EQUINITI

InFocus Document

PPF S143 (Entry) Valuations

Contents

1 Introduction

This document covers the additional functionality available to create a PPF S143 (Entry) Valuation in SuperVal for the Deferreds Module. It also discusses how the existing PPF S179 (Levy) Valuation functionality can be adapted to run a PPF S143 (Entry) Valuation within the Pensioner Module.

SuperVal has the functionality to run a PPF S143 (Entry) valuation in the Deferreds Module only. The user can define the relevant PPF assumptions within SuperVal, which will then override the assumptions set up for ongoing runs. This will allow the user to use the set-up for the ongoing runs to carry out PPF runs, without having to recreate new basis files.

As much of the set up for PPF S143 (Entry) valuation is similar to PPF S179 (Levy) valuation, the user should consider reading these documents in conjunction.

This document has been updated to reflect the assumptions documented in version B8 of the PPF's S143 guidance.

Please note that B8 changes are effective 13 June 2018. Users who wish to use these new yields for S143 valuations between 13 June 2018 and 1 November 2018 should use the Secondary Key (eg a secondary key of S143) and Adjustment Columns on the PPF yields page.

This document is based on V9.25 of SuperVal. Any screenshots from previous versions of SuperVal are not materially different.

The following points are relevant for the general set up of SuperVal.

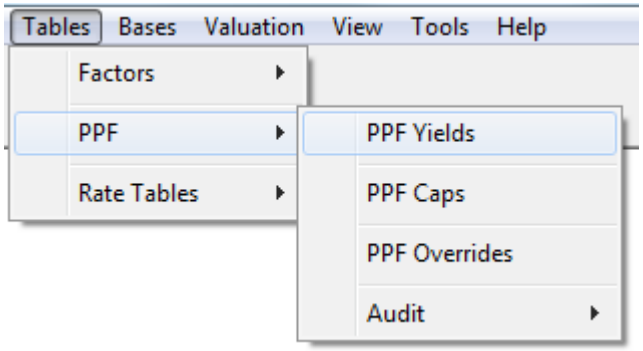
- There are no special member data requirements for PPF valuations.
- When selecting the Scheme Folders, the user should check the 'PPF Calculations Required' box on the Data tab to enable the PPF parameters within the Basis Files.

2 Defining PPF Assumptions and Recording Yields

The user should follow exactly the same set up process as set out in the InFocus document relating to a PPF S179 (Levy) Valuation with the addition of the 'S143 Cap Increase %'. For completeness this is set out below.

Firstly, ensure that the PPF Yields, Caps and Mortality and Spouse's override parameters are up to date and contain the relevant yields and cap data for the valuation date.

This can be done by selecting Tables > PPF > from the main menu.

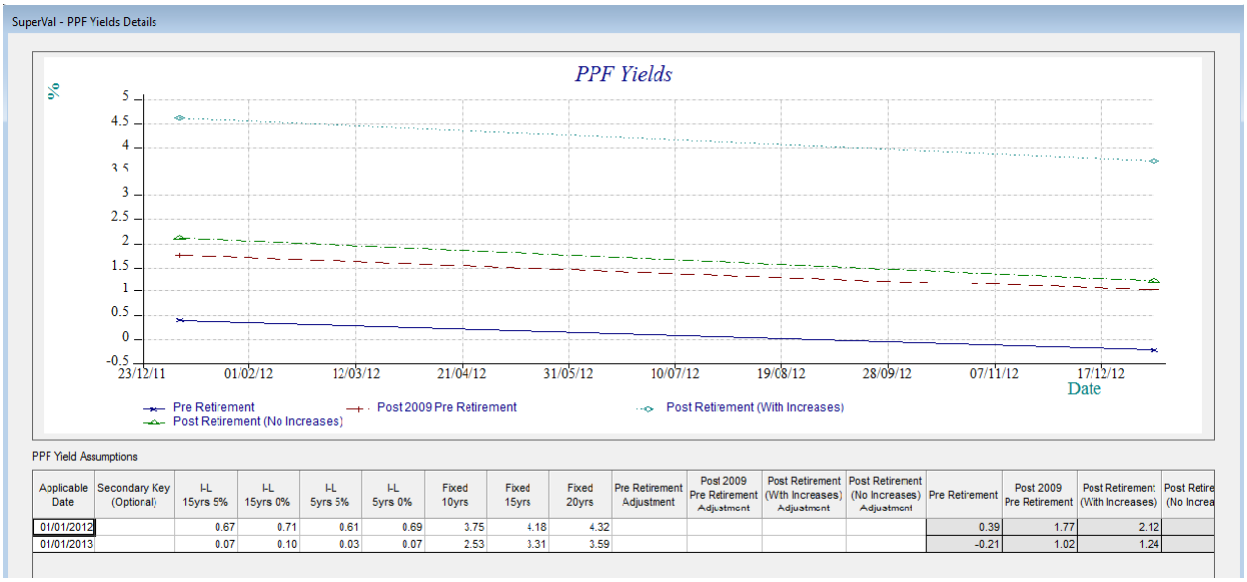


The user will need to define each of the PPF Yields, PPF Caps and PPF Overrides. The user can create multiple copies of the PPF Overrides but only one set of Yields or Caps. These will be saved in the SVPPFFILE.SF file that is stored in the Library Folder of SuperVal.

Each of these screens are discussed below.

