Investit Decisions

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Instruction Manual
Finance Folder
Creating Mortgages & Loans
USA Edition 1.0

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FINANCING FOLDER

Preface

The Finance Folder allows you to enter the financing for capital investments in equipment, real estate etc., if appropriate.

In capital budgeting, financial and engineering economic analysis it is common to ignore financing as this is an organizational decision. The organization rarely borrows money to fund an individual investment in equipment and other assets. Instead, money is raised through retained earnings, the issuance of shares, bonds, debentures and bank loans etc. If this is the case the Finance Folder is not used.

The organization may decide to lease rather than buy the equipment. The Investit Decision's templates "Lease" and "Buy" can be used to decide whether to lease or buy the equipment.

Only use the Finance Folder is there is loan, being borrowed against the specific investment or the investment involves the acquisition of real estate funded by a mortgage.

Features

The Financing Folder is used to create mortgages and loans and offers the following features which allows you to enter any kind of mortgage or loan and explore creative financing options;

1. The number of mortgages or loans are unlimited
2. The mortgage can start and finish any year and month. E.g., Year 2, March 1.
3. Eight mortgage payment options. They are:
    - Standard (Blended Principal and Interest Payment)
    - Interest Only
    - Fixed Payment
    - Variable Payment
    - Fixed Principal Payment plus Interest
    - Variable Principal Payment plus Interest
    - Construction Loan. Interest Only (Also called a "Draw" mortgage"
    - No Payment of Principal or Interest
    - Your own Principal and Interest schedule
4. Additional payments or borrowing can be made in any period
5. Multiple Terms and Amortization Periods
6. Multiple Terms
7. Payment Frequencies. Annually, Semi-annually, Quarterly Semi-monthly and Monthly

Mortgage Payment Types

Note: The term "Periodic" refers to the payment period or frequency. As an example, monthly, yearly etc.

There are eight different mortgage types:

1. Standard Mortgage
A Standard Mortgage consists of a constant blended mortgage payment of principal and interest, as well as full amortization. This means that the borrower pays back the full Principal amount over the life of the mortgage i.e. the outstanding balance of the mortgage at the end of the amortization period is zero.

2. Interest Only Mortgage
With an Interest Only Mortgage, the interest is paid periodically, and the periodic payment consists solely of the interest due for the period. The Principal Remaining, which is equal to the amount owed, is paid off at the end of the Term or Amortization Period.

3. Fixed Payment Mortgage
The periodic payment is fixed for the Term. The payment is first applied to the interest owing, and any remaining amount is applied to reducing the Principal Remaining.

Note: If the periodic payment is less than the Interest Due, the unpaid interest is added to the Principal Remaining.

4. Variable Payment Mortgage
The Variable Payment Mortgage allows you to vary the mortgage payment period by period. The payment is first applied to the interest owing, and any remaining amount is applied to reducing the Principal Remaining.

5. Fixed Principal plus Interest Mortgage
The Periodic Payment consists of:
1. The interest due for the period.
2. A fixed principal payment, which reduces the Principal Remaining. The principal payment is fixed for the entire term.

6. Variable Principal Payment plus Interest Mortgage
The Periodic Payment consists of:
1. The interest due for the period.
2. A variable principal payment which can be varied period by period. The variable principal payment reduces the Principal Remaining.

7. Construction Loan. Interest Only
Allows you to set up a construction draw mortgage and draw the mortgage down in and repay in stages

8. No Payment of Principal or Interest Mortgage
Also called an Interest Accruing Loan.

There are no payments of principal or interest during the life of the mortgage. The unpaid interest is added to the Principal Remaining, which is paid off at the end of the Term.

9. Your own Principal and Interest Schedule
This option allows you to enter the principal and interest schedule period by period, and is used for unique circumstances where the mortgage contract cannot be calculated using the options available in Investit.

