

widowhood. The projections were made in accordance with the mortality rates described in Appendix 1 of this report and with the remarriage rates described in the paper "Remarriage Experience under the Pension Act of Canada" (Transactions of the Society of Actuaries, Volume XII).

Step 4—For 1968, 1970 and each quinquennial year thereafter, groups of widows surviving from groups of females widowed in all preceding years from 1968 onward were produced from the groups of widows determined in Step 3 by interpolation. The resulting groups were classified according to age group at widowhood and duration from widowhood.

(ii) *Average benefit factors*

For the calculation of benefits to widows aged less than 65 in the year of calculation, the average benefit factors used were determined for all relevant groups of widows classified according to age group at widowhood and duration from widowhood as the weighted average of all applicable male "general benefit factors", described in section 2 above, multiplied by 37½% and adjusted in accordance with assumed changes in the Pension Index from the year of widowhood to the year for which the calculation is made.

For the calculation of benefits to widows aged 65 or over in the year of calculation, average benefit factors were required that, in effect, excluded the average amount of age retirement pension payable to widows. (It will be remembered that, subject to a certain maximum, the total benefit available to a widow when both a widow's pension and an age retirement pension become payable is either 60% of the widow's own age retirement pension plus 60% of an earnings-related pension based on the pensionable earnings record of the deceased contributor or 100% of the widow's own age retirement pension plus 37½% of an earnings-related pension based on the pensionable earnings record of the deceased contribution, whichever is the greater.) The development of the factors is outlined below in the form of a series of steps.

Step 1—Age retirement benefit factors for widows were produced in accordance with the assumption that age retirement benefits to all widows aged 65 or over commence at age 65. These factors were obtained by multiplication of "female" adjusted composite benefit factors similar to those developed for age retirement pensions by certain factors, varying by age at widowhood, that took account of the assumption that relatively more widows than married females will participate in covered employment.

Step 2—Adjusted combined benefit factors that took account of the alternative benefits available when both a widow's pension and an age retirement pension become payable were developed from the factors A and B, where

A represents the weighted average of general benefit factors, described in the first paragraph of this subdivision, adjusted in accordance with assumed changes in the Pension Index from the year of widowhood to the year of attainment of age 65 for cases where widowhood occurs prior to age 65, and

B represents the age retirement benefit factor for widows, obtained in Step 1, adjusted in accordance with assumed changes in the Pension Index from the year of attainment of age 65 to the year of widowhood for cases where widowhood occurs after age 65.

For this step, it was assumed that any group of widows who had become widows at the same age and in the same calendar year would be composed of five sub-groups of widows with entitlement to an age retirement pension equal to k times the factor B, where $k=0, \frac{1}{2}, 1, 1\frac{1}{2}$ and 2, respectively. For each such sub-group the factors

$$0.6 (k \times B + A), \text{ and } k \times B + 0.375 \times A$$