2.1 PPF Yields screen

To add or amend data use the 'Add Row(s)' or 'Edit Row' button at the bottom of the page.



Applicable Date	Secondary Key (Optional)	I-L 15yrs 5%	I-L 15yrs 0%	I-L 5yrs 5%	I-L 5yrs 0%	Fixed 10yrs	Fixed 15yrs	Fixed 20yrs	Pre Retirement Adjustment	Post 2009 Pre Retirement Adjustment	Post Retirement (With Increases) Adjustment	Post Retirement (No Increases) Adjustment	Pre Retirement	Post 2009 Pre Retirement	Post Retirement (With Increases)	Post Retire (No Increa
01/01/2012		0.67	0.71	0.61	0.69	3.75	4.18	4.32					0.39	1.77	2.12	
01/01/2013		0.07	0.10	0.03	0.07	2.53	3.31	3.59					-0.21	1.02	1.24	

- SuperVal expects Users to enter in biannual yields.
- These biannual yields are converted to annualised yields
- SuperVal uses the Yield date to establish which relevant assumptions guidance should be used and applies the prescribed method to calculate the assumptions used in the S179 valuation

Additional Functionality

The Secondary Key introduces the ability to have two different sets of yields defined at the same date. The user should attach a Secondary Key to a set of yields by typing in a value in the relevant column, eg, 1, 2, 3. This can be a numeric value or a character string.

When selecting the yields in the Scheme PPF tab, the user will have the option of which set of yields to select. Eg, 01/01/2014 1, 01/01/2014 2, etc.

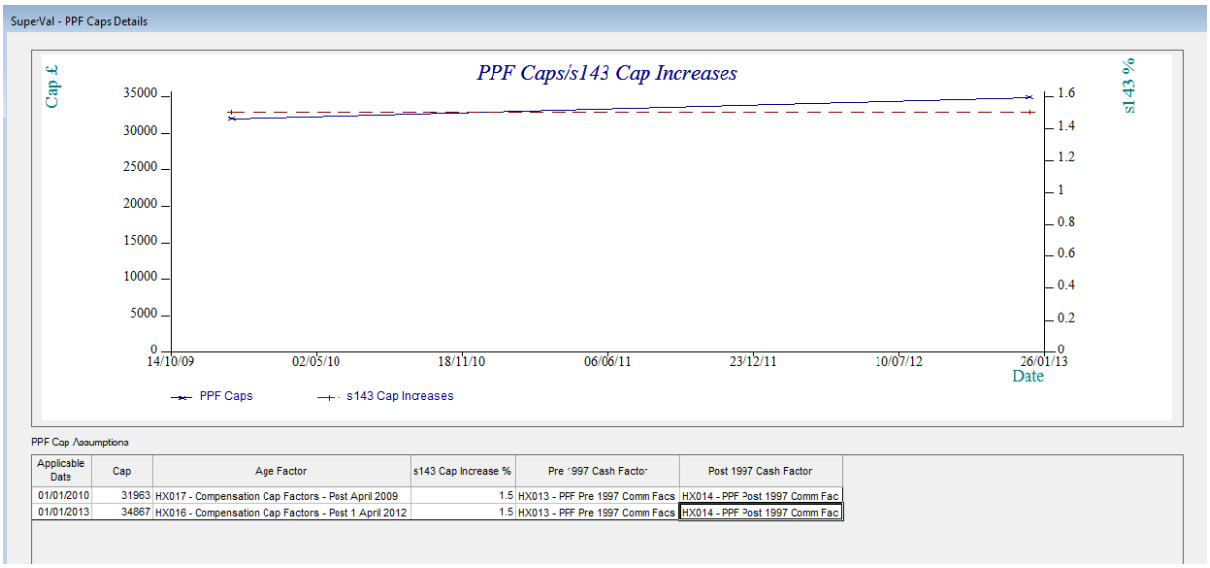
SuperVal also allows the user to specify an adjustment to each of the calculated interest rates for PPF valuations. The adjustment made is additive e.g. if the calculated yield is 3.25% and 0.25 is entered, the revised yield will be 3.50%.

Non-Revaluing Pensions

SuperVal makes no allowance for the non-revaluing pre-retirement yield as this only applies if all benefits for all members are non-revaluing. If the user requires this functionality, then the revaluing pre-retirement yield can be manipulated.

2.2 PPF Cap screen

To add or amend data use the 'Add Row' or 'Edit Row' button at the bottom of the page.



Compensation Cap

Enter the amount of the Compensation Cap applicable at age 65 as at the Applicable Date. Please note that SuperVal will apply 90% to the results for members below Normal Retirement Age after comparing with the Compensation Cap. Enter the full amount here (e.g. £39,006.18 as at 1 April 2018 at age 65).

Age Factor

The Compensation Cap entered is that applicable to benefits payable at age 65. For benefits payable at ages other than 65, the Compensation Cap needs to be multiplied by either a reduction or increase factor for ages below or above age 65 respectively. The PPF have prescribed these factors and they are published on their website. Double click to select the table that contains the relevant reduction factor table to apply. The table will have been previously entered into the Decrement File.

