

## SDS ProVal

- When I start ProVal I get an error message about Add-in tools.

Add-in tools are usually installed with the Excel application, but it is possible to install Excel without them. Close ProVal and open a blank Excel spreadsheet. From the Excel menu, select the *Tools* menu and then select the *Add-Ins...* option. Tick the *Analysis Toolpak* and *Analysis Toolpak-VBA* boxes and click Ok. Follow on-screen instructions thereafter. You may be asked to insert the Microsoft Office disk. Close Excel and reboot ProVal.

- When I start ProVal I get an error message about opening the *HCData* file **OR** SDS ProVal can't find the *HCdata* file

This is a problem with the installation of ProVal. Both messages have a nearly similar import but the fault may be of 3 kinds.

1. The *HCData* file should be in the *SDS ProVal* folder. Go into *Windows Explore* and look for this folder. Look for the file called *HCData (.xls)*. When ProVal boots up it will look for this file in this folder and if it cannot be found it will try to find it in the *C:\SDS ProVal* folder. When that fails it will return a message saying that it cannot find the file in *C:\SDS ProVal*. If the file is in the *SDS ProVal* folder, then the problem is likely to be caused by an incorrect drive mapping: see below. The *SDS ProVal* folder name must be spelt absolutely as shown here: spaces and letter case are important.

The SDS ProVal folder must be in the root of a shared folder where the shared folder has been assigned a drive mapping as agreed with SDS at the time of the supply. So if the agreed drive mapping letter is H: and the *SDS ProVal* folder is in a share called *\\.....Development* then H: must point to the *Development* folder. The path to *SDS ProVal* will then be *H:\SDS ProVal*. Note that the H: drive does not point to *SDS ProVal*. Click on the *About ProVal* button in SDS ProVal Control Panel to find out the agreed drive letter.

2. The user's PC may not have permission to access the *SDS ProVal* folder. Users must be given full rights to this folder. Ask an IT representative to check this.

- My ProVal Control Panel opens in *Read-Only* mode

ProVal is not installed correctly. When you boot ProVal it is essential that the boot file is personal to the user. Typically the shortcut on the desktop points to *ProVal.xls*. If this file is shared by others and someone has already opened it, subsequent users will only be allowed to access ProVal on a read-only basis. This prevents each user saving their personal defaults. Each user therefore must have exclusive access to *ProVal.xls* which can be stored anywhere on the network. Under no circumstances must the *ProVal.xls* boot file be renamed, but if using a shortcut to the file, the shortcut can be named as suits.

- How to interpret the Long Term Cashflow results

There is no definitive way to interpret an appraisal. Each user will have a view as to what constitutes viability and which measures are appropriate to consider. In general there are 3 key financial results which are required of an appraisal.

1. Does the value of the scheme exceed the cost?
  2. Can the income repay its loan within an acceptable period?
  3. Does the scheme have a positive net present value over the long term?
1. In the statement of Total Scheme Cost the ratio of Cost to Value will be shown, assuming the user has entered market values of each dwelling type in Section A. If the total scheme cost exceeds the value then this is good. However, there are circumstances where this ratio does exceed 100% for good reasons. The important point is to understand the reasons why an unusually high (or low) result arises.
  2. When the loan repayment method is set to *Interest Only*, the period when the net income repays interest and the initial capital is reported. This method assumes that all net income is used to repay the loan as quickly as possible. So if the net income is lower than the interest, the loan balance will rise. Conversely, if net income is greater than the interest, the loan balance will reduce. This is like an overdraft and is the method recommended by SDS.

Alternatively, you can force the Long Term Cashflow to repay the loan over a fixed term by equal monthly amounts (the *Annuity* method) - rather like a repayment mortgage. In this case the loan will always be repaid by the term specified, but net income may not be sufficient to meet the required annuity. It is then necessary to consider the point at which net income exceeds the annuity (the breakeven year) and the cumulative breakeven year is the period that all earlier deficits arising up to the breakeven have been repaid from surpluses arising after the breakeven.

When a loan cannot be repaid within an acceptable period, or when using the Annuity loan repayment method the cumulative breakeven is too late, the amount of additional grant required can be assessed by using the Sensitivity page, where a specific scenario for this purpose will be found.

3. Net Present Value (NPV) is the value of a future stream of income/expenditure expressed at today's (or present) value. A discount rate (e.g. 6% p.a.) is used to calculate the present value for each period which is usually equal to the long term interest rate.

The NPV of the net rent is a measure of all future net rent (excl. interest and/or loan repayments).

The scheme loan represents the initial scheme costs (i.e. total scheme cost less grant and any initial sales income). So when the NPV of the net rent exceeds the loan (i.e.  $NPV\ Net\ Rent - Loan > 0$ ) the scheme can be said to have a net worth. The initial scheme cost (or loan) does not have to be discounted because it is already at 'present value'. It is this complete calculation which is normally meant by the "NPV result" and is one of the key viability tests for any scheme.

