

Memorandum

To: All Fellows, Affiliates, Associates, and Correspondents of the Canadian Institute of Actuaries and Other Interested Parties

From: James K. Christie, Chair
Actuarial Standards Board
Conrad Ferguson, Chair
Designated Group

Date: June 15, 2015

Subject: **Final Communication of a Promulgation of the Mortality Table Referenced in the Standards of Practice for Pension Plans (Subsection 3530)**

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INTRODUCTION

According to subsection 3530 of the Standards of Practice:

Demographic Assumptions

- .01 *Except for situations specifically noted below, the actuary should assume:*
- *Separate mortality rates for male and female members; and*
 - *Mortality rates in accordance with a mortality table promulgated from time to time by the Actuarial Standards Board for the purpose of these calculations.*

At its meeting on June 9, 2015, the Actuarial Standards Board (ASB) decided to promulgate the use of the following mortality table, effective October 1, 2015: *Mortality rates equal to the 2014 Canadian Pensioners Mortality Table (CPM2014) combined with mortality improvement scale CPM Improvement Scale B (CPM-B).*

Use of mortality improvement scale CPM-B1D2014 is acceptable as an interim measure for calculations up to and including December 31, 2016.

An [initial communication](#) regarding this promulgation was published on December 4, 2014, with a comment period ending on February 15, 2015.

RATIONALE FOR THE PROMULGATION

The Standards of Practice require the promulgation from time to time by the ASB of a mortality table for commuted value (CV) calculations.

The [Final Report on Canadian Pensioners' Mortality](#) shows significant variances between actual and expected pensioner mortality experience relative to the current promulgated table (i.e., mortality rates underlying the UP-94 table with generational projection using mortality projection Scale AA). In addition, the report underlines the continued improvements in life expectancy at levels much stronger than those anticipated by the previously used Scale AA.

Under Canadian pension legislation, plan members who terminate employment prior to retirement are entitled to receive the CV of their promised benefits under their pension plans. Also, minimum lump sum death benefits prior to retirement are payable under pension legislation on the same basis. Pension regulators rely on the CIA Standards of Practice to provide a basis for the calculation of a fair transfer value for plan members and their beneficiaries, where applicable.

Clearly, the evidence shows that a change in the mortality basis is required at this time.

The designated group (DG) recognizes that life expectancy can be affected by many factors, including socio-economic conditions of a particular cohort, smoker versus non-smoker, single versus married, and so on. Members of some pension plans may experience generally higher or lower mortality rates than members of other pension plans. Furthermore, particular cohorts of members in the same plan may have a better or worse mortality experience than expected because some subsets of the membership may be more likely to be affected by one or more of the factors above. Developing information at this level of detail is beyond the scope of promulgating a reasonable mortality basis for CV calculations to be done uniformly across all jurisdictions and plans. Furthermore incorporation of all these factors in a series of promulgated tables or adjustments could lead to an unacceptably wide range of actuarial practice and make supervision of pension plans unnecessarily complex to a point where the public interest may very well not be properly served.

Ultimately, consideration of whether plan-specific adjustments should be allowed in the CV basis is one of balancing uniformity and ease of application against other impacts on certain pension plans caused by the selection of a uniform basis. On this point the DG felt that the potential variance in results from the application of one mortality table was not sufficient to merit introducing added complexity to the CV calculation process by recommending more than one table depending on different circumstances. Furthermore, other remedies could be considered if required for purposes of solvency funding or actual wind-up calculations that are outside the scope of this recommendation.

The DG concluded that the public interest would be better served by one recommendation for voluntary or contingent CV payouts applicable to all pension plans.

COMMENTS RECEIVED

The DG received nine responses to the initial communication, from one pension plan board, five individual members, and three pension consulting firms.

Rationale and Analysis

A number of comments were related to the rationale and analysis, namely whether or not the CV should be focused only on terminating members or balancing the interests of the terminating members and remaining members, disagreement with the assertion that a member can always choose a deferred pension, and disagreement with the tolerance ranges used.

DG Response

The DG acknowledges that these comments may have merit. However, in the context of making a recommendation intended to be reasonable for a broad range of plan members and meet the criteria for adoption of standards, these alternative considerations would not have led to a different recommendation.

Mortality Table

All issues raised regarding the mortality table were related to a potential concern that the table may be too conservative.

Suggestions were made about alternatives such as use of a head count-weighted table, or use of an unadjusted table, and to consider the potential anti-selection effect of individuals not electing a CV.