S143 Cap Increase %

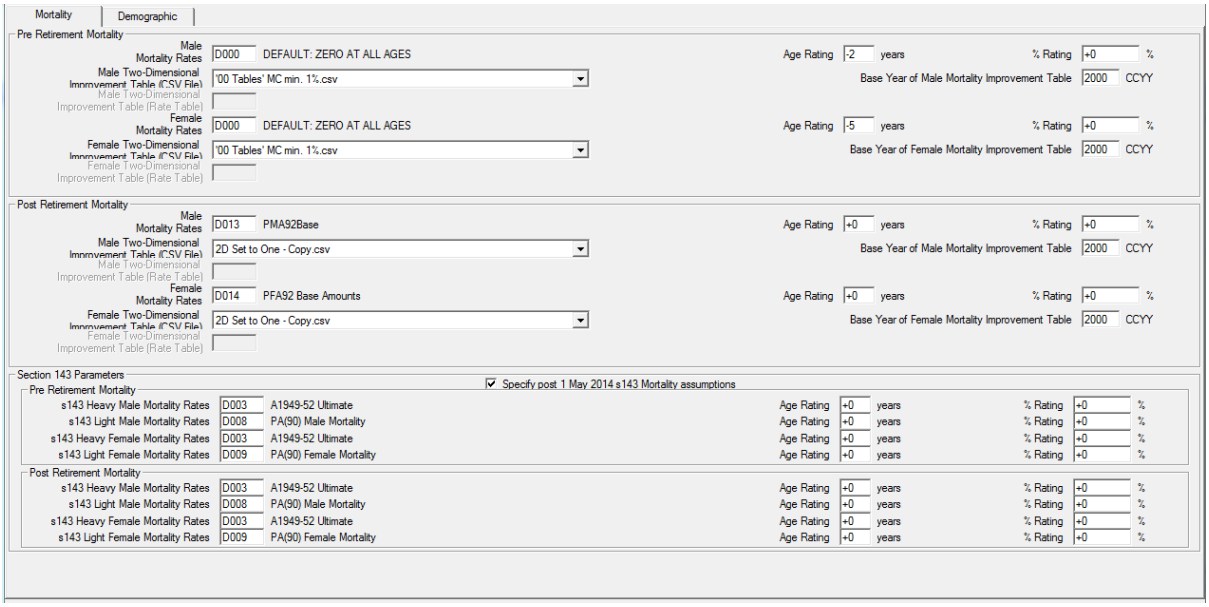
Enter the rate at which the Compensation Cap will increase in excess of inflation in the future for non-pensioners as set out in the guidance issued by the PPF. This currently is 1.5% (Version H6). Enter the rate of increase in excess of inflation here.

Pre 1997 and Post 1997 Cash Factor (for retirement Cash on Top benefits only)

The PPF has prescribed factors for converting Pre 1997 and Post 1997 lump sums into Pensions. The published rates need to be converted into commutation factors to be input into SuperVal. The factors entered will be used to convert any retirement Cash on Top benefit to pension equivalents. This amount plus the member's retirement pension will then be compared with the Compensation Cap and the result will then be multiplied by 90% if below Normal Pensionable Age.

2.3 Override screen

Firstly, select the Parameter File containing the Overrides you wish to edit. Different Parameter Files can be used to contain different sets of Overrides. To enter a new set of Overrides use the Default Button. This will open the PPF Overrides Details Screens.

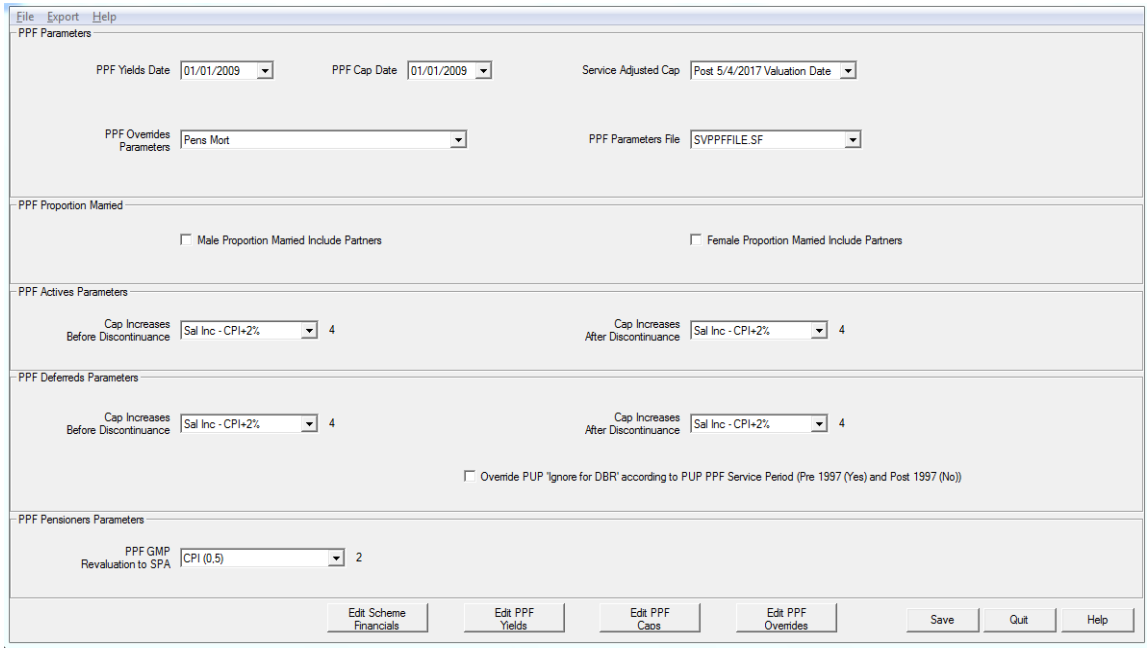


For S143 assumptions, we have a tick box so that the Mortality for the different bands can be specified. Specify the relevant mortality and mortality improvement tables (Pre and Post retirement), the proportion married for spouses and partners and the age difference here. The assumptions will be chosen from a list of all of those available in the Decrement File. Next to each table the description of the table is shown. The user should use the '% Rating' field to specify a scalar adjustment to the table entered. For a 90% adjustment enter -10. For all other valuations the user should ensure this is set to 100% by using an adjustment of 0.

