



# Government Actuary's Department

## **HSC Pension Scheme**

### **Pension sharing following divorce**

#### **Factors and Guidance**

Version 1.0

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## 1 Introduction

- 1.1 This Note is provided for the use of the HSC as administrator of the Health and Social Care Pension Scheme ('HSCPS'). It sets out how to determine the appropriate cash equivalent of a member's benefits for the purposes of divorce or dissolution of a civil partnership ('divorce') and also the corresponding pension credit payable to the ex-spouse/civil partner ('ex-spouse') following the issue of a pension sharing order by the Court.
- 1.2 The factors provided in this Note have been prepared in light of our advice to the Department of Health, Social Services and Public Safety dated 27 March 2015 and its instructions following that advice. This guidance is intended to supersede any factors or advice previously issued, for the purposes of divorce calculations, carried out from 1 April 2015. No advice or factors issued in the past should be used for cases going forward. No advice or factors issued for the Health and Social Care Pension Scheme 2015 ('NHSPS 2015') should be used for divorce cases in the HSCPS.
- 1.3 Where a member has benefits in both the HSCPS and the HSCPS 2015, these benefits should be treated separately for the purposes of providing cash equivalents. Care should be taken in applying court orders for such members; it is expected that a separate order will be issued for each scheme.
- 1.4 The effective date for this guidance is 1 April 2015. The version number for this guidance is 1.0.
- 1.5 The factors are provided in Appendices B and C, whilst a summary of the underlying assumptions is given in Appendix A.

### Exclusions

- 1.6 This Note covers the calculation of a cash equivalent of a member's benefits for divorce purposes and the subsequent pension credits payable<sup>1</sup>. This Note does not cover the general application of pension debits to a member's benefits although reductions and uplifts to the debit due on early or late retirement respectively are covered in Section 6.
- 1.7 The factors set out in Appendices B and C cover the following scenarios:
- > DIV1 Factors to calculate the pensioner cash equivalent for pensioners who retired for any reason other than ill-health grounds [replaces previous POD1/POD2]
  - > DIV2 Factors to calculate the pensioner cash equivalent for pensioners who retired on ill-health grounds [replaces previous POD5/POD6]
  - > DIV3 Factors to calculate the pension credit for an ex-spouse who has attained normal pension age i.e. immediate benefits are established)[replaces previous POD7/POD8]

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<sup>1</sup> See regulations SI1995/300 R12 and SI2008/653 2.D.2/3.D.2.



- > DIV4 and DIV5 Adjustment factors to reflect how Pension Increases ("PI") work where pensioners are under age 55 [replaces previous POD3/POD4]
- 1.8 Other factors are required for divorce calculations for members not in receipt of benefits and for ex-spouses under NPA. These factors are provided in the CETV guidance note and cross referenced in the examples provided in this document.

### **Implementation**

- 1.9 The factors contained in this Note should be used with effect from 1 April 2015.
- 1.10 The remainder of this Note covers the factor tables and guidance on their use.
- 1.11 The factors should be reconsidered whenever there is a change in the SCAPE basis, following each actuarial valuation where mortality and other relevant experience is reviewed or if other credible and material information comes to light.
- 1.12 In line with best practice and in order to make sure that factors are being used as intended and the instructions are fit for purpose, we suggest that some example calculations are sent to GAD for review.



## **2 Calculation of cash equivalents: Contributing Members and Deferred Pensioners not entitled to an immediate pension without actuarial reduction**

- 2.1 The cash equivalent transfer value should normally be quoted. This should be calculated using the same approach as would apply to a normal non-Club transfer value, even if the member is not normally entitled to a transfer value. This calculation is covered in 'HSCPS Non-Club transfers out (CETVs): Factors and guidance'.
- 2.2 There may be additional information requirements and considerations where members have previously elected for Scheme Pays. In general the valuation of benefits yet to be put into payment should be reduced in respect of any outstanding Scheme Pays balance before determining the cash equivalent. Please refer to the guidance 'HSCPS: Reduction to benefits due to Scheme Pays Annual Allowance and Lifetime Allowance Tax Charges: Factors and guidance' for more details.
- 2.3 For contributing NPA 55 members (who are under NPA) a cash equivalent transfer value should be quoted as covered in 2.1. However this transfer value will be calculated assuming a vesting age of 60. Therefore, should a pension sharing order be implemented but the member subsequently retires before age 60, an early retirement reduction should be applied to the pension debit. Please see the 'HSCPS Voluntary Early and Late retirements in normal health' guidance for further details.
- 2.4 If the member's pension is due to be reduced because an allocation option has been taken out, then the benefits after allocation should be used i.e. reduced member's pension and increased dependant's pension (including subsequent pension increases).



### 3 Calculation of cash equivalents: Members already in receipt of benefits

#### General information

- 3.1 Those in receipt of benefits do not have an entitlement to a cash equivalent transfer value. The pensioner cash equivalent can be calculated using the method and factors in this Note, but these should be used for divorce purposes only.
- 3.2 The following sets of tables are provided in Appendix B of this guidance for use in the calculation of pensioner cash equivalents:
- |   |  |
|---|--|
| > Table DIV1<br>[replaces previous POD1/POD2]           | Pensioners who retired for any reason other than ill-health grounds. |
| > Table DIV2<br>[replaces previous POD5/POD6]           | Pensioners who retired on ill-health grounds.                        |
| > Tables DIV4 and DIV5<br>[replaces previous POD3/POD4] | Adjustment factors for pensioners under age 55                       |
- 3.3 Separate tables are required for pensioners who retired due to ill health to reflect shortened expectations of life and to allow for immediate pension increases.

#### Calculation date

- 3.4 The date for the calculation will depend on the stage of the divorce:
- |   |
|---|
| > If a quotation is required for part of the proceedings, in Scottish cases the date will usually be specified by the court; for divorces in Northern Ireland, England or Wales, the date used should be consistent with the date used for normal transfer value calculations (i.e. the guarantee date) |
| > If the calculation is being done after a pension sharing order has been made, the calculation date should be the transfer date, during the implementation period following the pension sharing order.   |
- 3.5 The age last birthday of the member should be calculated at the relevant date. Benefits should also be taken at this date, as described below.



