Actuarial Standards Board
Conseil des normes actuarielles

***Final***

# Final Standards of Practice for Capitalized Value of Pension Plan Benefits for a Marriage Breakdown (Section 4300)

## Actuarial Standards Board

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# 4300 CAPITALIZED VALUE OF PENSION PLAN BENEFITS FOR A MARRIAGE BREAKDOWN

## 4310 SCOPE

.01 The standards in this section 4300 apply to an actuary's advice when the capitalized value of a pension plan's benefits is needed for calculating the value of family property at the breakdown of the marriage of a plan member.

.02 For the purposes of this section 4300, "plan" means "pension plan" and is broadly defined, including not only a plan that is registered under the federal Income Tax Act but also an unregistered plan, such as a retirement compensation arrangement and an unfunded pension plan.

.03 The standards in this section 4300 do not apply when the purpose of the calculation is to calculate an amount, in respect of a pension benefit, to be paid

> by the plan to the plan member or beneficiary as a result of the plan member's death or termination of membership, or
>
> by a party other than the plan in connection with litigation other than in respect of a marriage breakdown.

.04 The standards in this section 4300 may provide useful guidance for similar calculations for other deferred compensation arrangements, such as a partnership retirement buy-out agreement, a sick leave buy-out plan, and a retirement lump sum allowance, but they do not provide useful guidance for current compensation arrangements such as group life and disability insurance.

.05 The standards in this section 4300 do not apply when applicable legislation mandates a different basis for the calculation of the value of a pension for family property purposes at the breakdown of the marriage of a plan member.

## 4320 METHOD

.01 *The benefits to be valued are the plan's benefits in respect of the member (including survivor benefits vested in the member's spouse) at the calculation date or calculation dates.*

.02 *The value of the member's benefits is the capitalized value of the benefits to be valued, but assuming that the member has no spouse. The value of the survivor benefits vested in the member's spouse is the excess, if any, of the capitalized value of the benefits to be valued over the value of the member's benefits.* [Effective January 1, 2004]

**Principle**

.03 The capitalized value would conform to the intent of applicable family law. The capitalized value may, thus, differ from the corresponding transfer value from a registered pension plan. Transfer values typically include only unconditional rights, whereas property under family law typically includes both vested and contingent rights. Thus, such contingent rights as early retirement rights, bridging benefits, and ad hoc inflation adjustments are property to be considered in a calculation for marriage breakdown purposes.

.04 The standards in this section will often produce more than one result, by taking account of alternative possibilities for

pension commencement age,

future increases in accrued benefits before and after retirement,

allocation of value earned before marriage,

inclusion or exclusion of non-vested benefits, or

special circumstances, such as buy-back or transfer of benefits.

.05 If the actuary has reason to believe that the plan's financial position is so weak that payment of the capitalized benefits is doubtful, then the actuary would so report, making clear that allowance for this factor could significantly reduce the present values calculated, given that such present values have been calculated assuming that the plan would meet its obligations. In making that assessment, the actuary would take into account any benefits payable under provincial pension guarantee legislation. The actuary would take into account further the extent to which plan benefits are provided through a retirement compensation arrangement and/or an unfunded pension plan.

.06 The terms of the actuary's engagement may determine some or all of

the relevant law or jurisdiction,

the calculation date or calculation dates,

retirement age, but only if established as a matter of fact pursuant to an agreement of the parties or a determination by the court, and

inclusion or exclusion of the effect of income taxes.

**Benefits to be valued**

.07 The benefits to be valued would include all of the plan's contractual benefits, including pre- and post-retirement death benefits, and any contractual inflation protection and non-contractual inflation protection.

.08 The benefits to be valued would exclude spousal survivorship benefits, except to the extent that these may have vested upon retirement prior to the calculation date.

.09 The form of plan benefits that would be valued would be the most favourable of any optional form available to the member with no spouse. For example, a 15-year guaranteed pension option would have a greater value than a 5-year guaranteed pension option for a member with impaired mortality. However, if the applicable law disregards a particular optional form of plan benefit, then the actuary may omit that option in calculating the capitalized value.

.10 The benefits may include or exclude any non-vested benefits. Non-vested benefits may be included in the values, or may be illustrated separately, and would be valued without discount for the possibility of future forfeiture. Separately from the illustrated values, the report may contain comments including suggestions for recognizing the contingent nature of non-vested benefits. The references in this paragraph to inclusion of values of non-vested benefits apply in jurisdictions where the inclusion of such values depends on the plan provisions applicable to a deferred vested member. In other jurisdictions, the inclusion of such values depends on the extent to which continued employment is assumed.

.11 The capitalized values would include ancillary benefits that are provided by the plan as of the calculation date and are expected to become available to the member after the calculation date if the plan member continues as an active member of the plan, but are not available to the member as of the calculation date, such as unreduced early retirement benefits.

.12 The actuary would disclose whether or not the benefits valued include benefits that will be provided by the plan after the calculation date and that are expected to become available to the member after the calculation date if the plan member continues as an active member of the plan, but are not available to the member as of the calculation date, for example

a future increase in benefits as a result of a collective bargaining agreement, or

a future increase in benefits as a result of an adopted plan amendment.