As an example, the seller and purchaser agree on the following mortgage payments:

Mortgage Amount: $ 900,000

Mortgage Schedule:

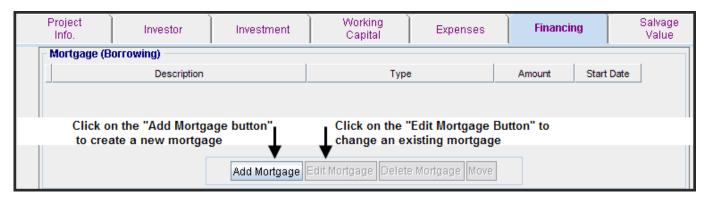| Period	Principal Payment	Interest Payment
1	$60,000	$4,000
2	100,000	25,000
3	0	70,000
4	40,000	87,000
5	700,000	60,000

Clearly, there is no mathematical relationship to the payment structure, and the Mortgage Schedule must be entered period by period.

This option allows you to enter unconventional mortgage arrangements between the borrower and lender.

Entering a Mortgage. Example

The following are the basic steps for entering a mortgage. The steps may vary slightly from those outlined below, depending on the Mortgage Type selected.

In the Financing Folder, Click on the "Add Mortgage" button to create a new mortgage or the "Edit Mortgage" button to make changes to an existing mortgage.

Example

Following are the entries for a standard mortgage or loan.

Mortgage Details
    Start Date: 2010 March
    Type: Standard Mortgage (Fully amortized loan with constant monthly principle and interest payment)
    Amount: $3,000,000
    Description: Financing

Mortgage Settings
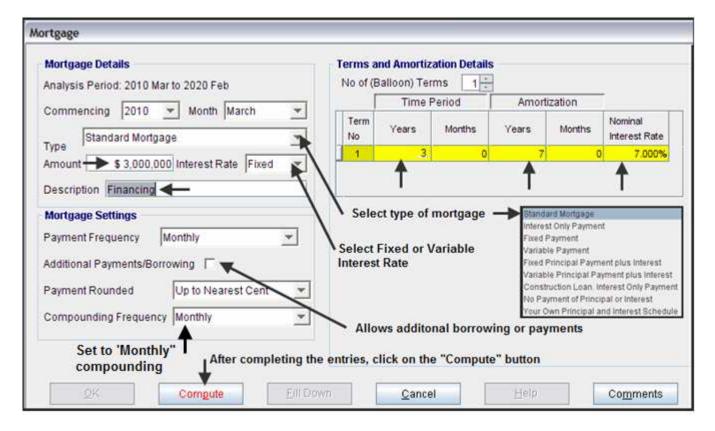   Payment Frequency: Monthly
    Additional Payments/Borrowing: None
    Payments: Rounded to Nearest Cent
    Compounding Frequency: Monthly

Term and Amortization Details
    No. of Terms: 1
    Time Period: 3 years (Mortgage is paid off with a balloon payment at the end of 3 years)
    Amortization Period: 7
    Interest Rate: 7.000%

After making the entries click on the "Compute" button and then the "Ok" button to complete the mortgage

Terms and Amortization Details

Allows you to set multiple "Terms" with each term having it own "Time Period", "Interest Rate" and "Amortization Period"
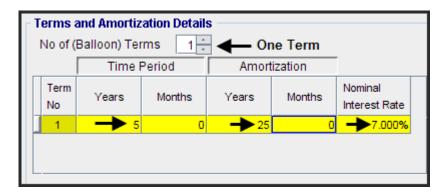
Example using a single term

No. of Terms: 1

Time period: 5 years. This means the outstanding principle at the end of 5 years will be paid off in full
Amortization Period: 25 years
Interest Rate: 7.00%

The entries are:

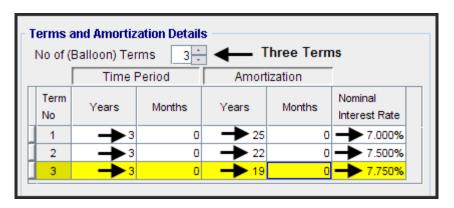Example using Multiple Terms

No. of Terms: 3

Term 1. Time Period: 3 years. Amortization 25 years Interest Rate: 7.00%
Term 2. Time Period: 3 years. Amortization 22 years Interest Rate: 7.50%
Term 3. Time Period: 3 years. Amortization 19 years Interest Rate: 7.75%