When staircasing shared ownership units or selling properties in the long term in a mixed tenure appraisal, the *NPV Calculation Option* should be changed to include the NPV of the future receipts, i.e. *NPV Net Rent + Cap. Value – Loan*.

For additional information about the results in the ProVal Long Term Cashflow, refer to the user manual.

- Staircasing in Version 9.08 of the Private Finance module (See next question for Version 9.09)

When you are using the PF module, because subsidy can be defined much more loosely we cannot be sure how much of the grant is attributable to the shared ownership units. It is also possible that the subsidy is not from the HC and therefore the treatment of repaying it may vary.

Therefore the user must specify what proportion of the receipts arising from staircasing sales should be set aside. This is done in the Shared Equity Report at Section F. The example below shows what to do.

**F** Staircasing

On staircasing, all allowances (except Service Costs & Major Repairs) reduce pro rata to the Equity Remaining  
Staircasing events are assumed to take place at the end of the year. Inflation is applied from Year 2.

Total Value of Shared Equity Units	6,000,000		Total Staircasing Receipts Arising	7,280,955	
Total Shared Equity Sold at Outset	3,000,000	50%	Adjust S/csg Receipts in Long Term Cashflow, y/m?	<input type="text" value="y"/>	
Total Unsold Equity at Start of Year 1	3,000,000	50%	Reduce Receipts to (%)	<input type="text" value="92.00%"/>	Long Term Cashflow shows adjusted receipts
Last Year of Staircasing	20		Total Receipts	7,280,955	
Unsold Equity at start Year 21	0	0%	Receipts in LTC	6,698,479	582,476 Unused Receipts

Year	1	2	3	4	5	6	7	8
Shared Unsold Equity	3,000,000	3,225,000	3,466,875	3,726,891	4,006,407	4,037,707	4,051,167	4,043,932
Shared Unsold Equity %	50%	50%	50%	50%	50%	47%	44%	41%
Staircasing %					3.13%	3.13%	3.13%	3.13%
Year End Receipt	0	0	0	0	250,400	269,180	289,369	311,072

In this example the remaining 50% unsold equity has been staircased over a period 5 to 20. Imagine that the grant attributable to these LCHO units is £585,000 so this needs to be set aside. You can see that the **Total Staircasing Receipts Arising** is reported as **7,280,955**. Therefore from this total the proportion to set aside is  $585,000 / 7,280,955 = 8.03\%$ . This means that we need to **Reduce Receipts to (%) 92%**. The precise percentage is not overly critical in terms of the appraisal results. You can now see that there are **582,476** unused receipts and the long term cashflow will show the reduced receipts (**6,698,479**) as **Adj. Staircasing Receipts**.

This facility is useful also when dealing with grant which must be inflated before set aside (this sometimes happens with LA enabling grants) and when sharing receipts with the private sector (increasingly common).

Finally remember that whether using the LCHO or PF module, if you are including staircasing receipts, remember to change the NPV Calculation Option at the long term cashflow to **Net Rent + Cap. Receipts - Loan**. This will ensure that the capital receipts are included.

- Staircasing in Version 9.09 of the Private Finance module

When you are using Version 9.09 of the PF module, subsidy can be defined much more precisely and setting aside SHG from staircasing receipts is automatic.

Grant can be defined using the Product Type table as before, but this can now be Per Unit or Per Person. If using this table it is no longer necessary to set the first line of Section C to "y"; the grant will automatically be entered into the appraisal.

To choose between grant per unit and grant per person, use the drop-down box as shown below.

**C Development Subsidy**

Received during development period		Total	Average per Res' Unit	Average per Person	% TSC as Section F	Sources of Subsidy	
As Defined by Product Type Table		372,000	16,909	5,391		HC	372,000
Input by %	% Acq. Cost	0				Other	LA
Input by Sum	Per Res. Unit					Other	RCGF
Other Sum	Description					Other	Total Other
<b>Total</b>		372,000	16,909	5,391	10.72%	<b>TOTAL</b>	0

Previous HC Regional Allocation	
Social Rent	52,000
Intermediate Rent	0
Homebuy (averaged)	18,600

Confirm Grant to Set Aside When Staircasing	
Expected SHG to be Set Aside	315,000
Or, Enter Revised SHG to Set Aside	<input type="text"/>

Inputs in the product table must be consistent, i.e. define grant for all product types either *Per Unit*, or *Per Person*.

When using this table for units which are either *NB Homebuy* or *KW NB H'buy*, the total grant attributable to those units alone will be shown as the *Expected SHG to be Set Aside*. In the above example this is shown as £315,000. If the total grant is not correct (as will be the case when an alternative grant input method is adopted, or when additional grant is entered) then the user must *Enter Revised SHG to Set Aside* in the cell below. This input should be equal to the total grant attributable to the LCHO units only.

When entering staircasing in the Shared Equity Report, grant set aside will now be handled automatically. However, if circumstances require that a manual calculation of the receipts to set aside is required (e.g. when sharing receipts with a developer) this option is still available.