### Calculation

- 3.6 The pensioner cash equivalent for a member who retired for any reason other than ill health should be calculated as follows:

3.7 Pensioner cash equivalent (not ill health) =

$$\begin{aligned} &\text{Current Member's Pension} \times \text{Factor DIV1A} \\ &+ \text{Survivor Pension payable on the death of the member} \times \text{Factor DIV1B} \\ &- (\text{Annual Pre 88 GMP} + 0.15^* \times \text{Annual Post 88 GMP}) \times \text{Factor DIV1C} \\ &- \text{National Insurance Modification} \times \text{Factor DIV1D} \\ &+ \text{Adjustment A (see 3.16 below)} \\ &+ \text{Adjustment B (see 3.19 below)} \end{aligned}$$

\*applies for both men and women

- 3.8 The appropriate factors should be taken from table DIV1 for the member's age last birthday at date of calculation. The appropriate factor DIV1C will also depend on the sex of the member. Note DIV1D is zero at age 65 (men) and 60 (women) and above.
- 3.9 The pensioner cash equivalent for a member who retired due to ill health should be calculated as follows:

3.10 Pensioner cash equivalent (ill health) =

$$\begin{aligned} &\text{Current Member's Pension} \times \text{Factor DIV2A} \\ &+ \text{Survivor Pension payable on the death of the member} \times \text{Factor DIV2B} \\ &- (\text{Annual Pre 88 GMP} + 0.15^* \times \text{Annual Post 88 GMP}) \times \text{Factor DIV2C} \\ &- \text{National Insurance Modification} \times \text{Factor DIV2D} \end{aligned}$$

\*applies for both men and women

- 3.11 The appropriate factors should be taken from table DIV2 for the member's age last birthday at date of calculation. The appropriate factor DIV2C will also depend on the sex of the member. Note DIV1D is zero at age 65 (men) and 60 (women) and above.



### Points to note in calculating the pensioner cash equivalent values

#### 3.12 Pension benefits:

- > The member's pension should be the rate of pension in payment. The last increase should be that awarded up to and including the April increase immediately before the calculation date.
- > GMP amounts used in the calculations should be revalued/increased to the calculation date.
- > A member who is under age 55, who retired on grounds other than ill health, does not receive index linking until age 55. In these cases, the pension used for 'Current member's pension' above should exclude pension increases for the period between exit and the April immediately before the calculation date, inclusive. Allowance is made for this increase in Adjustment B.
- > If the member is over State Pension Age (SPA), and has a NI modification, the pension used should be that after the deduction of the modification. Factor DIV1D /DIV2D is zero at age 65 (men) and 60 (women) and above.
- > If the member's pension has been reduced because an allocation option was taken out, then the pension actually in payment (i.e. after the reduction) should be used (including subsequent pension increases) and the pension payable on the member's death should include any increase due to the allocation option. If allocation has been made to a child or another dependant other than the spouse, please refer to GAD.
- > If the member's pension is reduced due to abatement, then the abatement reduction should be ignored for the purpose of this calculation. Benefits should be calculated as though the member had ceased re-employment on the date of calculation and valued accordingly.
- > If the member's pension has been reduced due to Scheme Pays, then the pension after this reduction should be used. However, cases involving compulsory early retirement where the implementation of the pension debit has been deferred should be referred to GAD.

#### 3.13 National Insurance modification:

- > An adjustment to the pensioner cash equivalent is applied in respect of any National Insurance modification. This may apply where the member left service prior to 6 March 1995 and is under SPA at the date of calculation.
- > The amount of National Insurance modification should be expressed as an annual rate, and increased in line with the pension increases awarded between leaving and the April prior to the date of calculation inclusive. The relevant factor from Table DIV1 or DIV2 should then be applied to that amount (based on age last birthday at the date of calculation). Factors are set to zero beyond SPA and the 'after modification' member's pension should be taken into account for the calculation.





### 3.14 Guaranteed Minimum Pension

- > The cash equivalent must be adjusted to reflect increases on the Guaranteed Minimum Pension (GMP) that are the responsibility of the State. These comprise all increases on pre-April 1988 GMPs and increases above 3% pa on the post-April 1988 GMPs. A different adjustment is therefore appropriate for pre and post-1988 GMPs.
- > Where the member is below GMP payment age (i.e. 65 for men or 60 for women), the GMP used should include revaluation up to and including the increase in the April immediately before the calculation date, using section 148 orders, in line with normal practice for cash equivalent transfer values.
- > Where the member has yet to retire or retired after GMP payment age, the GMP should include any late retirement increases (1/7% per week plus (for post-88 GMP) PI up to 3% pa up to the April preceding the calculation date) from GMP payment age to calculation date (if yet to retire) or from GMP payment age to date of retirement (if already in payment).

#### Adjustment A

- 3.15 This adjustment only applies to former deferred pensioners who took actuarially-reduced early retirement or retirement on compassionate grounds and are aged less than 55. Such pensioners will be entitled to a supplementary lump sum at age 55 representing the pension increases on the lump sum between their date of leaving and date of retirement. The "*Increases on the lump sum to be paid at age 55*" below, should represent the extra lump sum the member will receive, not the lump sum already paid.

3.16 Adjustment A = Increases on the lump sum to be paid at age 55 x Factor DIV4

- 3.17 The appropriate factors should be taken from table DIV4 for the member's age last birthday at date of calculation.

#### Adjustment B

- 3.18 This adjustment only applies to pensioners aged under 55 where the pension increases are deferred until age 55 (i.e. all pensioners under age 55 except those who have retired due to ill health). At age 55, the pension will increase up to the level it would have been if it had been index-linked since retirement.

3.19 Adjustment B = PI x Factor DIV5

where:

PI represents the increase to the pension in £ for the period since exit, including the increase applied in the April prior to the calculation date. (NB Use the extra pension, not the percentage increase.)

- 3.20 The appropriate factors should be taken from table DIV5 for the member's age last birthday at date of calculation.



## 4 Calculation of cash equivalents: Unusual cases

- 4.1 The instructions in sections 2 and 3 of this guidance should be sufficient for the majority of divorce calculations. However, there may be some cases that need different treatment, as described below. If other cases arise which are not covered by this guidance, these should be referred to GAD.