3 Setting up Scheme PPF information

Scheme level information is added by selecting Bases > Scheme > PPF from the main menu.

Within this screen the user can choose the yields, caps and override parameters to use in this Scheme Folder.



The Yields and Compensation Cap to be used will be taken from the information entered in the PPF parameters referenced by the date shown here. Where two sets of yields are defined for the same date the user should use the Secondary Key to identify which yields to use.

Select the PPF Override Parameter Set that contains the appropriate spouse's and mortality overrides.

Proportion Married

Use the check box to determine whether to use the assumptions entered in the Overrides for Partner Proportion Married or Spouse's Proportion Married. Note that the proportion married will apply at the PPF NRA. Allowance for the survivorship of the spouse will be made thereafter.

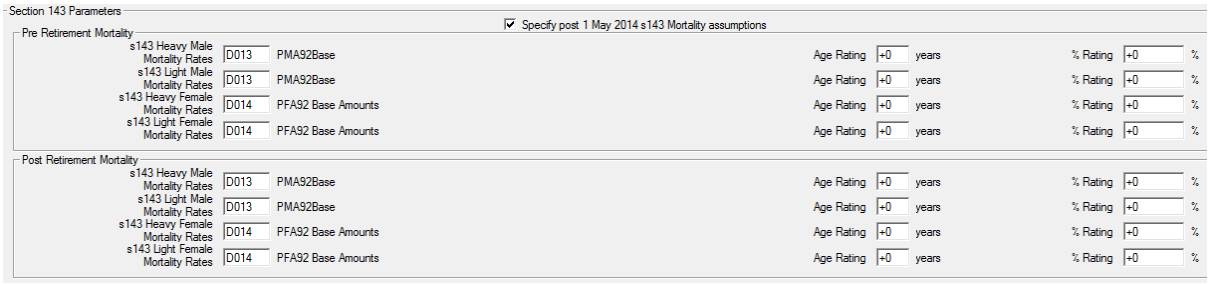
Cap Increases Before/After Discontinuance (Deferreds)

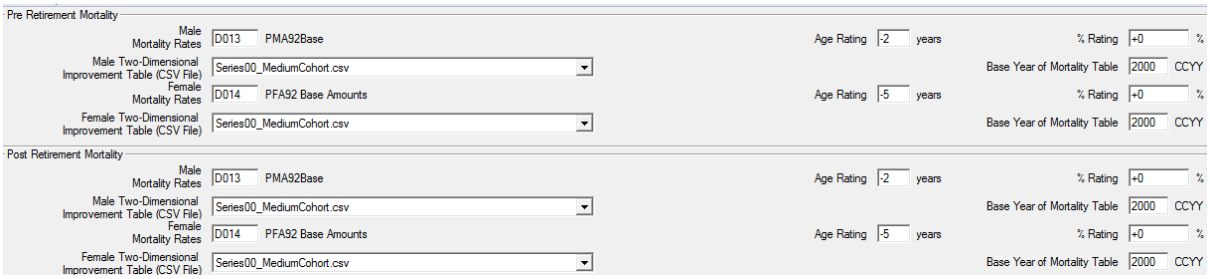
These fields are not used for PPF S143 (Entry) valuations.

4 PPF Mortality Adjustments - Member's Age Ratings

SuperVal will automatically take up the relevant mortality table according to each individual's total pension size (as set out in guidance note B6 to B8). Where included, a Cash on Top lump sum will be converted to pension and included in the comparison. The mortality table to apply is as follows (and is applied to both the base mortality table and the mortality improvement table in SuperVal):

Pension Size % of Compensation cap at age 65			**Mortality Table**	
Pre 1 May 2014	Post 1 May 2014			
Males/Females	Males	Females	First Life	Contingent Life
<25%	< 10%	< 5%	Heavy	Heavy
25% - 50%	10% - 50%	5% - 20%	Medium	Medium
> 50%	> 50%	> 20%	Light	Light





5 Setting up Deferred basis files for PPF Runs

For a PPF S143 (Entry) valuation, all non-pensioners will need to be valued in the Deferreds module in SuperVal. (There is no functionality to run a PPF S143 (Entry) valuations in the Actives module.)

The set-up for basis files is identical to that used for S179 valuations.

Select a basis file using Bases > Group > Deferreds.

5.1 PPF/CAP tab

Select the Scheme PPF information by clicking on the "Edit Scheme PPF" on the PPF/CAP tab.

On this screen the following information can be added:

PPF Male and Female Retirement Ages

You can specify up to four Normal Retirement Ages for males and females separately. Please note that these will also be used in any PPF Section 179 (Levy) valuation run in the same scheme folders.