Go to Section F of the Shared Equity Report.

**F Staircasing**

On staircasing, all allowances (except Service Costs & Major Repairs) reduce pro rata to the Equity Remaining  
 Staircasing events are assumed to take place at the end of the year. Inflation is applied from Year 2.

			<b>Confirm Set Aside for SHG in Long Term Cashflow (LTC)</b>		
Total Value of Shared Equity Units	4,500,000		Grant Total Identified to Set Aside	315,000	
Total Shared Equity Sold at Outset	375,003	8%	Receipts in LTC will be reduced for Set Aside to	93.31%	
Total Unsold Equity at Start of Year 1	4,124,997	92%	<b>Manually Adjust S/csg Receipts in LTC, y/n?</b>	<input type="text"/>	
Last Year of Staircasing	9		Total Receipts 4,709,543	Ignore First S/Csg Event for SHG Set Aside, y/n?	<input type="text"/>
Unsold Equity at start Year 10	0	0%	Receipts in LTC 4,394,543	315,000 Unused Receipts (Set Aside)	

Year	1	2	3	4	5	6	7	8	9
Shared Unsold Equity	4,124,997	4,228,122	4,333,825	4,442,170	4,553,225	2,130,612	2,183,877	1,439,019	655,553
Shared Unsold Equity %	92%	92%	92%	92%	92%	42%	42%	27%	12%
<b>Staircasing %</b>					50.00%		15.00%	15.00%	12.00%
Year End Receipt	0	0	0	0	2,474,579	0	779,956	799,455	655,553
Shared Equity Remaining	4,124,997	4,228,122	4,333,825	4,442,170	2,078,646	2,130,612	1,403,921	639,564	0
Equity % Remaining	92%	92%	92%	92%	42%	42%	27%	12%	0%

Look at the top right corner of this section.

The grant total to be set aside is shown (£315,000) and below is the necessary percentage adjustment which will be automatically applied. No further action is required by the user; the receipts in the long term cashflow will be adjusted accordingly by this percentage. When the equity is not fully staircased grant set aside will be adjusted pro rata.

The option remains to manually adjust the receipts. You no longer need to set this to "y" if normal grant set aside procedures apply and the total grant to be set aside has been defined in Section C of the appraisal (as described above).

A further improvement has been added when staircasing schemes which start as Intermediate Market Rent (IMR) and change to LCHO after a period of say 3 years. Grant does not have to be set aside on the first tranche and so no adjustment is required. In previous versions of this module all receipts were adjusted for grant set aside. Accordingly, for this kind of scheme set the option *Ignore First S/Csg Event for SHG Set Aside, y/n?* to "y". This adjustment will improve the final NPV result.

**F Staircasing**

On staircasing, all allowances (except Service Costs & Major Repairs) reduce pro rata to the Equity Remaining  
 Staircasing events are assumed to take place at the end of the year. Inflation is applied from Year 2.

			<b>Confirm Set Aside for SHG in Long Term Cashflow (LTC)</b>		
Total Value of Shared Equity Units	3,250,000		Grant Total Identified to Set Aside	315,000	
Total Shared Equity Sold at Outset	3	0%	Receipts in LTC will be reduced for Set Aside to	83.30%	
Total Unsold Equity at Start of Year 1	3,249,997	100%	<b>Manually Adjust S/csg Receipts in LTC, y/n?</b>	<input type="text"/>	
Last Year of Staircasing	9		Total Receipts 2,838,883	Ignore First S/Csg Event for SHG Set Aside, y/n?	<input type="text" value="y"/>
Unsold Equity at start Year 10	791,961	20%	Receipts in LTC 2,649,883	189,000 Unused Receipts (Set Aside)	

Year	1	2	3	4	5	6	7	8	9
Shared Unsold Equity	3,249,997	3,331,247	3,414,528	1,749,946	1,793,694	1,470,829	1,507,600	1,158,967	1,187,942
Shared Unsold Equity %	100%	100%	100%	50%	50%	40%	40%	30%	30%
<b>Staircasing %</b>			50.00%		10.00%		10.00%		10.00%
Year End Receipt	0	0	1,707,264	0	358,739	0	376,900	0	395,981
Shared Equity Remaining	3,249,997	3,331,247	1,707,264	1,749,946	1,434,955	1,470,829	1,130,700	1,158,967	791,961
Equity % Remaining	100%	100%	50%	50%	40%	40%	30%	30%	20%

In the above IMR to LCHO example, the set aside adjustments to the receipts in the long term cashflow only apply to Years 5, 7 and 9. Note that 20% of the equity is retained and therefore the grant set aside has been reduced accordingly to £189,000.

The staircasing profile dialog box has also been improved. It is now possible to staircase either the whole of the unsold equity, or if you have already made some inputs, the balance of the unsold equity. It is also possible to limit staircasing to a specified maximum equity level, e.g. 80%.