### **Contributing Members and Deferred Pensioners entitled to an immediate pension without actuarial reduction**

- 4.2 These should be valued as though they were pensioners. However any automatic retirement lump sum should be added to the value obtained, i.e. the calculation should be:

4.3 Pensioner cash equivalent (not ill health) =

$$\begin{aligned} & \text{Current Member's Pension} \times \text{Factor DIV1A} \\ + & \text{Survivor Pension payable on the death of the member} \times \text{Factor DIV1B} \\ - & (\text{Annual Pre 88 GMP} + 0.15 \times \text{Annual Post 88 GMP}) \times \text{Factor DIV1C} \\ - & \text{National Insurance Modification} \times \text{Factor DIV1D} \\ + & \text{Retirement Lump Sum that would be paid if the member had retired on the} \\ & \text{calculation date (including any Mandatory Lump Sum)} \\ + & \text{Adjustment A (see 3.16 above)} \\ + & \text{Adjustment B (see 3.19 above)} \end{aligned}$$

- 4.4 Points to note in using the factors:

- > The appropriate factors should be taken from table DIV1 for the member's age last birthday at date of calculation.
- > Current member's pension should, for 2008 section members, include uplift for late retirement (where relevant) using the appropriate factor from tables LRF1 based on age at date of calculation.
- > GMP amounts used in the calculation should be revalued/increased to the calculation date
- > Where a member could obtain extra lump sum by commuting pension it should be assumed that the member does not exercise their option to commute pension for the purpose of determining the Current Pension and Retirement Lump Sum, except in the case of any Mandatory Lump Sum.



### **Members under age 55 with dependent children**

- 4.5 Certain members who would not normally be entitled to pension increases (due to retirement on actuarially-reduced grounds, voluntary early retirement with consent, premature retirement, or retirement on compassionate grounds) are entitled to pension increases on part of their benefit because they support dependent children. Generally this is women in respect of service before 31 December 1992, and men in respect of service between 17 May 1990 and 31 December 1992. Any such cases should be referred to GAD.

### **Male Nurses**

- 4.6 There may be some male nurses who have taken the benefits accrued after 17 May 1990 on retirement after age 55, but have preserved the benefits accrued before 17 May 1990 to be paid at age 60<sup>2</sup>. In these cases, the benefits in payment should be calculated using the method and factors for pensions in payment described in this note. The benefits deferred to age 60 should be valued using the normal cash equivalent approach.

### **Members with Scheme Pays elections**

- 4.7 There may be additional information requirements and considerations required where members have previously elected for Scheme Pays. In general benefits yet to be put into payment should be reduced in respect of any outstanding Scheme Pays balance before determining the cash equivalent. Please refer to the guidance 'HSCPS: Reduction to benefits due to Scheme Pays Annual Allowance and Lifetime Allowance Tax Charges: Factors and guidance' for more details.

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<sup>2</sup> See Regulations SR 1995/95 75 paragraph 4(b)



## 5 Calculation of pension credits for ex-spouse

### General information

- 5.1 This section sets out the method and instructions for calculating the pension credit payable to the ex-spouse following the issue of a pension sharing order by the Court.
- 5.2 When a pension sharing order is received, the first stage is to check all the necessary information has been provided, check the charges have been paid, and recalculate the amount and the value of the member's benefits before the debit is applied. This should be done using the methods and assumptions set out in the previous sections of this note. In particular, it should be based on the age and status of the member at the calculation date, which should be within the implementation period, and the benefits in the scheme at that date. (This date is referred to as the 'transfer date' below.)

### Calculation of the ex-spouse's cash equivalent

- 5.3 For divorces under English and Northern Irish law, the pension sharing order will specify the percentage of the member's benefits that is to be shared. The cash equivalent obtained in 5.2 should be multiplied by this percentage, to give the value of the ex-spouse's benefits, or the ex-spouse's cash equivalent.
- 5.4 In Scotland, the pensions sharing order will usually specify a monetary amount, and this should be used as the ex-spouse's cash equivalent. The percentage for the pension debit should be calculated as the ratio of the monetary amount and the cash equivalent.

### Calculation of the pension credit for the ex-spouse

- 5.5 The ex-spouse's cash equivalent will need to be converted into a benefit payable to the ex-spouse. The calculations below are based on the following benefit features<sup>3</sup>:
- > a pension payable from age 60 (1995 section), 65 (2008 section), or the transfer date, if later;
  - > for the 1995 section, if the member has not received a lump sum before the pension sharing order date, a lump sum of three times the ex-spouse pension. This is payable at age 60, or the transfer date if the ex-spouse is aged 60 or above. If the e-spouse dies before retirement, the deferred lump sum will be payable on the death of the ex-spouse. No lump sum is payable to the ex-spouse if the member has already received their lump sum from the scheme;

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<sup>3</sup> See paragraph 3 of Schedule 2A to SI1995/300 and regulations 2.D.2 and 3.D.2 of SI2008/653.



- > for the ex-spouse of Choice Optants, if the member has not received their Mandatory Lump Sum in respect of pre-1 April 2008 service in the 1995 section before the pension sharing order date, a lump sum of 2¼ times the ex-spouse's pension in respect of service accrued by the member in the 1995 section. This is payable at age 65 (unreduced from age 60), or the transfer date if the ex-spouse is aged 65 or above. If the ex-spouse dies before retirement, the deferred lump sum will be payable on the death of the ex-spouse. No lump sum is payable to the ex-spouse if the member has received their Mandatory Lump Sum from the scheme;
- > benefits to be increased in line with prices, under the provisions of the Pensions (Increase) Acts;
- > no attaching benefits for the children, future spouse or future civil partner of the ex-spouse on the death of the ex-spouse;
- > on death after retirement, a lump sum equal to five times the pension less the pension already received, subject to a maximum of twice the member's salary at the transfer date less any lump sum paid to the ex-spouse (by commutation).

5.6 Table DIV3 in Appendix C sets out the factors needed to calculate the pension credit for the ex-spouse where the ex-spouse had already attained their pension age as set out in 5.5 above. Where the ex-spouse had not attained that age at the transfer date a deferred pension credit is established payable from NPA and the factors should be taken from 'NHSPS Non-Club transfers out (CETVs): Factors and guidance':

|   | <b>Pension credit factors</b> | <b>CETV factors</b> |
|---|-------------------------------|---------------------|
| 1995 section – male ex-spouse                                 | DIV3A and DIV3B               | TV1A and TV1B       |
| 1995 section – female ex-spouse                               | DIV3A and DIV3B               | TV2A and TV2B       |
| 2008 section – male ex-spouse<br>2008 section choice optant   | DIV3C                         | TV3A<br>TV3B        |
| 2008 section – female ex-spouse<br>2008 section choice optant | DIV3C                         | TV4A<br>TV4B        |

5.7 The calculation date should be the transfer date. The factors should be based on the age last birthday of the ex-spouse on this date. Do not use the age of the member.