Cap Offset %

If a deferred member, who has not yet reached PPF Normal Retirement Age, is already receiving a retirement pension from this or another scheme, then the Compensation Cap at retirement can be reduced to reflect this. Select the data item containing the percentage of the Compensation Cap already used. SuperVal will then take account of this when determining any restriction in benefits due to the Compensation Cap at future retirement ages.

Pre 97 and Post 97 Discontinuance pension increases

These fields are not used for PPF S143 (Entry) valuations. They are only used in the Non PPF Capped Runs however the Relevance Rules will require the user to enter a relevant parameter for this variable before proceeding.

5.2 PPF inputs on PUPs Tab

PPF NRA (Levy Valuations)

Select the PPF Normal Retirement Age for each PUP from the list previously defined on the PPF/CAP tab.

PPF Service Period

Specify whether a particular slice of benefit is in respect of 'Pre 97', '97 to 09' or 'Post 09' service and it will be valued accordingly for PPF purposes.

5.3 Other Issues

GMP Calculations

The 'Treat GMP as Zero' checkbox will default to being ticked and all GMP benefits are ignored when running a PPF S143 (Entry) valuation.

Non-standard PUPs and Independent PUPs

IndPUPs are included in PPF runs. For members below NRA the benefit will be adjusted by 90%. Independent PUPs will not be restricted by the Compensation Cap.

NSPUPs remain excluded.

Which adjustment factors are applied?

The PUP adjustment factors on the PUPs screen are included. These are applied *before* the benefit is compared with the Compensation Cap

Cash on Top

Where Cash on Top benefits are provided all options except for '% of pension' are valued. These will be converted to an equivalent pension amount using the Pre 1997 and Post 1997 Cash Factors entered on the PPF Caps tab in the PPF Parameters. These will then be added to the Total Accrued Pension when applying the Compensation Cap.

SuperVal will split the liability for Cash on Top into 'Pre 97', '97 to 09' and 'Post 09'.

SuperVal will ignore any retirement cash provided through commutation of pension.

6 Setting up Pensioners basis files for PPF runs

There is no specific functionality to run a PPF S143 (Entry) valuation in the Pensioners module. However, there is no difference in the treatment of Pensioners between a PPF S143 (Entry) valuation and a PPF S179 (Levy) valuation except for the mortality assumptions used for the different bands of pension. As a result, a pensioners PPF S143 (Entry) valuation can be run through the PPF S179 (Levy) valuation functionality after setting up new sets of PPF Overrides.

In order to reflect the different mortality assumptions, depending on the size of the member's pension, the pensioners valuation data should be split into different categories. The categories within the data should reflect the age rating that applies to the mortality assumption.

More information on how to set up a PPF S179 (Levy) Valuation is contained in the relevant Infocus document.

7 Expenses

SuperVal does not make any allowance for expenses in the PPF S143 (Entry) Valuations.

8 Application of Capping and Reduction Factors

8.1 Retirement benefits

For S143 (Entry) valuations, SuperVal will reduce retirement benefits using the same methodology as is used for a S179 (Levy) valuations, except that the Compensation Cap at the relevant Normal Retirement Age will be increased in line with 'S143 Cap Increase %' assumption between Valuation Date and Normal Retirement Age. The following examples provide more details.

Example 1 - Member has just one NRA for all benefits and he has not yet reached this

Relevant Data	
Valuation Date	01/01/2013
Member's Age at Valuation Date	60
Deferred Pension revalued to Valuation Date	£20,000 pa
Normal Retirement Age for all benefits	65
Compensation Cap at age 65 at Valuation Date	£34,050 pa (Cap at 1 April 2012)

The Projected Compensation Cap at age 65 is calculated as

$$= 34{,}050 \times 1.015^5 = £36{,}682$$

Projected Benefit at age 65 is

$$= 90\% \times \min [20{,}000, 36{,}682] = £18{,}000 \text{ pa}$$

The member won't be subject to the Compensation Cap at retirement and only the 90% reduction factor applied.

Note, strictly speaking, when calculating the projected Compensation Cap in relation to any Post 09 benefits, an adjustment should be made based on the geometric difference between the assumed yields in deferment for Pre 09 & Post 09 benefits. Version 9.25 of SuperVal does not currently make this adjustment.

Example 2 - Member has just one NRA for all benefits and he has not yet reached this

The member's revalued pension at Valuation Date is above the Compensation Cap.

Relevant Data	
Valuation Date	01/01/2013
Member's Age at Valuation Date	60
Deferred Pension revalued to Valuation Date	£40,000 pa
Normal Retirement Age for all benefits	65
Compensation Cap at age 65 at Valuation Date	£34,050 pa (Cap at 1 April 2012)

The Projected Compensation Cap at age 65 is calculated as

$= 34{,}050 \times 1.015^5 = £36{,}682$

Projected Benefit at age 65 is

= 90% x min [40,000, 36,682] = £33,014 pa

The member's benefits will be subject to the Compensation Cap at retirement.