.13 The benefits referred to in paragraph 4320.11 are those payable by the plan as a going concern, and not those payable on plan wind-up, if different, unless the plan has been fully wound up or partially wound up with respect to the plan member.

.14 Where various legal interpretations for a specific question appear possible, the actuary would obtain clarification of such unclear matters from the instructing lawyer or from another authoritative source. If that is not possible, the actuary would advise that various interpretations exist, and would report the effects of these interpretations or report values that, in the actuary's opinion, are most consistent with accepted actuarial practice.

**Calculation date**

.15 The calculation date may be single or multiple, depending on the circumstances and applicable law. The possibilities include

the date of separation,

the date of marriage or commencement of cohabitation,

the date of trial, and

the report date.

.16 If the use of an alternative calculation date, close to the calculation date, would significantly affect the capitalized value, then the actuary would so report. Examples are

the date at which the member becomes eligible for early retirement with unreduced benefits, and

the date at which the plan is amended to enhance its benefits.

**Applicable standards**

.17 The applicable standards are those in effect at the calculation date. If there are two or more calculation dates, however, and if the standards applicable to one differ from the standards applicable to another, then the actuary would use the same standards for all calculation dates. The choice of standards would be governed by the latest of the calculation dates, except that the choice would be governed by the base calculation when the actuary selects an alternative calculation date, close to the calculation date, in accordance with the previous paragraph.

**Future service**

.18 If the member's employment terminated before the calculation date and was not reinstated at the report date, then the actuary would include nothing in the capitalized value on account of assumed service after the calculation date, even if reinstatement is possible after the report date. The actuary may, however, report a useful alternative calculation that assumes reinstatement.

.19 If the member's employment terminated between the calculation date and the report date and was not reinstated at the report date, then the actuary may, with disclosure, exclude from the capitalized value any non-vested benefits forfeited by the termination of employment.

**Effect on capitalized value of minimum benefits**

.20 In calculating the capitalized value, the actuary would take account of any minimum benefit related to member contributions;, for example

the so-called "50% minimum employer contribution rule", and

a minimum benefit equal to the member's contributions accumulated with interest.

.21 The minimum benefit would not necessarily be limited only to the value determined on a termination of employment assumption. The capitalized value would incorporate the relevant minimum benefit rule according to the event.

**Effect on capitalized value of salary increases after the calculation date**

.22 If the pension is an earnings-related benefit, then the possibilities are

the capitalized value takes account of all the member's salary increases – general increases, promotional increases, and seniority increases – after the calculation date.

the capitalized value takes account of the member's salary increases which result from general (as opposed to promotional and seniority) salary increases after the calculation date. A rationale for this possibility is that the member's spouse has no entitlement to the effect of promotions or seniority increases, which the member earns after the calculation date.

the capitalized value does not take account of the member's salary increases after the calculation date. A rationale for this possibility is that the member's spouse has no entitlement to the effect of salary increases, which depend on the member's continued employment after the calculation date.

.23 The assumed salary increases after the calculation date would be consistent with the prescribed economic assumptions, except that salary increases revealed by subsequent events would be substituted for the corresponding assumed increases.

**Effect on capitalized value of non-contractual indexing of pensions and other benefit adjustments**

.24 In calculating the capitalized value, the actuary would assume continuance of the plan's established practice or current policy, if any, for non-contractual indexing for inflation of pensions after pension commencement age and of vested deferred pensions before pension commencement age, unless there is explicit reason not so to assume. The actuary would report

the established practice or current policy, and

the indexation assumption.

.25 If that assumption is doubtful, then the actuary would also report the numerical effect on the capitalized value of helpful alternative assumptions.

.26 In the case of a final or best average earnings plan, there would be no allowance made for indexing of vested deferred pensions before pension commencement age in the period for which salary increases are projected after the calculation date.

**Effect on capitalized value of income tax**

.27 Income tax may be taken into account in the calculation. If it is to be taken into account, then the actuary would do so by calculating the average income tax rate based upon the member's anticipated retirement income computed in "current" dollars, including accrued and projected future pension income, Canada Pension Plan, Old Age Security and other anticipated income, and continuance of the tax environment at the report date or the calculation date; i.e., assuming continuation of the existing tax rates, brackets, surtaxes and clawbacks, applied to the projected income on retirement expressed in "current" dollars. The actuary would disclose which date was used and if the tax environment is as at the report date, would disclose the use of any tax provisions that have not yet been enacted.

.28 The actuary may report useful alternative calculations that take income tax into account.

## 4330 ASSUMPTIONS

.01 *The actuary should select all assumptions, except those depending upon interpretation of applicable law.* [Effective January 1, 2004]

**Mortality rates**

.02 *The actuary should assume mortality rates in accordance with a mortality table promulgated from time to time by the Actuarial Standards Board for the purpose of these calculations, modified, if appropriate, to reflect the member's or the member's spouse's impaired health, if medically determinable.* [Effective July 1, 2011]

.03 Tobacco use (or lack of tobacco use) would not, in itself, be sufficient reason to modify the mortality rates identified above.