- 5.8 For ex-spouses of members in the 1995 section who are under Normal Pension Age as set out in 5.5 above, the pension credits are calculated as follows:

If the member has not received their lump sum prior to the calculation date, the pension credit as at the calculation date will be:

The pension credit as at the calculation date will be:

>  $[\text{Ex-Spouse's Cash Equivalent}] \div [\text{Factor TV1/2A} + 3 \times \text{Factor TV1/2B}]$

The retirement lump sum credit as at the calculation date will be:

> 3 x pension credit

If the member has received their lump sum prior to the calculation date, the ex-spouse is not entitled to a lump sum and the pension credit as at the calculation date will be:

>  $[\text{Ex-Spouse's Cash Equivalent}] \div \text{Factor TV1/2A}$

- 5.9 For ex-spouses of members in the 2008 section who are under Normal Pension Age as set out in 5.5 above, the pension credits are calculated as follows:

>  $[\text{Ex-Spouse's Cash Equivalent}] \div \text{Factor TV3/4A}$

- 5.10 For ex-spouses of Choice Optants in the 2008 section who are under Normal Pension Age as set out in 5.5 above, the ex-spouse's cash equivalent (CE) will first of all need to be split between that in respect of the member's service before 1 April 2008 and that in respect of their service from 1 April 2008. This apportionment is done in the same ratio as the member's cash equivalent.

If the member has not received their mandatory lump sum prior to the calculation date, the pension credits for the ex-spouse are then calculated as follows:

In respect of pre-1 April 2008 service:

>  $[\text{Pre 2008 service ex-spouse's CE}] \div [\text{Factor TV3/4A} \times 0.8125 + 2.25 \times \text{TV3/4B}]$

In respect of post-1 April 2008 service:

>  $[\text{Post 2008 service ex-spouse's CE}] \div \text{Factor TV3/4A}$

The mandatory lump sum credit as at the calculation date will be:

> 2.25 x pension credit in respect of pre-1 April 2008 service

On payment the pension credit will be reduced by the mandatory lump sum credit divided by 12.



If the member has received their mandatory lump sum prior to the calculation date, the pension credits are calculated as follows:

In respect of pre-1 April 2008 service:

>  $[\text{Pre 2008 service ex-spouse's CE}] \div [\text{Factor TV3/4A} \times 0.8125]$

In respect of post-1 April 2008 service:

>  $[\text{Post 2008 service ex-spouse's CE}] \div \text{Factor TV3/4A}$

There will be no mandatory lump sum credit.

- 5.11 For ex-spouses of members in the 1995 section who are over Normal Pension Age as set out in 5.5 above, the pension credits are calculated as follows:

If the member has not received their lump sum prior to the calculation date, the pension credit as at the calculation date will be:

>  $[\text{Ex-Spouse's Cash Equivalent}] \div [\text{Factor DIV3A} + 3 \times \text{Factor DIV3B}]$

If the member has received their lump sum prior to the calculation date, the ex-spouse is not entitled to a lump sum and the pension credit as at the calculation date will be:

>  $[\text{Ex-Spouse's Cash Equivalent}] \div \text{Factor DIV3A}$

- 5.12 For ex-spouses of members in the 2008 section who are over Normal Pension Age as set out in 5.5 above, the pension credits are calculated as follows:

>  $[\text{Ex-Spouse's Cash Equivalent}] \div \text{Factor DIV3C}$

- 5.13 For ex-spouses of Choice Optants in the 2008 section who are over Normal Pension Age as set out in 5.5 above, the ex-spouse's cash equivalent (CE) will first of all need to be split between that in respect of the member's service before 1 April 2008 and that in respect of their service from 1 April 2008. This apportionment is done in the same ratio as the member's cash equivalent.

The pension credits for the ex-spouse are then calculated as follows:

In respect of pre-1 April 2008 service:

>  $[\text{Pre 2008 service ex-spouse's CE}] \div [\text{Factor DIV3C} \times 0.8125 + 2.25 \times \text{DIV3B}]$

In respect of post-1 April 2008 service:

>  $[\text{Post 2008 service ex-spouse's CE}] \div \text{Factor DIV3C}$



### **Pension benefits**

- 5.14 The ex-spouse's pension credit will be subject to pension increases with effect from the transfer date, under the provision of the Pension (Increase) Acts.





## **6 Calculation of pension debits and treatment of debits on early and late retirement**

### **Calculation of the pension debit**

- 6.1 For divorces under English and Northern Irish law, the pension sharing order will specify the percentage of the member's benefits that is to be shared. This percentage should be applied to all the benefits (except GMP) used to determine the cash equivalent transfer value. These amounts are the member's debits (reductions in member and dependant pensions and retirement lump sum for 1995 section members) and are subject to pension increases with effect from the valuation date, under the provision of the Pensions (Increase) Acts.
- 6.2 In Scotland, the pensions sharing order will usually specify a monetary amount. The percentage for the pension debit should be calculated as the ratio of the monetary amount and the cash equivalent. This percentage should be applied to the member's benefits as in paragraph 6.1 to determine the member's debits.

### **Allowance for pension debits – early retirement**

- 6.3 On early retirement (except in ill-health), pension debits should be reduced to reflect that the debit will be in effect for a longer period. Pension debits should be treated as main scheme pension for the purposes of determining which reduction factors should be applied. Therefore factors  $ERF1$ ,  $ERF2$  or  $(1 \div [\text{Factor } ERF3 \div PI + 1.269])$  should be applied as applicable to the pension debit. The factors  $ERF7$  or  $(1 \div [\text{Factor } ERF9A \div PI + \text{Factor } ERF9B])$  should be applied to the lump sum debit if appropriate.
- 6.4 For NPA 55 members retiring between age 55 and 60 from active service who had a pension sharing order implemented before age 55, the pension debit will need to be reduced even though the member is not technically retiring early. Other scheme benefits are not affected and do not need to be adjusted. Factor  $ERF1$  should be applied to the pension debit and Factor  $ERF7$  to the lump sum debit.

### **Allowance for pension debits – late retirement**

- 6.5 For late retirements of members from the 1995 section no adjustment should be made to the pension debit to reflect later debit.
- 6.6 For late retirements of members of the 2008 section where the member divorced before age 65, the pension debit should be treated as additional pension for the purposes of determining the late retirement factor to be applied. That is, the pension debit should be increased by applying factor  $LRF3$ .
- 6.7 For late retirements of members of the 2008 section, if the member divorced after age 65, the pension debit should also be increased to allow for the debit coming into effect later than NPA. However, in the same way that after age 65 not all pension attracts a late retirement uplift, only part of the debit should be increased.