Click the green button at the top of the Equity Report: *Set or Clear Staircasing Profile*.

**Staircasing Profile**

**OPTIONS**

Total Unsold Equity at Year 1 £2,650,000 59 %

Balance of Unsold Equity

Staircase selected total by equal amounts over this period.

Start in Year No. 5 Finish in Year No. 20

Up to a Maximum Sold Equity % of 80 %

Or clear all existing staircasing inputs

O.K. [arrow]

Cancel [X]

In this example 41% of the equity has been sold at the outset, leaving 59% available to staircase. No previous staircasing entries have been made. The dialog shows how the unsold equity total will be sold over Years 5 to 20, but leaving 20% of the equity unsold at the end of Year 20.

The example below is from an IMR to LCHO scheme. A first equity tranche of 40% has been manually entered at the end of Year 3, leaving 60% as the balance to staircase.

**Staircasing Profile**

**OPTIONS**

Total Unsold Equity at Year 1 £4,499,997 100 %

Balance at Year 4 £2,836,685 60 %

Staircase selected total by equal amounts over this period.

Start in Year No. 8 Finish in Year No. 20

Up to a Maximum Sold Equity % of 80 %

Or clear all existing staircasing inputs

O.K. [arrow]

Cancel [X]

The balance is shown staircasing from Years 8 to 20 up to a maximum equity sold of 80%.

Here is the view after performing this action.

**F Staircasing**

On staircasing, all allowances (except Service Costs & Major Repairs) reduce pro rata to the Equity Remaining  
 Staircasing events are assumed to take place at the end of the year. Inflation is applied from Year 2.

**Confirm Set Aside for SHG in Long Term Cashflow (LTC)**  
 Grant Total Identified to Set Aside 315,000  
 Receipts in LTC will be reduced for Set Aside to 91.57%  
**Manually Adjust S/csg Receipts in LTC, y/n?**   
**Ignore First S/Csg Event for SHG Set Aside, y/n?**   
 Total Receipts 4,383,046      210,000 Unused Receipts (Set Aside)  
 Receipts in LTC 4,173,046

Year	1	2	3	4	5	6	7	8	9
Shared Unsold Equity	4,499,997	4,612,497	4,727,809	2,907,603	2,980,293	3,054,800	3,131,170	3,209,449	3,120,984
Shared Unsold Equity %	100%	100%	100%	60%	60%	60%	60%	60%	57%
<b>Staircasing %</b>			40.00%					3.08%	3.08%
Year End Receipt	0	0	1,891,124	0	0	0	0	164,587	168,702
Shared Equity Remaining	4,499,997	4,612,497	2,836,685	2,907,603	2,980,293	3,054,800	3,131,170	3,044,862	2,952,282
Equity % Remaining	100%	100%	60%	60%	60%	60%	60%	57%	54%
Year	10	11	12	13	14	15	16	17	18
Shared Unsold Equity	3,026,089	2,924,499	2,815,938	2,700,121	2,576,753	2,445,530	2,306,135	2,158,241	2,001,512
Shared Unsold Equity %	54%	51%	48%	45%	42%	38%	35%	32%	29%
<b>Staircasing %</b>	3.08%	3.08%	3.08%	3.08%	3.08%	3.08%	3.08%	3.08%	3.08%
Year End Receipt	172,919	177,242	181,673	186,215	190,871	195,642	200,533	205,547	210,685
Shared Equity Remaining	2,853,169	2,747,256	2,634,264	2,513,906	2,385,883	2,249,887	2,105,601	1,952,694	1,790,826
Equity % Remaining	51%	48%	45%	42%	38%	35%	32%	29%	26%
Year	19	20	21	22	23	24	25	26	27
Shared Unsold Equity	1,835,597	1,660,135	1,474,754	1,511,623	1,549,413	1,588,148	1,627,852	1,668,548	1,710,262
Shared Unsold Equity %	26%	23%	20%	20%	20%	20%	20%	20%	20%
<b>Staircasing %</b>	3.08%	3.08%							

The first sale of 40% in Year 3 was manually entered. Staircasing in Years 8 to 20 arose from the entries in the dialog box above. Note that Ignore First S/csg Event for SHG Set Aside, y/n? has been set to "y" to prevent the receipt in Year 3 being adjusted for grant set aside in the long term cashflow. Note also that 20% of the equity remains at Year 21.

A full example of converting Intermediate Market Rent to Shared Ownership can be downloaded from the website.

- I am unable to make changes to default values, or the *Password Status* is showing as *Locked* and I have forgotten the password.

After opening the defaults file from the Control Panel, move to the page of defaults you wish to amend. If the *Password Status* is *Unlocked*, click the green button *Update Default Values*. Proceed to make changes.

If the *Password Status* is *Locked*, then on clicking *Update Default Values*, you will be prompted for the user-defined password. SDS can give you the password, but you will need to send the file to us. Attach the defaults file to an email and send to support@sdsproval.co.uk.

- How can I protect an appraisal file from changes being made to it?