.04 Use of unisex mortality rates would not be appropriate except that it may be appropriate in situations where the plan member has terminated employment and has elected, or has the option to elect, a transfer value that was or would be calculated under a unisex basis.

**Retirement age**

.05 If the retirement age is a matter of fact (i.e., one agreed by the parties or determined by the court), then the actuary would report the selection of the assumed retirement age as such.

.06 The retirement of the member before the report date does not necessarily preclude assumption of a different retirement age.

.07 Unless paragraph 4330.05 applies, the actuary would usually assume and report the results for a range of useful retirement ages, based on data at the calculation date, which would include

> the earliest age at which the member is entitled to a pension whose amount is not reduced on account of early retirement, assuming that the member's service ceases at the calculation date,
>
> the earliest age at which the member is entitled to a pension whose amount is not reduced on account of early retirement, assuming that the member continues in service either to that age or to an earlier age after the calculation date,
>
> if there is an upper limit to the number of years of credited service, the earliest age at which the member has attained, or will attain, that upper limit and becomes entitled to a pension whose amount is not reduced on account of early retirement, and
>
> the normal retirement age.

**Economic assumptions**

.08 *The actuary should select economic assumptions that depend on the reported rates for the applicable CANSIM series for the calendar month immediately preceding the month in which the calculation date falls.*

.09 *The actuary should determine from the CANSIM series the following four factors.*

| ***CANSIM Series*** | ***Description*** | ***Factor*** |
|---|---|---|
| *V122487* | *average long (>10 yrs) Government of Canada bond yields (final Wednesday of month)* | $G_L$ |
| *V122544* | *long-term Government of Canada benchmark bond yield, annualized (final Wednesday of month)* | $b_L$ |
| *V122553* | *long-term Government of Canada real return bond yield, annualized (final Wednesday of month)* | $r_L$ |
| $(1 + b_L)/(1 + r_L) - 1$ | *break-even inflation rate* | *BEIR* |

*Note that the factors determined above do not reflect the reported CANSIM series, but the annualized value of the reported figure.*

**Inflation and Indexing**

.10 *The actuary should calculate the projected benefit obligation for a pension that is fully indexed to increases in the Consumer Price Index using an assumed inflation rate of EI. For pensions that are partially indexed to increases in the Consumer Price Index, the actuary should derive inflation rates in a like manner by applying to the stipulated inflation rates the partial indexing formula of the plan.*

.11 *The actuary should determine the assumed rate of inflation EI as*

*first 20 years* $EI_{0\text{-}20} = BEIR$

*after 20 years* $EI_{20+} = 2.25\%$

*EI should be rounded to the nearest multiple of 0.01%.*

.12 *Where increases in pensions are related to increases in the average wage index, the actuary should assume that the average wage index will increase at rates that are one percentage point higher than EI.*

.12.1 *The capitalized value of a fully- or partially-indexed pension should be at least equal to the capitalized value applicable to a non-indexed pension in the same amount and having similar characteristics.* [Effective July 1, 2011]

.13 Where the plan so provides, the indexing in any of the above arrangements may be modified by

applying a maximum or minimum annual increase, with or without carry forward of excesses or deficiencies to later years, or

prohibiting a decrease in a year where the application of the formula would otherwise cause a decrease.

The actuary would then adjust the expected inflation rate for a year to reflect the probability and extent of modification for that year.

.14 If the pension is indexed using an "excess investment return" approach, the expected indexation rate would be determined using the "floor rate" and the interest rates determined in accordance with paragraph 4330.18 to produce an expected indexation rate consistent with excess interest situations.

.15 For a pension in a plan that has a policy or a history of indexing on an ad hoc basis, the actuary would determine an indexation rate consistent with the indexing policy or history. 4330.18

**Interest rates**

.16 *The actuary should calculate two interest rates, one applicable to the first twenty years following the calculation date, and the second one applicable to all years thereafter.*

.17 *The actuary should determine the interest rates as*

*first 20 years* $i_{0\text{-}20} = G_L + 0.50\%$

*after 20 years* $i_{20+} = 5.50\%$

*Prior to calculating the capitalized value, the actuary should round the rates of interest determined in accordance with this paragraph to the nearest multiple of 0.1%.*

.18 *The actuary should calculate the capitalized value of a pension using a two-tier interest rate of*

$i_{0\text{-}20}$ *for the first twenty years, and*

$i_{20+}$ *thereafter.* [Effective July 1, 2011]

**Assumptions selected by client**

.19 The actuary would obtain instructions from the client with respect to assumptions dependent upon the interpretation of applicable law.

.20 The actuary would report his or her reliance on an assumption selected by the client.

## 4340 REPORTING: EXTERNAL USER REPORT

.01 Here is model text if the actuary reports without reservation with regard to marriage breakdown.

> I have determined the capitalized value of the pension benefits and prepared this report in accordance with accepted actuarial practice in Canada, for purposes of settlement of a division of pension benefits resulting from marriage breakdown under the [Family Law Act] of [province]. In my opinion, the capitalized values are appropriate for this purpose.
>
> Respectfully submitted,
>
> [actuary]
> Fellow, Canadian Institute of Actuaries