6.8 The pension debit should first be proportioned by the amount of main scheme pension which attracts a late retirement uplift:

- $$\text{Pension debit to attract an uplift} = \frac{\text{Pension debit} \times \text{Main scheme pension which attracts an uplift}}{\text{Total main scheme pension}}$$

The late retirement uplift to be applied needs to reflect the date at which the debit was calculated:

- $$\text{Pension debit uplift} = \frac{\text{Factor LRF3 for age at retirement}}{\text{Factor LRF3 for age at date of divorce}}$$

Therefore the overall pension debit on late retirement for 2008 section late retirees who divorced after age 65 is:

- $$\begin{aligned} & \text{Pension debit} \times \frac{\text{Scheme pension which attracts an uplift}}{\text{Total main scheme pension}} \times \frac{\text{LRF3 age at retirement}}{\text{LRF3 for age at divorce}} \\ & + \text{Pension debit} \times \frac{\text{Scheme pension which does not attract an uplift}}{\text{Total main scheme pension}} \end{aligned}$$

#### **Allowance for pension debits – other circumstances**

6.9 No adjustments should be applied to pension debits on retirement on grounds of ill-health or to dependants' debits whatever the circumstances of death.

6.10 On subsequent transfer out the debits should be applied to members' benefits before the cash equivalent is determined.



## 7 Example calculations

7.1 The following worked examples help to illustrate how the factors should be used to calculate the cash equivalent of a pensioner member.

### Example 1 – Cash equivalent calculation for a male who retired in normal health

|   |              |
|---|--------------|
| Member's age last birthday                                | = 70         |
| Current member's pension                                  | = £10,000 pa |
| Pension payable on the death of the member                | = £5,000 pa  |
| Annual Pre 88 GMP   | = £500 pa    |
| Annual Post 88 GMP  | = £900 pa    |
| National Insurance modification                           | = N/A        |
| (over age 65, current pension should be after adjustment) |              |

#### Factors

|                                       |         |
|---------------------------------------|---------|
| DIV1A (Pension factor)                | = 15.25 |
| DIV1B (Surviving Partner's factor)    | = 1.44  |
| DIV1C (Adjustment for GMP factor)     | = 3.01  |
| DIV1D (Deduction for NI modification) | = 0     |

#### Cash Equivalent

$$\begin{aligned}\text{Cash equivalent} &= 10,000 \times 15.25 + 5,000 \times 1.44 - (500 + 0.15 \times 900) \times 3.01 \\ &= £157,789\end{aligned}$$

### Example 2 – Cash equivalent calculation for a female member under age 55 who retired in normal health

|   |             |
|---|-------------|
| Member's age last birthday                        | = 50        |
| Current member's pension at DoL                   | = £7,000 pa |
| Pension payable on the death of the member at DoL | = £3,500 pa |
| Annual Pre 88 GMP                                 | = Nil       |
| Annual Post 88 GMP                                | = Nil       |
| National Insurance modification                   | = Nil       |
| Increases on Lump sum to be paid at age 55        | = £4,410    |
| PI on pension                                     | = £1,400    |

#### Factors

|                                       |         |
|---------------------------------------|---------|
| DIV1A (Pension factor)                | = 23.28 |
| DIV1B (Surviving Partner's factor)    | = 1.17  |
| DIV1C (Adjustment for GMP factor)     | = 3.16  |
| DIV1D (Deduction for NI modification) | = 11.68 |
| DIV4 (Adjustment A)                   | = 0.8   |
| DIV5 (Adjustment B)                   | = 19.08 |

#### Cash Equivalent

$$\begin{aligned}\text{Cash equivalent} &= 7,000 \times 23.28 + 3,500 \times 1.17 + 4,410 \times 0.8 + 1,400 \times 19.08 \\ &= £197,295\end{aligned}$$



7.2 The following worked examples help to illustrate how the factors should be used to calculate pension credits for ex-spouses.

**Example 3 – Pension credit for female ex-spouse aged 50 of 1995 section member who has not received a lump sum**

Ex-spouse's age last birthday = 50  
Ex-Spouse's share of Cash Equivalent = £10,000

Factors

TV2A = 14.85  
TV2B = 0.75

Pension Credit (deferred and payable from age 60)

Pension =  $10,000 \div [14.85 + (3 \times 0.75)]$  = £584.80 pa  
Lump sum =  $3 \times 584.80$  = £1,754.40  
No contingent benefit payable

**Example 4 – Pension credit for male ex-spouse aged 50 of 2008 section member**

Ex-spouse's age last birthday = 50  
Ex-Spouse's share of Cash Equivalent = £10,000

Factors

DIV3C = Factor TV3A = 11.49

Pension Credit (deferred and payable from age 65)

Pension =  $10,000 \div 11.49$  = £870.32 pa  
No separate lump sum, available by commutation at retirement  
No contingent benefit payable



**Example 5 – Pension credit for male ex-spouse of a 2008 Choice Optant who has not received a lump sum**

|   |           |
|---|-----------|
| Ex-spouse's age last birthday               | = 60      |
| Ex-spouse's Cash Equivalent – Pre 1.4.2008  | = £10,000 |
| Ex-spouse's Cash Equivalent – Post 1.4.2008 | = £5,000  |

Factors

|       |               |         |
|-------|---------------|---------|
| DIV3B | = Factor TV3B | = 0.86  |
| DIV3C | = Factor TV3A | = 15.31 |

Pension Credit (deferred and payable from age 65)

|               |   |   |              |
|---------------|---|---|--------------|
| Pre 1.4.2008  | = | $£10,000 \div (15.31 \times 0.8125 + 2.25 \times 0.86)$ | = £695.68 pa |
| Post 1.4.2008 | = | $£5,000 \div 15.31$                                     | = £326.58 pa |
| <u>MLS</u>    | = | $£695.68 \times 2.25$                                   | = £1,565.28  |

Benefits Payable (deferred and payable from age 65)

|                               |   |                            |   |                   |
|-------------------------------|---|----------------------------|---|-------------------|
| Pension                       | = | $£695.68 - £1,565.28 / 12$ | = | £565.24           |
|                               |   |                            | + | <u>£326.58</u>    |
|                               |   |                            |   | <b>£891.82 pa</b> |
| MLS                           | = |                            |   | <b>£1,565.28</b>  |
| No contingent benefit payable |   |                            |   |                   |