When saving the appraisal for the first time, no password protection option will be given. Afterwards, using the *Save As New Version* button on the Home page of the appraisal will give you the option to apply a password. The password will allow others to open the file and to make changes, but no changes can be saved, unless saving as another new version.

- I am asked for a password.

Except for user-defined passwords, as required for unlocking default files, or for opening a password-protected appraisal file, you will not require any system passwords. You must contact SDS should a system generated request of this kind appears.

- Is SDS ProVal Office 2007 compatible

No, you need MS Office 2003 or MS Office XP (earlier versions are also supported). An Excel 2007 compatible version of ProVal will be available in 2008. In 2009 a new version of ProVal addresses this issue by taking it out of Excel completely.

- How to set rents when not as displayed at the start of the rent setting section.

Rents should normally be set equivalent to the point when the scheme goes into management. Target rents reported at the start of the rent setting section are the predicted rents for the period one year after the funding year. So the Funding Year 2008/09 will give the target rent at April 2009 (the start of the 2009/10 year).

If you need to set a rent for a different period there are two ways of doing this:

- 1) (Recommended) Double click in the rent setting cell and use the second option in the dialog box – Set rent as a percentage of the target rent. To set the rent for a later period amend the percentage input, e.g. assuming rent inflation at 3%, for one year later set to 103%, for two years set to 106%, etc. For earlier periods use 97%, 94% etc. These percentages are not strictly correct when adjusting for two or more years as the inflation should be compounded, but the error will be negligible.
- 2) Change the funding year to the year prior to when you want to set the rents, note down the rent figures; put the funding year back to the correct year and then manually enter the rents at the figures as noted.

- Target rents don't agree with IMS

There are three possible causes.

1. You do not have the latest *HCDData* file - contact your key contact or IT representative to check with SDS. It may be necessary to run the last ProVal update.
2. The number of weekly rent periods set in the Cost Rent section of the appraisal has been set to a period other than 52.18 (this is the standard period of weeks in the year used by the HC).



3. Key values are different in the two systems. Key values are Funding Year (but note that ProVal gives the target rent one year after the funding year) the Local Authority, the number of bedrooms and the capital value as at January 1999.

- How to calculate the affordable loan

The definition of *affordable loan* can be interpreted in different ways. In ProVal this will be shown in the section immediately before the Long Term Cashflow. The meaning will vary depending on the loan repayment method used.

When the loan repayment method is *Annuity*, the affordable loan is defined as the loan which has a year 1 annuity repayment equal to the year 1 net income. In this case the Cashflow will be zero in year 1 and (typically) positive thereafter.

When the loan repayment method is *Interest Only*, the affordable loan is defined as the loan where the year 1 interest is equal to the year 1 net income. In this case the loan will typically start to reduce immediately thereafter. The loan may or may not repay by a desired period. The actual repayment term will be determined by the profile of future income/expenditure. There is a scenario in the *Sensitivity* page to find the affordable loan which can be repaid by a user-specified repayment term.

- Updating values in the defaults file

Go to *Set Defaults* from the Control Panel. Choose the file of defaults you want to update and click OK. Select *View Defaults* on the Home Page. *Click Update These Defaults* at the top of the page. Enter the user-defined password if requested. You will need to repeat this for each page of defaults before you can change any values.

On completion return to the Home Page and *Save* the defaults. These default values can then be used in new appraisals, or applied to previously created appraisal files (to do this from within the appraisal itself, click on *Update Defaults* at the top of the page and follow on screen instructions).

- What is NPV

Net Present Value (NPV) is the value of a future stream of revenue income/expenditure expressed at today's (or present) value. A discount rate (e.g. 6% p.a.) is used to calculate the present value for each period and this is usually equal to the long term interest rate.

The NPV of the net rent is a measure of all future net rents (excl. interest and/or loan repayments).

The scheme loan represents the initial scheme costs (i.e. total scheme cost less grant and any initial sales income). So when the NPV of the net rent exceeds the loan (i.e.  $NPV \text{ Net Rent} - \text{Loan} > 0$ ) the scheme can be said to have a net worth. The initial scheme cost (or loan) does not have to be discounted because it is already at 'present value'. It is this complete calculation which is normally meant by the "NPV result" and is one of the key viability tests for any scheme.

When staircasing shared ownership units or selling properties in the long term in a mixed tenure appraisal, the *NPV Calculation Option* should be changed to include the NPV of the future receipts, i.e. *NPV Net Rent + Cap. Value – Loan*.

- What do the NPV Calculation Options mean

The NPV of a project is a measure of what the scheme is worth to the organisation today, recognising that the income takes place over a long period, typically 30 to 35 years. To understand the concept of NPV, you need first to understand 'Present Value' (PV). This is straightforward: it is simply 'today's value' (present value) of a sum received in the future. Thus £1 received today is worth £1, but if you had to wait a year you might say it was only worth 90p. Alternatively, you could think of 90p today being invested and, after inflation and interest are taken into account, it would be worth £1 in a year's time. To calculate today's value from a known future value we apply a discount rate, typically equal to the interest rate. In some cases the discount rate is greater than the interest rate to reflect the risk inherent in the project (which for social housing rented schemes is generally considered to be low).