Note: The outstanding principle will be paid off with a balloon payment at the end of 9 years.
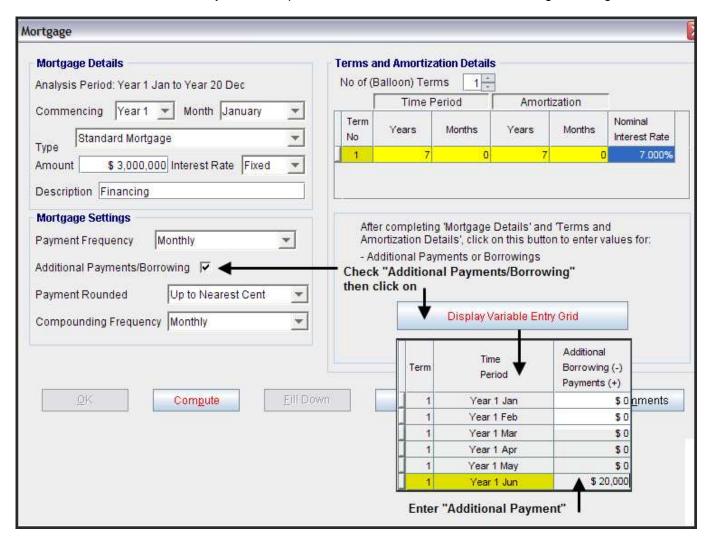
The entries are;

Additional Payments and Borrowings. Example

Entering Additional Payments or Borrowing:

Steps:

1. Make sure that you have entered all of the mortgage information by completing the:
   i) Mortgage Details
   ii) Mortgage Settings
   iii) Term and Amortization Details

2. Click on the Additional Payments/Borrowing button in the Mortgage Settings Box

3. Click on the "Display Variable Entry Grid" Button.

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4. Enter the Additional Payments or Borrowing in the Grid in the appropriate Time Period.

 E.g., Additional payment of $ 20,000 in period Year 1 Jun.

Note: Enter an "Additional Payment" as a positive number. Enter "Additional Borrowing" as a negative number.

Using Fill Down for Repeating Entries

The "Fill Down" button can be used to quickly enter repeating entries for;

1. Variable Interest Rates
2. Variable Principal Payments
3. Additional Payment/Borrowing

As an example, Nominal Annual Interest Rate for Periods: Year 1 Jan to Dec: 9.25%
Year 2 Jan to Dec: 8.00%
Year 3 Jan to Dec: 7.25%

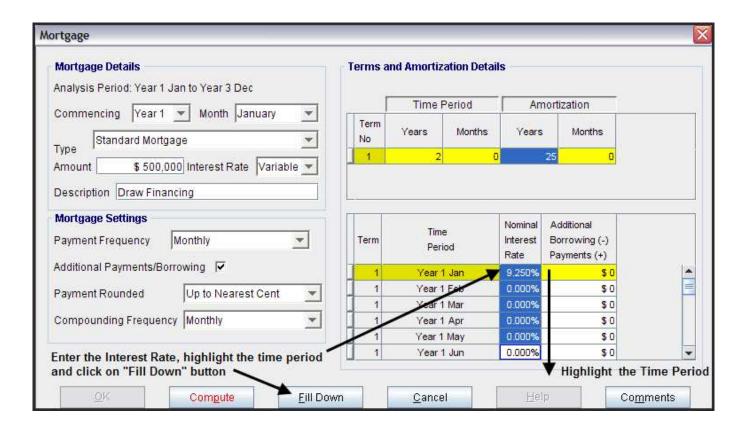can be entered quickly using the [Fill Down] Button as follows;