7.3 The following worked example helps to illustrate how late retirement uplifts are applied to pension debits.

**Example 6 – Late retirement uplift on pension debit, for a Male 2008 Section member**

|   |             |
|---|-------------|
| Member's age at retirement                                  | = 70        |
| Member's age at divorce                                     | = 67        |
| Main scheme pension which attracts a late retirement uplift | = £2,000 pa |
| Total pension   | = £6,000 pa |
| Pension debit   | = £3,000 pa |

Factors

|                 |         |
|-----------------|---------|
| LRF 3 at age 67 | = 1.121 |
| LRF 3 at age 70 | = 1.338 |

Overall pension debit on late retirement for 2008 section late retiree who divorced after age 65:

$$\text{Overall pension debit} = 3,000 \times \frac{2,000}{6,000} \times \frac{1.338}{1.121} + 3,000 \times \frac{4,000}{6,000} = £3,193.60 \text{ pa}$$



## Appendix A: Assumptions underlying factors

### Financial assumptions

|                                       |          |
|---------------------------------------|----------|
| Nominal discount rate                 | 5.06% pa |
| Real discount rate (in excess of CPI) | 3.00% pa |

### Mortality assumptions

|                                      |   |
|--------------------------------------|---|
| Base mortality tables: normal health | S1NMA and S1NFA   |
| Base mortality tables: ill health    | S1IMA and S1IFA   |
| Base table adjustments               | Adjustments applied so that 20% fewer deaths at each age are assumed for male members and 15% fewer deaths at each age are assumed for female members than implied by the standard tables. (As per 2012 valuation.) |
| Future mortality improvement         | Based on ONS principal UK population projections 2012   |
| Year of Use                          | 2016  |

### Other assumptions

|   |  |
|---|--|
| Proportion of male members for the purpose of unisexing factors | 33.3%  |
| Allowance for commutation                                       | Nil  |
| Age difference between member and partner                       | Males assumed to be 3 years older than females |
| Proportions partnered   | As assumed for the 2012 valuation              |
|   | Sample rates:                                  |

| Age | Males | Females |
|-----|-------|---------|
| 50  | 0.76  | 0.54    |
| 60  | 0.76  | 0.54    |
| 70  | 0.74  | 0.46    |
| 80  | 0.61  | 0.23    |
| 90  | 0.34  | 0.07    |



## Appendix B: Factors for calculation of Cash Equivalents

**Table DIV1 - Factors to calculate pensioner cash equivalent on divorce - retirement not on grounds of ill health**

|   | Factor A               | Factor B                             | Factor C                   |                            | Factor D   |
|---|------------------------|--------------------------------------|----------------------------|----------------------------|--|
|   |                        |                                      | Males                      | Females                    |  |
| Member's age last birthday at relevant date | Gross Pension of £1 pa | Surviving Partner's Pension of £1 pa | Deduction for GMP of £1 pa | Deduction for GMP of £1 pa | Deduction for NI Modification of £1 pa<br><b>M/F</b> |
| 50  | 23.28                  | 1.17                                 | 3.72                       | 3.16                       | 11.68  |
| 51  | 22.96                  | 1.20                                 | 3.71                       | 3.16                       | 12.01  |
| 52  | 22.63                  | 1.22                                 | 3.71                       | 3.15                       | 12.35  |
| 53  | 22.30                  | 1.25                                 | 3.71                       | 3.15                       | 12.71  |
| 54  | 21.95                  | 1.27                                 | 3.71                       | 3.15                       | 13.08  |
| 55  | 21.60                  | 1.29                                 | 3.70                       | 3.15                       | 13.46  |
| 56  | 21.24                  | 1.31                                 | 3.70                       | 3.15                       | 13.85  |
| 57  | 20.87                  | 1.33                                 | 3.70                       | 3.16                       | 14.26  |
| 58  | 20.49                  | 1.35                                 | 3.71                       | 3.16                       | 14.68  |
| 59  | 20.11                  | 1.37                                 | 3.71                       | 3.23                       | 15.12  |
| 60  | 19.71                  | 1.38                                 | 3.71                       | 3.36                       | <b>15.58/0</b>                                       |
| 61  | 19.31                  | 1.40                                 | 3.72                       | 3.45                       | <b>16.06/0</b>                                       |
| 62  | 18.89                  | 1.41                                 | 3.72                       | 3.55                       | <b>16.55/0</b>                                       |
| 63  | 18.47                  | 1.42                                 | 3.73                       | 3.65                       | <b>17.07/0</b>                                       |
| 64  | 18.04                  | 1.43                                 | 3.83                       | 3.76                       | <b>17.61/0</b>                                       |
| 65  | 17.60                  | 1.44                                 | 3.84                       | 3.73                       | 0  |
| 66  | 17.15                  | 1.44                                 | 3.67                       | 3.55                       | 0  |
| 67  | 16.69                  | 1.44                                 | 3.51                       | 3.38                       | 0  |
| 68  | 16.22                  | 1.44                                 | 3.34                       | 3.21                       | 0  |
| 69  | 15.73                  | 1.44                                 | 3.18                       | 3.04                       | 0  |
| 70  | 15.25                  | 1.44                                 | 3.01                       | 2.87                       | 0  |
| 71  | 14.75                  | 1.43                                 | 2.86                       | 2.71                       | 0  |
| 72  | 14.24                  | 1.42                                 | 2.70                       | 2.55                       | 0  |
| 73  | 13.73                  | 1.41                                 | 2.55                       | 2.39                       | 0  |
| 74  | 13.22                  | 1.39                                 | 2.41                       | 2.23                       | 0  |
| 75  | 12.71                  | 1.36                                 | 2.27                       | 2.08                       | 0  |
| 76  | 12.20                  | 1.34                                 | 2.13                       | 1.94                       | 0  |
| 77  | 11.69                  | 1.31                                 | 2.01                       | 1.80                       | 0  |
| 78  | 11.19                  | 1.27                                 | 1.88                       | 1.66                       | 0  |
| 79  | 10.68                  | 1.22                                 | 1.77                       | 1.53                       | 0  |
| 80  | 10.16                  | 1.17                                 | 1.65                       | 1.41                       | 0  |
| 81  | 9.64                   | 1.13                                 | 1.54                       | 1.28                       | 0  |
| 82  | 9.12                   | 1.09                                 | 1.44                       | 1.16                       | 0  |
| 83  | 8.61                   | 1.04                                 | 1.34                       | 1.05                       | 0  |
| 84  | 8.10                   | 0.98                                 | 1.25                       | 0.94                       | 0  |
| 85  | 7.60                   | 0.91                                 | 1.16                       | 0.84                       | 0  |
| 86  | 7.12                   | 0.86                                 | 1.08                       | 0.75                       | 0  |





