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DB SOLUTIONS Industry Watch

New actuarial rules shine the spotlight on longevity risk

People living longer is a good thing, right? An upcoming change to the rules for calculating commuted values will increase the amount that pension plans pay to plan members cashing their entitlements out of the plan, as well as increase pension plans' solvency funding requirements compared to 2010 valuations. The changes are the final instalment of a package of changes previously introduced in 2009 by the Canadian Institute of Actuaries (CIA).

Change in commuted value standards

The CIA publishes rules for calculating commuted values for members leaving defined benefit pension plans. These rules set out the assumptions that should be used in calculating commuted values, such as the interest rate and the mortality table. The standard requires that a certain mortality table is used for calculations up to January 31, 2011 and that a new mortality table be used for calculations beginning February 1, 2011.

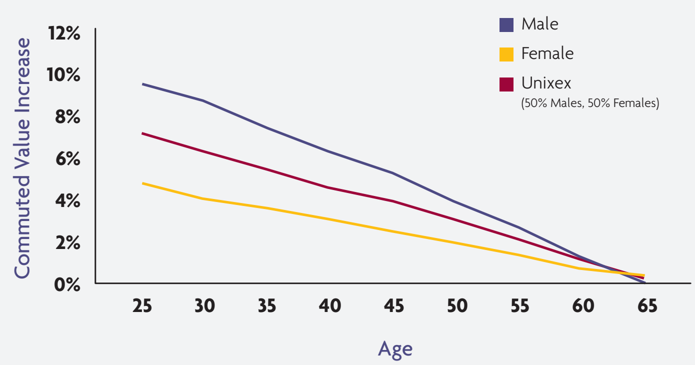
The current mortality table is a static table, meaning that someone age 65 today has the same life expectancy as someone age 65 in 20 years' time. While this approach is simple to calculate and administer, the CIA acknowledges that it is an unrealistic estimate, since life expectancy has been steadily increasing and is expected to improve in the foreseeable future.

The new mortality table takes into account that life expectancy will continue to improve, providing a more realistic, but computationally more complicated, estimate.

How much of a change?

The chart below shows the percentage increase in commuted values for a range of member ages as a result of the new commuted value standards for males, females and unisex (50% males, 50% females). The pension benefit being commuted is assumed to be payable at age 65 for the lifetime of the member.

Percentage increase in commuted value as at February 1, 2011



The biggest increase in commuted values will occur for younger plan members, since younger plan members are expected to have bigger increases in life expectancy by the time they reach retirement age. In addition, the increases are higher in general for males compared to females (or for plans with larger male populations, in the case of plans that use a unisex assumption) as the new table assumes faster increases in life expectancy for males than females.

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Larger commuted values will be good news for plan members, but will adversely affect pension plan sponsors in two ways:

1. increased cash payments out of the pension plan, when a member elects a commuted value; and

2. increased solvency liabilities for those members expected to take a commuted value, which may lead to increased cash funding contributions to the pension plan.

The solvency liability for a member who is expected to elect an annuity is equal to the expected cost of purchasing that annuity. The cost is not expected to increase as a result of the new rules, because the annuity purchase price already reflects increasing life expectancy. As such, pension plans with large retiree liabilities will be less affected by the new rules, since the retiree liabilities will not be affected.

The actual cost implications for a specific plan sponsor will depend on:

- the number of members taking commuted values (as opposed to pensions);
- the proportion of males and females in the plan; and
- the age of the members taking commuted values.

In order to illustrate the effect on non-retiree solvency liabilities, consider an illustrative pension plan with 70% males and 30% females, evenly distributed across a range of ages 25 to 55 years old. The table below shows the increase in solvency liabilities for the non-retiree component, based on the assumption that 25%, 50% and 75% of the non-retirees take commuted values.

Solvency liability for non-retirees

Percentage assumed to take commuted value	Increase in non-retiree liabilities
25%	1.1%
50%	2.2%
75%	3.3%

For plans that expect a large component of the non-retiree plan membership to elect commuted values, the increase could be over 3% of these liabilities.

While the new CIA standards address the increase in life expectancy for commuted values, plan sponsors would also benefit from a review of their overall longevity assumptions. A discussion with the plan actuary or pension consultant could help highlight the risk of further increases in liability values as a result of changes in longevity assumptions.

For further information about how longevity could affect your company, contact your pension actuary or pension consultant.

For further information about how Sun Life Financial can help protect you against increases in longevity, please contact:

Brent Simmons
Senior Managing Director, DB Solutions
416 408-8935 | brent.simmons@sunlife.com