Example 3 - Member has benefits payable from two different NRAs and he has not yet reached either

Relevant Data	
Valuation Date	01/01/2013
Member's Age at Valuation Date	55
Deferred Pension revalued to Valuation Date	£10,000 pa – Pen1 £15,000 pa – Pen2
Normal Retirement Age for all benefits	60 – NRA 1 65 – NRA 2
Compensation Cap at age 60 at Valuation Date	£29,867 pa
Compensation Cap at age 65 at Valuation Date	£34,050 pa (Cap at 1 April 2012)

The Projected Compensation Cap at age 60 is calculated as

$= 29,867 \times 1.015^5 = £32,175$

The Projected Compensation Cap at age 65 is calculated as

$= 34,050 \times 1.015^{10} = £39,516$

Projected NRA 1 Benefit at age 60

= 90% x min [10,000, 32,175] = £9,000 pa

Comp Cap % used at NRA 1

= 10,000/32,175 = 31.08%

As this is less than 100% the member's benefit is not capped at age 60.

Projected NRA 2 benefit at age 65

= 90% x min [15,000, 39,516] = £13,500 pa

Comp Cap % used at NRA 2

= 31.08% + 15,000/39,516 = 69.04%

As this is still less than 100%, the member's benefit is not capped at age 65.

The NRA 1 benefit continues to be paid from age 65. (It may have had increases in payment between 60 and 65). In addition, NPA 2 benefit of £13,500 is payable from age 65.

Example 4 - Member has benefits payable from two different NRAs and he has not yet reached either

Relevant Data	
Valuation Date	01/01/2013
Member's Age at Valuation Date	55
Deferred Pension revalued to Valuation Date	£50,000 pa – Pen1 £15,000 pa – Pen2
Normal Retirement Age for all benefits	60 – NRA 1 65 – NRA 2
Compensation Cap at age 60 at Valuation Date	£29,867 pa
Compensation Cap at age 65 at Valuation Date	£34,050 pa (Cap at 1 April 2012)

The Projected Compensation Cap at age 60 is calculated as

$= 29,867 \times 1.015^5 = £32,175$

Projected Benefit at age 60 = 90% x min [50,000, 32,175] = £28,958 pa

In this case SuperVal will only value the Capped NRA 60 benefits and not value any of the NRA 65 benefits (post-retirement).

Strictly speaking, if there is a split of pre/post 97 pension (either in relation to the NPA60, NPA65 or both NPAs), there should be a reallocation of pension at 65 (see PPF document "Additional information for carrying out a Section 143 valuation"). SuperVal currently does not carry out this reallocation of benefits, (and hence the proportion of Pre/Post 97 pension may need to be adjusted outside of SuperVal to amend benefits from the higher NPA).

Example 5 - Member has benefits payable from two different NRAs and he has not yet reached either

Relevant Data	
Valuation Date	01/01/2013
Member's Age at Valuation Date	55
Deferred Pension revalued to Valuation Date	£25,000 pa – Pen1 £25,000 pa – Pen2
Normal Retirement Age for all benefits	60 – NRA 1 65 – NRA 2
Compensation Cap at age 60 at Valuation Date	£29,867 pa
Compensation Cap at age 65 at Valuation Date	£34,050 pa (Cap at 1 April 2012)

The Projected Compensation Cap at age 60 is calculated as

$= 29,867 \times 1.015^5 = £32,175$

The Projected Compensation Cap at age 65 is calculated as

$= 34,050 \times 1.015^{10} = £39,516$

Projected NRA 1 Benefit at age 60

= 90% x min [25,000, 32,175] = £22,500 pa

Comp Cap % used at NRA 1 = 25,000/32,175 = 77.70%

As this is less than 100%, the member's benefit is not Capped at age 60.

A pension of £22,500 will be paid between ages 60 and 65 (with any relevant increases due).

Projected NRA 2 benefit at age 65

= 90% x min [25,000, 39,516] = £22,500 pa

Comp Cap % used at NRA 2 = 77.70% + 25,000/39,516 = 140.97%

As this is greater than 100%, the member's benefits will be capped at age 65 and a reduction factor will be applied to the benefit. The total benefits will be reduced by a factor of 1/1.4097 = 70.94% from age 65.

Note, SuperVal will reduce both the NRA 60 & NRA 65 benefits by a factor of 0.7094 from age 65 onwards. Strictly speaking, if there is a split of Pre/Post 97 pension (either in related to the NRA 60, NRA 65 or both NPAs), there should be a reallocation of pension at 65 (see PPF document "Additional information for carrying out a Section 143 valuation"). SuperVal currently does not carry out this reallocation of benefits (and hence the proportion of Pre/Post 97 pension may need to be adjusted outside of SuperVal to amend benefits from the higher NPA).

Example 6 - Members over NRA at the valuation date

If a member has any benefits with an NRA lower than their current age, then SuperVal will value the benefit from their current age ignoring the 90% adjustment.

For example, a member aged 63 has 2 benefits, one with NRA 60, the other with NRA 65.

The NRA60 benefit will be valued from age 63, ignoring the cap and without adjustment (and no adjustment for late retirement).

The NRA 65 benefit will be valued from age 65, with a 90% adjustment. Note, when determining whether the benefit will be Capped at age 65, the NRA 60 benefit is ignored.

Death-in-deferment Benefits:

SuperVal will cap death-in-deferment benefits in exactly the same way as it does for S179 valuations. Details are set out below.