Steps

1. Make the first entry. Example 9.250% in Year 1 Jan
2. Highlight the time Period. Year 1 Jan to Dec
3. Click on the "Fill Down" button

Repeat the process to enter;
  Year 2 Jan to Dec: 8.00%
  Year 3 Jan to Dec: 7.25%

Term	Time Period	Nominal Interest Rate	
1	Year 1 Jan	9.250%	**Entered by highlighting and using "Fill Down"**
1	Year 1 Feb	9.250%	
1	Year 1 Mar	9.250%	
1	Year 1 Apr	9.250%	
1	Year 1 May	9.250%	
1	Year 1 Jun	9.250%	

FINANCING EXAMPLES

The Financing Folder flexible allows you to develop mortgage schedules for a wide variety of mortgage payment types and to explore creative financing options.

This section contains the steps for developing the following mortgages:

1. Variable Payment Mortgage with Variable Interest Rates
2. Draw Mortgages

Variable Payment Mortgage with Variable Interest Rates. Example

The following example illustrates how to enter a mortgage with
   a) Variable Payments
   b) Variable Interest Rates

Mortgage Details
   Type: Variable Payment
   Interest Rate: Variable
   Amount: $3,000,000
   Description: Financing

Term and Amortization Details:
   Number of Terms: 1
   Time Period: 3 years (The mortgage will be paid off with a balloon payment at the end of three years)

Mortgage Settings:
   Payment Frequency: Monthly
   Additional Payments/Borrowing: None
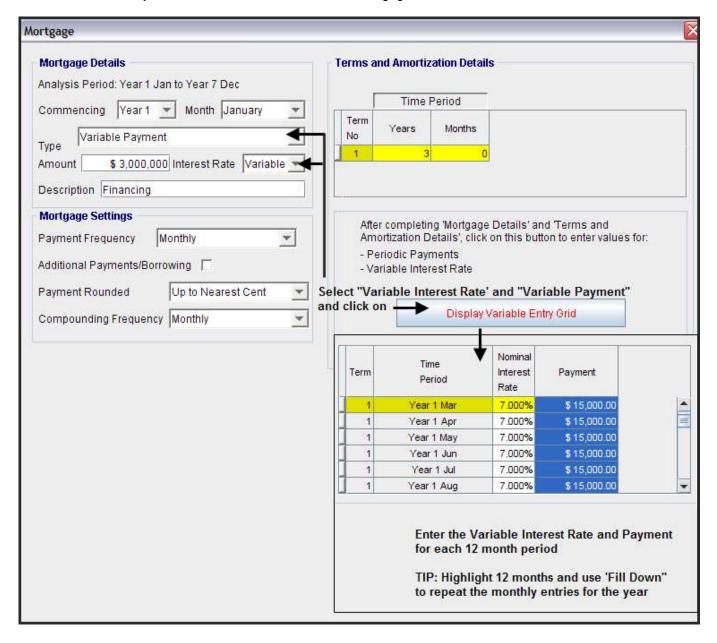   Rounding Option: Up to nearest cent
   Compounding Frequency: Monthly

The variable payments and interest rates are;

   Year 1: $15,000 per month. Interest Rate: 7.00%

   Year 2: $25,000 per month. Interest Rate: 7.50%

   Year 3: $35,000 per month. Interest Rate: 8.00%

The "Variable Payment" and "Variable Interest Rate" mortgage is entered as follows;

Draw Mortgage Example

A manufacturer has arranged a draw mortgage for $1,000,000 at a Nominal Interest Rate of 8.75%, compounding monthly, and anticipates drawing down and then repaying the mortgage from sales revenue, as follows

Mortgage Draws and Payment Schedule

Mortgage Draws	**Draw**
Year 1 Jan	$200,000
Feb	$400,000
Mar	$300,000
Apr	$100,000
Total	$1,000,000
Mortgage Repayments	**Payment**
Year 1 June	$300,000
July	$400,000
Aug	$300,000
Total	$1,000,000

The Mortgage dialogue should look like this;