Where a project has a series of future incomes, such as a social housing scheme, each year's rent (less direct costs for allowances) can be discounted over the period to provide a present value of that year; when all these PV's are added together the result is the NPV.

To assess the viability of a scheme using the NPV method there are generally 2 stages. The first is to calculate the NPV of the Net Rent (i.e. Gross rent, less voids and allowances, such as management and maintenance costs). The second is to deduct the private finance loan which arises at the outset. This loan reflects the cost of the project (i.e. Total Scheme Cost less grant). So deducting the loan is the same as deducting the net project cost. As this cost is already the 'present value', there is no need to discount it. Thus 'NPV Net Rent – Loan' (NPV of Net Rent minus loan) is the basic viability measure used to assess a scheme. The result should be positive; i.e. the scheme increases the organisation's net worth. Although a result greater than zero would be considered good, a benchmark value per unit, or per person, would be more discriminating when comparing one scheme with another. Note that no account is taken of the loan repayment method, or of the interest payments. This is because the discount rate has the interest rate built into it.

A variation on the above calculation, used by some organisations, is to include the PV of the future capital value of the scheme. Because the net rent assumes that the properties are maintained in good condition, one can argue that at the end of the 30-35 year period, the scheme has a value. Selling a scheme is not usually an option, but it could provide security for further borrowing. Assessing what that future value might be is difficult and is also very risky as one cannot be sure that the value will be realised at that time. Adding in a (discounted) capital value has a wildly fluctuating effect on the final answer, allowing users to manipulate the NPV result by making unverifiable assumptions about future values.

#### NPV Calculation Options in ProVal

In order to meet requests from various organisations to calculate the NPV by different methods, ProVal allows the user to set a Calculation Option at the start of the Long Term Cashflow. The options are different for the 2 loan repayment methods. Whichever method for repaying the loan you use, in the absence of any instructions to the contrary, we recommend that you use the 'NPV-Loan' option. All the options are explained below:

### Net Rent – Loan

This is the recommended option and is fully explained above. The result will be the same regardless of the loan repayment method and will not be affected by interest rate settings.

### Net Revenue Stream

This is shown in the Long Term Cashflow and the result varies for the 2 loan repayment methods:  
'Annuity' method: Net Rent less annuity payment  
'Interest Only' method: Net Rent less interest cost.

### Cashflow

This option is available only with the 'Interest Only' method of loan repayment. It represents the proceeds from the net rent after the loan has been repaid. Therefore if the loan is repaid by Year 27 and the NPV is assessed over 35 years, the result will be the NPV of the 8 years' income from Year 28 to Year 35.

All NPV methods include the option to include a user defined discounted capital value.

- What is IRR

The Internal Rate of Return (IRR) of a scheme is the discount rate which returns an NPV result of zero.

For example, if the NPV calculation uses a 6% discount rate and the result is positive, then the IRR will be higher than 6%. Conversely, a negative NPV result implies that the IRR is below 6%.

IRR is an alternative way of assessing the scheme viability. If the discount rate is greater than the interest rate (usually used as the discount rate to calculate the NPV result) the scheme could be said to be a better investment than might be obtained by depositing money in the bank. Note that there are some occasions when it is not mathematically possible to calculate the IRR and in these instances the report will read advise accordingly. When the IRR value is very large the report will give a result such as ">50%" or ">-50%".

- How to access Excel files with all the usual Excel menu and toolbar options when using ProVal

On booting ProVal the Excel operating environment is restricted because most of the normal Excel commands are not required. Unwanted toolbars also reduce the working screen area.

You can open other files in Excel with full Excel functionality. From the Windows Start button, start a new instance of the Excel application and open files as usual. This will not affect ProVal. You can switch between the two Excel applications by clicking on the icon showing in the tray at the bottom of the screen.

- How do I know this is the latest version

ProVal files use two identifying *file property values*: a Document Number and a Reference. The Document Number identifies the module version, e.g. 520001 is the General Needs appraisal

version 5.20. The Reference Number identifies a date when that particular version of the file was issued, e.g. 230708 = 23 July 2008. When used together they identify a specific version of the file. When changes are made one or both of these numbers will be changed.

Each module has a general Version number, e.g. Version 5.20 is the General Needs module.

A full list of Document and Reference numbers for all files is on the website. To check these go to Windows Explore and view the custom tab on the file properties dialog.

- **Checking for all essential data**  
To verify that all essential data has been entered and to check for any unresolved error messages click *Essential Data Check* navigation on the main appraisal page.

- **Why isn't the target rent showing**

The most common cause for this is that an essential input has been omitted. For target rents the essential inputs are:

- Funding Year
- Local Authority
- No. of bedrooms
- Capital value at January 1999
- There must also be at least one unit entered on the Units line

Click *Essential Data Check* navigation button on the main appraisal page to check everything is correctly completed.