|     |      |      |      |      |   |
|-----|------|------|------|------|---|
| 87  | 6.66 | 0.82 | 1.01 | 0.67 | 0 |
| 88  | 6.23 | 0.76 | 0.94 | 0.59 | 0 |
| 89  | 5.82 | 0.70 | 0.88 | 0.53 | 0 |
| 90  | 5.44 | 0.62 | 0.83 | 0.47 | 0 |
| 91  | 5.08 | 0.60 | 0.79 | 0.41 | 0 |
| 92  | 4.75 | 0.57 | 0.75 | 0.36 | 0 |
| 93  | 4.44 | 0.54 | 0.72 | 0.32 | 0 |
| 94  | 4.14 | 0.52 | 0.69 | 0.28 | 0 |
| 95  | 3.86 | 0.49 | 0.66 | 0.25 | 0 |
| 96  | 3.60 | 0.46 | 0.64 | 0.22 | 0 |
| 97  | 3.35 | 0.44 | 0.62 | 0.19 | 0 |
| 98  | 3.12 | 0.41 | 0.60 | 0.16 | 0 |
| 99  | 2.91 | 0.39 | 0.59 | 0.14 | 0 |
| 100 | 2.72 | 0.37 | 0.58 | 0.13 | 0 |

**Note:**

When calculating the deduction for GMP, the factor given should be applied to the sum of the GMP amount in respect of service up to 5 April 1988 and 15% of the GMP amount in respect of service after that date.



**Table DIV2 - Factors to calculate pensioner cash equivalent on divorce - retirement on grounds of ill health**

| Member's age<br>last birthday at<br>relevant date | Factor A<br><br>Gross<br>Pension of<br>£1 pa | Factor B<br><br>Surviving<br>Partner's<br>Pension of<br>£1 pa | Factor C |         | Factor D<br><br>Deduction<br>for NI<br>Modification<br>of £1 pa<br><b>M/F</b> |
|---|--|---|----------|---------|---|
|   |  |   | Males    | Females |   |
| Deduction<br>for GMP of<br>£1 pa                  | Deduction<br>for GMP of<br>£1 pa             |   |          |         |   |
| 20  | 27.66  | 1.73  | 3.11     | 2.81    | 4.72  |
| 21  | 27.50  | 1.76  | 3.11     | 2.81    | 4.85  |
| 22  | 27.34  | 1.78  | 3.10     | 2.80    | 4.99  |
| 23  | 27.18  | 1.81  | 3.10     | 2.80    | 5.12  |
| 24  | 27.02  | 1.83  | 3.10     | 2.79    | 5.27  |
| 25  | 26.86  | 1.86  | 3.10     | 2.79    | 5.41  |
| 26  | 26.69  | 1.88  | 3.10     | 2.79    | 5.56  |
| 27  | 26.52  | 1.90  | 3.09     | 2.79    | 5.72  |
| 28  | 26.35  | 1.92  | 3.09     | 2.78    | 5.88  |
| 29  | 26.18  | 1.94  | 3.09     | 2.78    | 6.04  |
| 30  | 26.01  | 1.95  | 3.09     | 2.78    | 6.21  |
| 31  | 25.84  | 1.96  | 3.09     | 2.78    | 6.39  |
| 32  | 25.67  | 1.97  | 3.10     | 2.78    | 6.57  |
| 33  | 25.49  | 1.98  | 3.10     | 2.78    | 6.76  |
| 34  | 25.32  | 1.98  | 3.10     | 2.78    | 6.96  |
| 35  | 25.14  | 1.99  | 3.11     | 2.79    | 7.16  |
| 36  | 24.96  | 1.99  | 3.11     | 2.79    | 7.37  |
| 37  | 24.78  | 1.99  | 3.12     | 2.79    | 7.58  |
| 38  | 24.60  | 1.98  | 3.13     | 2.79    | 7.80  |
| 39  | 24.41  | 1.98  | 3.14     | 2.80    | 8.03  |
| 40  | 24.22  | 1.97  | 3.15     | 2.80    | 8.27  |
| 41  | 24.02  | 1.96  | 3.15     | 2.80    | 8.51  |
| 42  | 23.81  | 1.96  | 3.16     | 2.81    | 8.76  |
| 43  | 23.59  | 1.95  | 3.17     | 2.81    | 9.02  |
| 44  | 23.36  | 1.95  | 3.18     | 2.81    | 9.28  |
| 45  | 23.12  | 1.95  | 3.18     | 2.81    | 9.56  |
| 46  | 22.87  | 1.95  | 3.19     | 2.82    | 9.84  |
| 47  | 22.60  | 1.96  | 3.20     | 2.82    | 10.12   |
| 48  | 22.33  | 1.97  | 3.20     | 2.82    | 10.42   |
| 49  | 22.04  | 1.98  | 3.20     | 2.82    | 10.73   |
| 50  | 21.75  | 1.99  | 3.21     | 2.83    | 11.05   |
| 51  | 21.45  | 2.00  | 3.21     | 2.83    | 11.37   |
| 52  | 21.14  | 2.00  | 3.22     | 2.84    | 11.71   |
| 53  | 20.83  | 2.01  | 3.22     | 2.84    | 12.07   |
| 54  | 20.51  | 2.02  | 3.23     | 2.85    | 12.43   |
| 55  | 20.18  | 2.02  | 3.24     | 2.85    | 12.81   |
| 56  | 19.84  | 2.02  | 3.25     | 2.86    | 13.21   |
| 57  | 19.50  | 2.03  | 3.26     | 2.87    | 13.62   |



