



InFocus Document

Equalisation of Retirement Ages

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1 Introduction

This document covers the Equalisation of Retirement Ages in SuperVal for the Actives Module.

Where members have different retirement ages in respect of different periods of service, as a result of equalisation, the user may need to allow for this when valuing benefits. This document provides some suggested approaches.

This document is based on Version 9.20 of SuperVal. Any screenshots which may be included from previous versions of SuperVal are not materially different from those in V9.20.

2 Worked Example

Suppose a scheme equalised retirement ages for service from 1st January 1993 at 65 for males and females. Retirement ages were 65 for males and 60 for females prior to this date.

The NRAs for different periods of service are as follows:

For Service:	NRA (M/F):
up to 17 May 1990	65/60
between 17 May 1990 and 1 January 1993	60/60
from 1 January 1993	65/65

There are two methods of dealing with this in SuperVal, shown as Method A and Method B below:

2.1 Method A

This method is used where there is an early retirement decrement assumption in the valuation basis. It makes use of two sets of early retirement reduction factors.

2.2 Method B

This method is simpler and involves loading the benefit from a slice by a factor to approximate the higher value.

2.3 Slice Structure

The slice structure will be the same for both methods as follows:

Slice 4:

Service Start Date	DJF
Not Before Date	
Service Finish Date	VDATE
Not After Date	17051990

Slice 3:

Service Start Date	DJF
Not Before Date	17051990
Service Finish Date	VDATE
Not After Date	01011993

Slice 2:

Service Start Date	DJF
Not Before Date	01011993
Service Finish Date	VDATE
Not After Date	

Slice 1:

Service Start Date	VDATE
Not Before Date	
Service Finish Date	LDATE
Not After Date	

2.4 Further Complications

The above Slice Structure ignores complications for changes in pension increase rate and any application of an Underpin. If your scheme has these scenarios then you will need to increase the number of slices as appropriate.

For example, if the Scheme applied LPI 5% on pensions accruing post 5/4/1997 and 3% for pensions accruing pre 6/4/1997 then the Slice Structure would be:

Slice 5: (as for previous Slice 4)

Slice 4: (as for previous Slice 3)

Slice 3:

Service Start Date	DJF
Not Before Date	01011993
Service Finish Date	VDATE
Not After Date	06041997

Slice 2:

Service Start Date	DJF
Not Before Date	05041997
Service Finish Date	VDATE
Not After Date	

Slice 1: (as for previous Slice 1)

[Slices 1 and 2 apply the LPI 5% pension increase rate, and Slices 3 to 5 apply the 3% pension increase rate.]

Note

Because periods of service are being split around dates, you need to be careful as to the (service) "Rounding Override" on the Slices. Rounding down by months or even years could mean that the total service being allowed for is less than is required. To get round this you could round up, or even use days ("DN")

2.5 Method A

2.5.1 Tables and Reduction Factors

On the "Demographic" tab a non-zero 'R' type table for the Early Retirement Decrement needs to be entered.

For example, suppose that an early retirement decrement rate table is entered as follows:

Age	65	64	63	62	61	60	59	58
Rate	1	0.05	0.05	0.05	0.05	0.05	0.05	0.05

Note

Decrement rates are entered as independent rates and SuperVal derives the dependent rates from these

Suppose that the scheme applies a 4% simple reduction factor for early retirements. The entries required in tables of the early retirement reductions factors are as follows:

Age	65	64	63	62	61	60	59	58
ERF65	1	0.98	0.94	0.90	0.86	0.82	0.78	0.74
ERF60	1.50	1.45	1.35	1.25	1.15	1.05	0.98	0.94

ERF65 reflects at NRA of 65 and ERF60 is to reflect an NRA of 60.

In this case it has been assumed that the scheme applies Late Retirement Factors of 10% pa simple (factors applied to benefit at actual retirement age).

Note for ERF65, that there is only a reduction of 2% in the first year early. This is because SuperVal assumes exit benefits payable before NRA will occur half way through the year. So, for ages below NRA, you need to enter the factors for age $x + \frac{1}{2}$. The ERF60 factors show how this affects the ERFs and LRFs.

(Rate table types for early retirement reduction factors would typically be 'FX' or 'HX' type)

The Early Retirement Reduction Factor tables would then be set on the "Ret Pension" and "Ret Cash" tab as follows:

Field	Male Table	Female Table
ERF1 (Revaluation 1 & 3)	ERF60	ERF60
ERF1 (Revaluation 2)		
ERF2 (Revaluation 1 & 3)	ERF65	ERF65
ERF2 (Revaluation 2)		

User will have to consider the Early Retirement Reduction Factors they want to apply and code the relevant table under ERF1 (Revaluation 1 & 3) or ERF1 (Revaluation 2). This depends on the parameter set in the "Revaluation in Deferment".

Note

Alternative ERFs to be used for cash-on-top benefits which can be set on the "Ret Cash" tab

2.5.2 Withdrawal Benefits

If you have a withdrawal decrement, then a loading needs to be applied to reflect the fact that part of the benefit can be taken at age 60 without a reduction. This is done in the fields "Male/Female Barber Adjustment to Main/Special/PenInc3/PenInc4" on the "Financial" tab for "Deferred Revaluation".

The loading is necessary because withdrawal benefits will be assumed to be payable at NRA only. The early retirement decrement only applied to those that stay in service to the early retirement ages.

Please note that the loading will apply to the part of the withdrawal benefit arising from the Slice that has "ERF Tables" set to '1' (for ERF1).

2.6 Method B

In this method there are no early retirement decrements or early retirement reduction factors.

The entire allowance for the Slice of service payable from age 60 is made via the Pension Adjustment Factor on the Tier of that Benefit Slice e.g. entering 1.5 in this field will load the pension amount in that slice by 50%.

Note that if you have withdrawals you will **not** need to make the loading adjustment in the fields "Male/Female Barber Adjustment to Main/Special/PenInc3/PenInc4" on the "Financial" tab for "Deferred Revaluation". These fields will need to be set to 1.

Note

Whatever the factor is in the early retirement reduction factor table at NRA, it will get applied to the pension amount at NRA. This is regardless of the early retirement decrement at NRA.

3 VARPRINTs

It is always a good idea to check the calculations of the benefits for a member by running a VARPRINT.

The VARPRINT will show the benefit amounts, application of early retirement reduction factor tables, loading adjustments, and annuities.

The sections of the VARPRINT that will need consideration here are as follows:

Section	Heading	Description
st0 (s=slice no., t=tier no.)	Slice Structure	Calculation of the benefit amounts arising in each slice.
990	Summary of Slice Processing	Will illustrate the amounts of benefit for each particular purpose. In 991 columns A to D will be shown the amounts of benefit to which ERF2 will be applied.
1100	Early Retirement Pension	Benefit amounts after application of the early retirement reduction factor tables.
2450	Barber Adjustments to PUPs	Application of the loading adjustment to the withdrawal pension amounts. This is the adjustment outlined in Method A.

Annuities are multiplied by the benefit amounts and their values are shown in sections 3000 onwards for all the different types of benefit; retirement, death in service, ill health, leaving service.