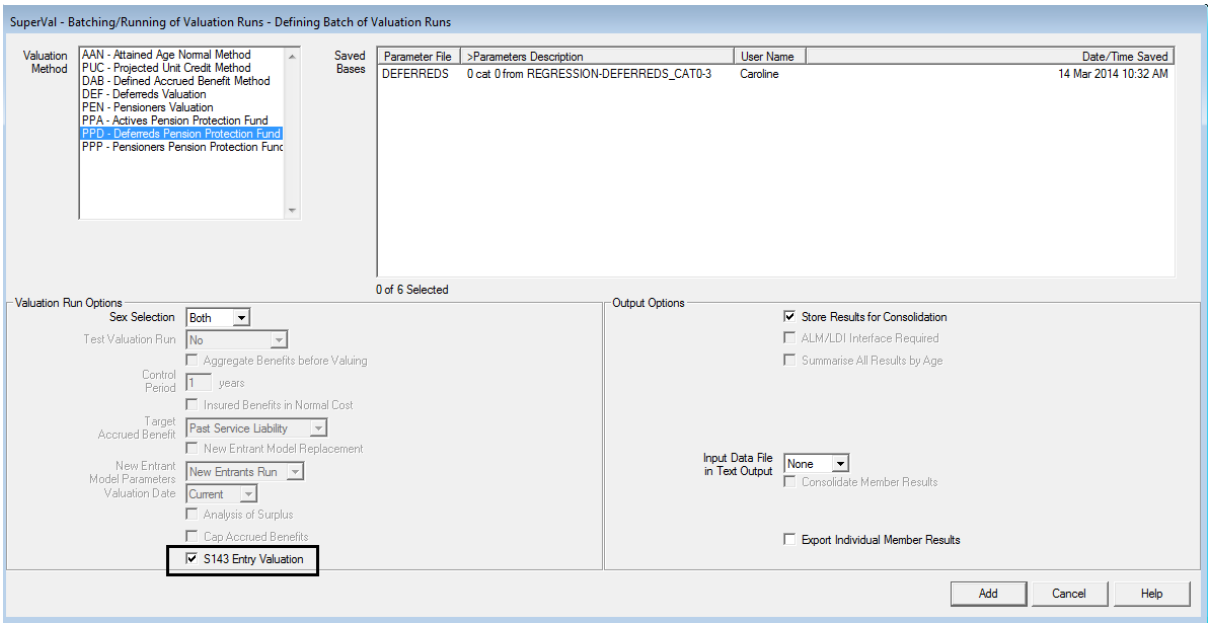
Death in Deferment Lump Sums are ignored i.e. not included in the liability.

A comparison with the Compensation Cap will only be made for the spouse's benefit where this is defined as percentage of the member's pension. The percentage override will be set to 50%.

The formula for the Reduction Factor uses the same methodology as for Retirement benefits but uses the Compensation Cap at VDATE for the member's age last adjusted for the relevant Death in Deferment percentage.

9 Running a PPF S143 valuation:

When setting up a batch run for a S143 valuation, follow the same methodology as for a PPF S179 (Levy) valuation i.e. select the Deferred Pension Protection Fund as the valuation method. Then select the Scheme Basis Files that you wish to run and whether you wish to include Males and Females. Then ensure the S143 Entry Valuation check box within the Batch Parameters tab is ticked.



Click ‘Add’ to add the Batch run and then select either a ‘Unattended Run’ or an (attended) ‘Run’.

10 Changes to PPF assumptions

SuperVal V9.25 allows fully for the changes in the financial and demographic assumptions for PPF S179 (Levy) valuations ie those specified in guidance notes A4, A5, A6, A7, A8 and A9.

SuperVal assumes that all pensions defined are revaluing. As noted earlier, the yields can be manipulated to allow for non-revaluing pensions if required. However, for pensioners, you are able to define a PPF Revaluation in Deferment for each pension defined.

Note, the relevant yield data needs to be input at Valuation Date and SuperVal will use the different formulae to determine the correct yields.