- **#NAME, #VALUE, ##### errors show on the appraisal**

These errors are generated by Excel and are not usually a fault of the ProVal application.

They can arise when ProVal has not been installed correctly, but can also arise under the following circumstances:

- If there are several ProVal appraisals open, Excel can “lose focus” and functions are not calculated correctly. (#VALUE errors).
- The built-in reference between the appraisal and the system code file has broken (#NAME errors).
- System files are missing (#VALUE, #NAME errors)

To resolve these issues:

- Try changing the funding year to a different year; change it back again.
- If this fails, exit ProVal and close Excel. Reboot ProVal.
- If this has not cleared the issue, contact SDS.

When numbers are so large that the cell width cannot display the number correctly, ##### is displayed. This is not an error as such and will not affect the program. It is not possible for the user to correct this. Send the appraisal to SDS and we will reduce the font size to overcome the problem.

- I get *Can't Find Project Library* error message

This is an Excel error message and almost always means that the initial boot sequence when starting ProVal did not complete correctly. Cancel the message, close Excel (using the Excel menu commands) and reboot ProVal. Note any error messages which appear during the boot sequence.

Alternatively, if an appraisal file is opened in Excel before the ProVal application has been booted this error will always occur. ProVal appraisal files must be opened from the Control Panel, not directly into Excel.

- Dealing with major repairs in the Private Finance module

You need to consider whether your scheme is a mixed tenure scheme or just units for rent. If your scheme is just rented units then you can use your standard default setting. For mixed tenure schemes, set a major repairs sinking fund value for the rented units only as follows.

In Section I – Allowances, use Option 1 or Option 2/3.

### Option 1

Set the *% Selection to % User Input*. Enter a *User Input* value. This value should be your estimate of the works costs attributable to the rented units only. Complete the input with an appropriate % of this value. This will generate a sinking fund at Year 1. Defer to a later year if appropriate.

### Option 2/3

These options are for commercial (Option 2) and residential (Option 3) situations. Enter a sinking fund value per unit. Defer to a later year if appropriate.

Note that you cannot use Life Cycle Costs in this module.

- Using formulae in the input cells

**As a general rule you should not use formulae in an appraisal.** This is because, a) unexpected results may be generated when other values change, and b) it is not possible to see that a formula has been entered, so there is a danger that it is accidentally overwritten. Using formulae is particularly unwise when linking the set rent to the reported target rent. As inflation data gets updated so reported target rents change. A linking formula would therefore change the appraisal results.

If you still wish to use formulae, enter directly in the cell. To edit the formula, click F2.

We recommend that you restrict formulae to the *Memorandum Information* areas.

In the Scheme Timings section, formulae can be useful. Special arrangements have been made to avoid the pitfalls mentioned above. For further information, refer to the User Manual.

- Changing tenures in the Private Finance module in the long term

### Changing from one rented tenure to another rented tenure (e.g. market rent to social rent)

In section L, Set Rents, create two periods in the long term cashflow. Set the first period to the length of the first tenure type. Ensure that you complete the rent for both periods for all unit columns, regardless of whether the rents are changing. Rents should be set at their Year 1 values. Repeat the process for section I, Allowances.

If subsidy is received as a result of changing tenure, make inputs in the first part of section J.

### Changing from rented tenure to shared ownership tenure, or vice versa

This is possible but beyond the scope of normal users. We therefore recommend that you refer to SDS for special help with this topic.

- What are the two methods for repaying loans

There are two methods for repaying interest and capital over the long term.

#### ***Annuity***

This method repays the loan by regular monthly payments over a specified repayment term.

If the net income is insufficient to meet the annuities a negative cashflow will arise. This deficit will have to be met from other income available to the organization.

#### ***Interest Only***

This method uses the net income to pay off the interest and any surplus will reduce the outstanding loan balance. Conversely a shortfall will increase the loan balance. This method works like an overdraft. The organization does not have a cashflow until the loan is repaid. In extreme cases the loan balance may increase indefinitely.

- I've run out of columns

You will need to split your scheme into two 'phases' and appraise each 'phase' separately by apportioning costs pro-rata. Consolidate the results in the consolidation module to see an overall result.

Alternatively, try reducing the number of dwelling types by averaging similar types.

- What effect does funding year have on the appraisal

The funding year identifies when public subsidy will be received. It also determines the target rent. Target rents are reported one year after the funding year.

See also target rents.

For funding years earlier than 2005/06 the funding year is an essential input for determining norm grant rates and other Housing Corporation parameters applicable to the funding rules at that time.

- How to roll up interest on land banked schemes

When a scheme has been land banked for any appreciable period, you are advised to add interest to the value of the land and enter as an additional acquisition cost in section B. This will avoid problems of exceeding the maximum period of 48 months in the scheme cashflow.

