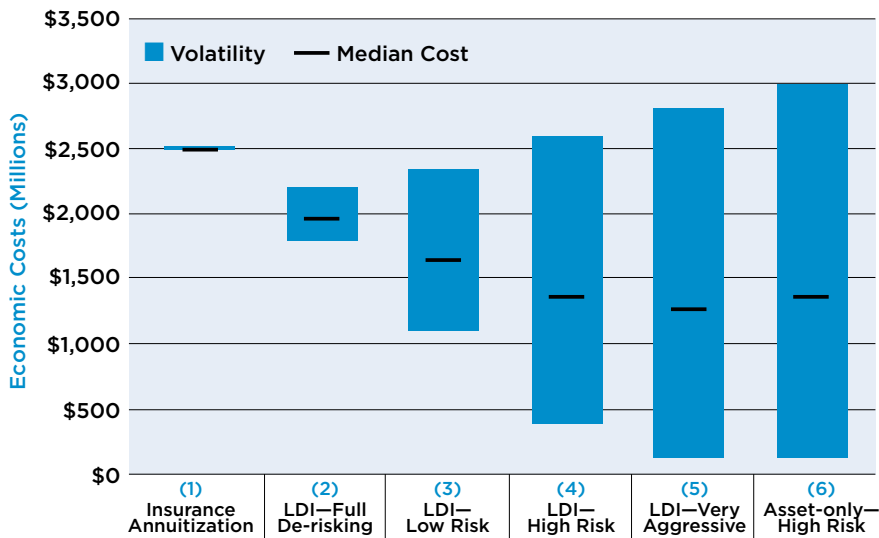
Broadly speaking, there are three types of strategies for de-risking a DB plan.

Risk transference – This strategy involves shifting all of the plan's risk to a third party (e.g., an insurance company) by purchasing annuities or, in the U.K. model, through buyouts or buy-ins.

Risk sharing – Plan redesign can be used to share the DB risk with plan members by creating what is essentially a multi-employer plan in a single-employer environment. This is currently available only in British Columbia (the affordable DB plan) and Quebec (the member-funded pension plan). Although the Ontario Expert Commission on Pensions recently announced that it is in favour of risk-shared, jointly sponsored target benefit plans, the supporting legislation has not yet been introduced.

Risk mitigation – This strategy uses liability driven investing (LDI), a framework for managing the plan's asset allocation, to de-risk the plan.

Although LDI has been around for years, it has only just begun to win acceptance. Yet certain research suggests that LDI was the most effective asset allocation strategy in 2008, making it an attractive option for many DB plan sponsors today.



Source: Sibson Consulting

Understanding LDI

Instead of looking at the plan's assets or its liabilities in isolation, LDI views them together and sees the risk of the assets in the context of their ability to support the plan's liabilities. This is different from historical strategies, in which the asset allocation decision was essentially made in a vacuum.

LDI is a form of asset allocation that focuses on the excess return of a pension plan's assets over its liabilities and the volatility associated with the plan's investment approach. The key aspect of LDI is that the benefit liability structure is factored into the determination of the plan portfolio's asset allocation.

LDI reduces volatility by hedging the risks for which the plan is not adequately compensated and increasing the risks for which the plan *is* favourably compensated, while meeting the overall risk tolerances and return objectives of the fiduciaries. This reduces the cost and accounting volatility of the DB plan or, at least, results in better compensation for taking on risk.

The three steps of de-risking in an LDI framework are as follows.

1. Determine the current position of the plan and its risk/return objectives.
2. Understand the plan's sources and magnitude of risks.
3. Evaluate the trade-offs of the various

risks and adjust the framework accordingly.

Figure 1 shows how LDI can be used to significantly reduce a DB plan's volatility. The shorter the bar, the lower the volatility.

Strategy No. 6 in the above graph is what most DB plans have today—a portfolio of 65% equity and 35% broad investment-grade fixed income focused on asset-only risk. While the median cost of operating the plan is relatively low (just below \$1.5 billion), there is an enormous range of volatility (i.e., possible outcomes in terms of the plan's future cost). The cost could range anywhere from \$100 million to \$3 billion a year, depending on investment returns and interest rate levels.

De-risking the portfolio by moving to very aggressive LDI [strategy No. 5, with a portfolio of 75% equity and 25% long duration matched (LDM) fixed income] will cause both the median cost and the volatility to drop slightly.

Strategy No. 4 (LDI high risk, with a portfolio of 60% equity and 40% LDM fixed income) and strategy No. 3 (LDI low risk, with a portfolio of 40% equity and 60% LDM fixed income) will increase costs but decrease volatility.

Although it has the highest cost of all of the LDI strategies, full LDI de-risking (strategy No. 2, with a portfolio of 0% equity and 100% LDM fixed income) has

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almost no volatility. In fact, it approaches the zero-volatility insurance annuitization strategy (strategy No. 1) at a significantly lower cost. All things considered, a full de-risking LDI strategy offers almost the same low volatility as an insurance annuitization but for much less money.

The goal of the de-risking review is a less volatile future for the funding and accounting of DB plans. De-risking offers benefits for HR, finance, employees and shareholders alike. Most plans will benefit from some combination of risk transference, risk sharing and risk mitigation.

Regardless of the plan's current investment strategy, it's possible to make the funding and accounting of DB plans less volatile using LDI. The result will be a more predictable future—even in these turbulent times. **BC**

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