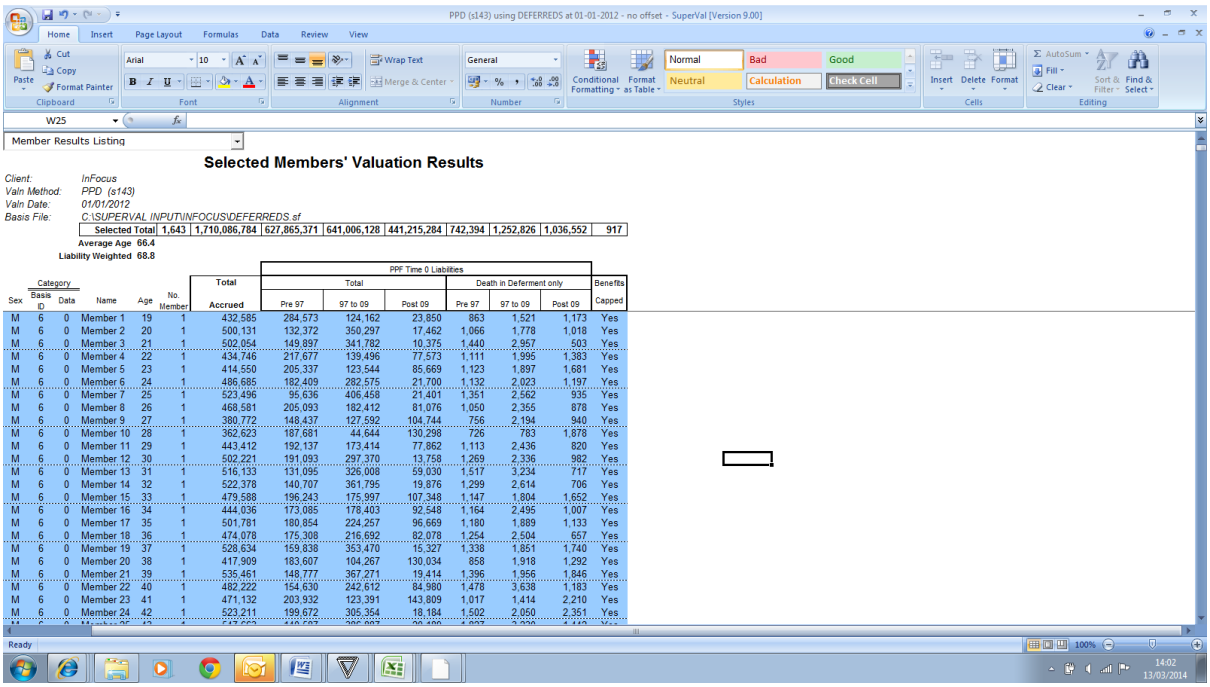
11 Output from PPF S143 runs

11.1 Excel results output

Excel output is available for the deferreds module. The output filename is:

Deferreds PPD (S143) using <basis filename> at <vdate>.xls

The results will appear as follows:



Selected Members' Valuation Results

Client: InFocus
Valn Method: PPD (s143)
Valn Date: 01/01/2012
Basis File: C:\SUPERVAL INPUT\INFOCUS\DEFERREDS.sf

Selected Total	1,643	1,710,086,784	627,865,371	641,006,128	441,215,284	742,394	1,252,826	1,036,552	917

Average Age 66.4
Liability Weighted 68.8

Sex	Category Basis ID	Category Data	Name	Age	No. Member	Total Accrued	PPF Time 0 Liabilities: Total Pre 97	Total 97 to 09	Total Post 09	Death in Deferment only Pre 97	Death in Deferment only 97 to 09	Death in Deferment only Post 09	Benefits Capped
M	6	0	Member 1	19	1	432,585	284,573	124,162	23,850	863	1,521	1,173	Yes
M	6	0	Member 2	20	1	500,131	132,372	350,297	17,462	1,066	1,778	1,018	Yes
M	6	0	Member 3	21	1	502,054	149,897	341,782	10,375	1,440	2,957	503	Yes
M	6	0	Member 4	22	1	434,746	217,677	139,496	77,573	1,111	1,995	1,383	Yes
M	6	0	Member 5	23	1	414,550	205,337	123,544	85,669	1,123	1,897	1,681	Yes
M	6	0	Member 6	24	1	486,685	182,409	282,575	21,700	1,132	2,023	1,197	Yes
M	6	0	Member 7	25	1	523,496	95,636	406,458	21,401	1,351	2,562	935	Yes
M	6	0	Member 8	26	1	468,581	205,093	182,412	81,076	1,050	2,355	878	Yes
M	6	0	Member 9	27	1	380,772	148,437	127,592	104,744	756	2,194	940	Yes
M	6	0	Member 10	28	1	362,623	187,681	44,644	130,298	726	783	1,878	Yes
M	6	0	Member 11	29	1	443,412	192,137	173,414	77,862	1,113	2,436	820	Yes
M	6	0	Member 12	30	1	502,221	191,093	297,370	13,758	1,269	2,336	982	Yes
M	6	0	Member 13	31	1	516,133	131,095	326,008	59,030	1,517	3,234	717	Yes
M	6	0	Member 14	32	1	522,378	140,707	361,795	19,876	1,299	2,614	706	Yes
M	6	0	Member 15	33	1	479,588	196,243	175,997	107,348	1,147	1,804	1,652	Yes
M	6	0	Member 16	34	1	444,036	173,085	178,403	92,548	1,164	2,495	1,007	Yes
M	6	0	Member 17	35	1	501,781	180,854	224,257	96,669	1,180	1,889	1,133	Yes
M	6	0	Member 18	36	1	474,078	175,308	216,692	82,078	1,254	2,504	657	Yes
M	6	0	Member 19	37	1	528,634	159,838	353,470	15,327	1,338	1,851	1,740	Yes
M	6	0	Member 20	38	1	417,909	183,607	104,267	130,034	858	1,918	1,292	Yes
M	6	0	Member 21	39	1	535,461	148,777	367,271	19,414	1,396	1,956	1,846	Yes
M	6	0	Member 22	40	1	482,222	154,630	242,612	84,980	1,478	3,638	1,183	Yes
M	6	0	Member 23	41	1	471,132	203,932	123,391	143,809	1,017	1,414	2,210	Yes
M	6	0	Member 24	42	1	523,211	199,672	305,354	18,184	1,502	2,050	2,351	Yes

Note that the liabilities are also shown separately for death in deferment benefits. Any member who is affected by the Compensation Cap has a "Yes" in the column "Benefit Capped".

11.2 Varprint / Accprint

Please note that the single-life test files VARPRINT and ACCPRINT are not available for PPF runs.

11.3 Consolidation

Consolidation is carried out as for other funding methods. Under Valuation Methods select 'PP3 - Pension Protection Fund Entry'.

The user can define the name of each consolidation run. Each run will result in an excel file and a database file.