Another perhaps more important concern was raised in respect of certain multi-employer plans subject to solvency funding rules where evidence suggests there is a higher mortality risk. In these circumstances it was argued that use of the CPM table is inappropriate because the CVs are too high for this cohort. If terminating members take more than their share of the fund, the remaining members are left with a shortfall and are disadvantaged. Furthermore, solvency funding requirements are such that current benefits could be reduced for all members. A recommendation was made that the mortality basis should be the one used for the funding valuation for each year, and not a specified uniform table.

DG Response

The DG feels that the mortality tables published and approved by the CIA should be used for calculation of values under legislated standards. The mandate of this DG was not to develop new tables or provide recommendations on legislated standards.

As for anti-selection effect, while intuitively this comment may have merit, the DG notes that the CV standard does not allow for use of individual health conditions and found no strong evidence that would allow for an explicit recognition of the potential anti-selection. Any adjustments here would have been arbitrary. Again, the DG's role is not to develop new mortality tables.

Finally, recommending a mortality basis by plan would lead to a wide range of practice which, in the opinion of the DG, would not meet the criteria for adoption of standards. The DG also had difficulty with the notion that the life expectancy to be used for different individuals of the same age and gender who are covered under pension legislation would be different because of the plans these individuals belong to. The CV standard is national in nature and not plan specific. CVs are calculated for individuals and not cohorts of individuals. To draw a cohort distinction on a per-individual basis seemed to the DG to be inappropriate for individual CV calculations.

Projection Scale

The comments made here are as follows:

- Projection too far in future;
- Discount rate should factor in the effect of the projection scale; and
- The projection scale should be revised when the work of the Mortality Improvement Task Force is completed.

DG Response

On the first point, any adjustments here would be arbitrary. The DG feels it is best to use the scales published by the CIA following a period of commentary on the merits of the projection basis.

On the second point, the DG will pass on the comment to the other DG looking at the CV Standard other than mortality.

On the last point, the DG agrees and this is duly noted both in this communication and with the ASB.

Transition and Timing

A concern was raised about the fact that the one-dimensional scale produces higher values and that it should not be allowed, or an alternative table should be used or the timing should be delayed to allow plans to modify their systems so as to avoid having to use the one-dimensional scale.

The initial communication proposed an August 1, 2015, implementation date. Several concerns were raised about timing, noting that three jurisdictions need to change their regulations and the promulgation should coincide with other changes in this standard or the marriage breakdown standard.

DG Response

The DG sees these concerns as having merit. However, new tables were published by the CIA in February 2014 and any delay should not be for a prolonged period. As a result, the DG recommended that the effective date should be October 1, 2015, to coincide with the effective date for the capitalized value calculations at the dissolution of a union.

Other Comments

There were other comments suggesting the standard be modified to require disclosure of the mortality basis used.

DG Response

Paragraph 3550.01 of the standards addressing disclosure requirements, while not mentioning mortality specifically, states the following at the second bullet:

A description of the actuarial assumptions used in determining the commuted value and the rate of interest to be credited between the valuation date and the date of payment; . . .

PROMULGATION

The CPM2014 mortality table combined with projection scale CPM-B for calculations effective October 1, 2015 is recommended for use for pension CV calculations. A calculation using scale CPM-B1D2014 is an acceptable interim measure for calculations up to and including December 31, 2016. Since the standard at paragraph 3520.10 already allows for alternative methods and assumptions that produce higher values in specified circumstances, the issue of possible early adoption need not be addressed specifically here.

CRITERIA FOR THE ADOPTION OF STANDARDS OF PRACTICE

The newly promulgated mortality table meets the criteria set out in section B of the ASB's Policy on Due Process for the Adoption of Standards of Practice:

1. It advances the public interest through the use of a mortality basis that is aligned with current mortality experience for Canadian pensioners and provides a fair and consistent assessment of life expectancy for a wide range of pension plan member cohorts.
2. The actuary will continue to apply professional judgment within a reasonable range, as was the case previously. Although the use of the table is prescribed, there continues to be circumstances where an actuary should or may use judgment.
3. Compliance with the promulgated table is practical for actuaries as the underlying elements (mortality rates and projection scale) are similar in structure as those currently in use.
4. The promulgated table is considered to be unambiguous.

EFFECTIVE DATE

The newly promulgated mortality table should be used for pension CV calculations effective on or after October 1, 2015. Early implementation is effectively accommodated by paragraph 3520.12, which allows for alternative methods and assumptions that produce higher values.

JKC, CF