There are standard built-in Excel functions for calculating compound interest. For short periods, adding simple interest may be sufficiently accurate.

- My scheme is being developed over more than 48 months - what can I do

It is important to check the circumstances which give rise to this situation. Interest is capitalized from the start up to the last cashflow event. Schemes being developed over a long period often have units coming into management at an earlier time. In this case interest needs to be capped and rent income will need to be recognized.

Split the scheme into phases and appraise each phase separately. Then consolidate the results in the consolidation module.

For other situations please contact SDS for the best method of appraising.

- Reapplying defaults

This procedure cannot be undone, so save the current version of the appraisal first.

From within the appraisal click *Update Defaults* button and select a defaults file. Selected pages of the default values can be imported as appropriate.

- How do I deal with retentions

Do not time retentions in the scheme cashflow. The scheme will be in management before the second retention is paid out. Given the difficulties of forecasting events and the minimal effect that retentions have on the total interest cost, they are ignored. If the retention payment is significant, then make an adjustment in the Total Scheme Cost section of the appraisal.

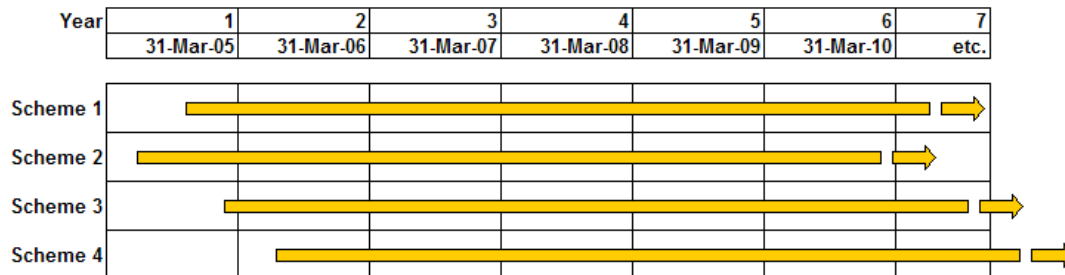
- How to deal with phasing in consolidation

The consolidation cashflow varies from the scheme cashflow in one very important aspect. When consolidating multiple schemes it is not possible to add annual cashflows together. The schemes will usually be developed at different times, therefore the point at which they come into management will also be different.

So when consolidating schemes it is necessary to establish the phasing of schemes. This phasing is established when the scheme is imported and the user is asked the question: *When does the scheme come into management?*

Before consolidating cashflows, it is also necessary to establish what month should be used to define the year end. This is established when applying defaults on starting a new consolidation. For most RSLs this will be March. The scheme which has the earliest *Date Into Management* together with the user's preferred year end month determines Year 1 of the cashflow. E.g. if the earliest scheme into management is July 2004 (interpreted as the end of July) and the preferred year end month is March then Year 1 of the consolidation will be y/e March 2005. This is the case with Scheme 2 in the illustration below.

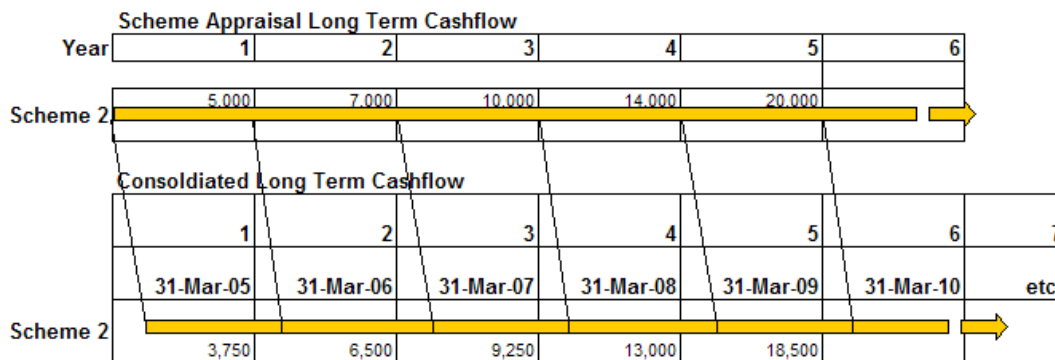
Illustration of Cashflow indicating phasing of income/expenditure



In the consolidation it is necessary to recast the appraisal's long term cashflow so that the revenue flows are split up across the correct years. This is done on a pro rata monthly basis.

Therefore for Scheme 2 in the above example, Year 1 of the consolidated cashflow comprises 9/12 of Year 1 of the scheme cashflow. Year 2 of the consolidated cashflow is the remaining 3/12 from Year 1 of the scheme cashflow plus 9/12 from Year 2. The last year in the consolidated cashflow (Year 46) will only have 3/12 from Year 45 of the scheme cashflow.

Illustration showing how annual cashflows in the scheme appraisal are split up in the consolidation



Thus the annual cashflows in the consolidation are different from the scheme cashflow and this has a knock on effect on the viability results, particularly NPV and loan repayment period.