|    |       |      |      |      |         |
|----|-------|------|------|------|---------|
| 58 | 19.14 | 2.03 | 3.27 | 2.88 | 14.04   |
| 59 | 18.78 | 2.03 | 3.29 | 2.95 | 14.49   |
| 60 | 18.41 | 2.02 | 3.30 | 3.07 | 14.95/0 |
| 61 | 18.04 | 2.02 | 3.32 | 3.17 | 15.43/0 |
| 62 | 17.65 | 2.01 | 3.35 | 3.26 | 15.94/0 |
| 63 | 17.26 | 2.00 | 3.37 | 3.37 | 16.47/0 |
| 64 | 16.86 | 1.99 | 3.48 | 3.47 | 17.02/0 |
| 65 | 16.44 | 1.97 | 3.51 | 3.45 | 0       |
| 66 | 16.02 | 1.95 | 3.36 | 3.29 | 0       |
| 67 | 15.59 | 1.93 | 3.22 | 3.13 | 0       |
| 68 | 15.15 | 1.91 | 3.08 | 2.97 | 0       |
| 69 | 14.70 | 1.88 | 2.94 | 2.82 | 0       |
| 70 | 14.24 | 1.85 | 2.81 | 2.67 | 0       |
| 71 | 13.77 | 1.82 | 2.68 | 2.51 | 0       |
| 72 | 13.30 | 1.79 | 2.55 | 2.37 | 0       |
| 73 | 12.83 | 1.75 | 2.42 | 2.22 | 0       |
| 74 | 12.36 | 1.70 | 2.30 | 2.08 | 0       |
| 75 | 11.89 | 1.65 | 2.19 | 1.95 | 0       |
| 76 | 11.44 | 1.60 | 2.08 | 1.82 | 0       |
| 77 | 10.99 | 1.54 | 1.97 | 1.70 | 0       |
| 78 | 10.54 | 1.48 | 1.87 | 1.58 | 0       |
| 79 | 10.09 | 1.40 | 1.77 | 1.47 | 0       |
| 80 | 9.65  | 1.32 | 1.68 | 1.36 | 0       |
| 81 | 9.20  | 1.26 | 1.59 | 1.25 | 0       |
| 82 | 8.77  | 1.20 | 1.50 | 1.15 | 0       |
| 83 | 8.33  | 1.13 | 1.42 | 1.06 | 0       |
| 84 | 7.91  | 1.05 | 1.34 | 0.96 | 0       |
| 85 | 7.50  | 0.95 | 1.27 | 0.88 | 0       |
| 86 | 7.11  | 0.90 | 1.20 | 0.80 | 0       |
| 87 | 6.74  | 0.84 | 1.14 | 0.73 | 0       |
| 88 | 6.39  | 0.77 | 1.08 | 0.67 | 0       |
| 89 | 6.07  | 0.70 | 1.02 | 0.61 | 0       |
| 90 | 5.77  | 0.62 | 0.98 | 0.55 | 0       |
| 91 | 5.49  | 0.59 | 0.94 | 0.51 | 0       |
| 92 | 5.22  | 0.56 | 0.90 | 0.46 | 0       |
| 93 | 4.95  | 0.53 | 0.87 | 0.41 | 0       |
| 94 | 4.69  | 0.50 | 0.84 | 0.37 | 0       |
| 95 | 4.41  | 0.48 | 0.82 | 0.33 | 0       |

**Note:**

When calculating the deduction for GMP, the factor given should be applied to the sum of the GMP amount in respect of service up to 5 April 1988 and 15% of the GMP amount in respect of service after that date.



## Tables DIV4 and DIV5

**Factor to adjust for supplementary lump sum due at age 55 where pensioners retired from deferred status and are under age 55 at the date of calculation**

**Factors applicable for males and females (retirement due to ill health and non-ill health)**

|   | <b>DIV4<br/>Adjustment A</b>                            | <b>DIV5<br/>Adjustment B</b> |
|---|---|------------------------------|
| <b>Age last<br/>birthday at<br/>relevant date</b> | <b>Factor for lump<br/>sum supplement<br/>at age 55</b> |                              |
|   |   |                              |
| 50  | 0.80  | 19.08                        |
| 51  | 0.84  | 19.65                        |
| 52  | 0.88  | 20.23                        |
| 53  | 0.93  | 20.83                        |
| 54  | 0.98  | 21.46                        |
|   |   |                              |



## Appendix C: Factors for calculation of Pension Credits

Table DIV3 - Factors to calculate pension credit for ex-spouse where NPA attained

| Ex-spouse's age last birthday at relevant date | Factor A<br>1995 Section<br>Gross Pension of<br>£1 pa | Factor B<br>1995 Section<br>Lump Sum of £1 | Factor C<br>2008 Section<br>Gross Pension of<br>£1 pa |
|--|---|--|---|
| 60   | 19.75   | 1.00                                       |   |
| 61   | 19.35   | 1.00                                       |   |
| 62   | 18.94   | 1.00                                       |   |
| 63   | 18.52   | 1.00                                       |   |
| 64   | 18.10   | 1.00                                       |   |
| 65   | 17.66   | 1.00                                       | 17.66   |
| 66   | 17.22   | 1.00                                       | 17.22   |
| 67   | 16.76   | 1.00                                       | 16.76   |
| 68   | 16.30   | 1.00                                       | 16.30   |
| 69   | 15.83   | 1.00                                       | 15.83   |
| 70   | 15.35   | 1.00                                       | 15.35   |
| 71   | 14.87   | 1.00                                       | 14.87   |
| 72   | 14.38   | 1.00                                       | 14.38   |
| 73   | 13.89   | 1.00                                       | 13.89   |
| 74   | 13.39   | 1.00                                       | 13.39   |
| 75   | 12.91   | 1.00                                       | 12.91   |
| 76   | 12.42   | 1.00                                       | 12.42   |
| 77   | 11.94   | 1.00                                       | 11.94   |
| 78   | 11.47   | 1.00                                       | 11.47   |
| 79   | 10.99   | 1.00                                       | 10.99   |
| 80   | 10.52   | 1.00                                       | 10.52   |
| 81   | 10.05   | 1.00                                       | 10.05   |
| 82   | 9.58  | 1.00                                       | 9.58  |
| 83   | 9.12  | 1.00                                       | 9.12  |
| 84   | 8.68  | 1.00                                       | 8.68  |
| 85   | 8.25  | 1.00                                       | 8.25  |
| 86   | 7.85  | 1.00                                       | 7.85  |
| 87   | 7.47  | 1.00                                       | 7.47  |
| 88   | 7.13  | 1.00                                       | 7.13  |
| 89   | 6.82  | 1.00                                       | 6.82  |
| 90   | 6.53  | 1.00                                       | 6.53  |
| 91   | 6.28  | 1.00                                       | 6.28  |
| 92   | 6.05  | 1.00                                       | 6.05  |
| 93   | 5.85  | 1.00                                       | 5.85  |
| 94   | 5.66  | 1.00                                       | 5.66  |
| 95   | 5.50  | 1.00                                       | 5.50  |



---

|     |      |      |      |
|-----|------|------|------|
| 96  | 5.36 | 1.00 | 5.36 |
| 97  | 5.24 | 1.00 | 5.24 |
| 98  | 5.13 | 1.00 | 5.13 |
| 99  | 5.04 | 1.00 | 5.04 |
| 100 | 5.00 | 1.00 | 5.00 |