## Unequal Periods Cash Flows Worksheet

| List <br> Example | $\mathrm{r} \%$ <br> $5.00 \%$ | NPV <br> $6,159.89$ |
| :---: | :---: | :---: |
| Interest Type <br> Compound | IRR\% | NFV |
| Interest Base <br> Days: 360 | PV $(-)$ | TOTAL |

This worksheet extends the cash flows calculations when they occurs at unequal periods. The cash flows are specified in a list with the cash flow value and the date it occurs.

| $\begin{gathered} {\left[\begin{array}{c} \text { List } \\ \text { New } \\ \text { Edit } \end{array}\right.} \\ >\text { Load } \\ \text { Delete } \end{gathered}$ | Unequal Periods Cash Flows action menu. Opens the "(Date, CF) List Editor" to create a new list. Opens the "(Date, CF) List Editor" to edit the current list. Shows a menu to load a previously saved list. Deletes the current list. |
| :---: | :---: |
| [ r \% ] | Stores or calculates the "Rate of Return" ( r\% ) in percent. |
| [NPV] | Stores or calculates the "Net Present Value" ( NPV ). |
| Interest Mode Compound or Simple | Set the interest type of r\% to Compound or Simple for all the calculations performed in the worksheet. |
| Interest Base Days | Stores the number of days for interest " $r$ \%" definition to calculate the daily interest to apply (r\%/Days ). |
| [IRR\%] | Calculates the Internal Rate of Return of the current list in \%. |
| [NFV] | Calculates the Net Future Value of the current list. |
| [TOTAL] | Calculates the total sum of the current list. |
| [PV(-)] | Calculates the Present Value of Negative cash flows at the displayed number rate in \%. |
| [FV(+)] | Calculates the Future Value of Positive cash flows at the displayed number rate in \%. |
| [MIRR] | Calculates the Modified Internal Rate of Return. The investment rate is $r \%$ and the risk free rate\% is the displayed number. |
| If any other key is pressed before one of the Blue keys, the displayed number is stored in the corresponding variable. Otherwise, the variable is calculated. |  |

To create or edit an unequal period cash flow list, see the "(Date, CF) List Editor" help document.

## Example:

Considering an investment opportunity with the following estimated cash flows schedule:

| Date | Cash Flow | Date | CashFlow |
| :---: | :---: | :---: | :---: |
| Dec 20, 2023 | $-\mathbf{1 8 0 . 0 0 0}$ | Apr 16, 2026 | 45.000 |
| Apr 18,2024 | 25.000 | Apr 14, 2027 | 50.000 |
| Feb 13, 2025 | 33.000 | Jul 16, 2028 | 60.000 |

If you demand a compounding nominal interest rate base on 360 days, calculate:
1.- Net Present value at $5 \%$ interest.
2.- The rate necessary to obtain a Net Present value of 1000.
3.- The Internal rate of return (IRR\%).
4.- Calculate the Net Future Value at $5 \%$ of interest.
5.- Calculate the Modified Rate of Return with $2.5 \%$ safe rate and $5 \%$ risk rate.

## Solution:

| Keys | Comment |
| :---: | :---: |
| [ $=$ List $>$ ] ${ }^{\text {b }}$ New | Opens the "(Date, CF) List Editor". |
| [ Add] <br> Set the Transaction Date Type 180000 [ + / - ] [ Enter ] | Adds transaction to the list. <br> Set Year-Month and Day to "Dec 20, 2023". <br> Enter "-180000" cash flow value to the list. |
| [ Add] <br> Set the Transaction Date Type 25000 [ Enter ] | Adds transaction to the list. <br> Set Year-Month and Day to "Apr 18, 2024". <br> Enter "25000" cash flow value to the list. |
| [ Add] <br> Set the Transaction Date Type 33000 [ Enter ] | Adds transaction to the list. <br> Set Year-Month and Day to "Feb 13, 2025". <br> Enter " 33000 " cash flow value to the list. |
| [ Add] <br> Set the Transaction Date Type 45000 [ Enter ] | Adds transaction to the list. <br> Set Year-Month and Day to "Apr 16, 2026". <br> Enter "45000" cash flow value to the list. |


| Keys | Comment |
| :---: | :--- |
| [ Add ] <br> Set the Transaction Date <br> Type 50000 [ Enter ] | Adds transaction to the list. <br> Set Year-Month and Day to "Apr 14, 2027". <br> Enter "5000"" cash flow value to the list. |
| [ Add ] <br> Set the Transaction Date <br> Type 60000 [ Enter ] | Adds transaction to the list. <br> Set Year-Month and Day to "Jul 16, 2028". <br> Enter "60000" cash flow value to the list. |
| List ] Name... | Shows a Name entry view to name the list |
| Type "Example" [ Done ] | Name the list "Example" |
| [ Save ] | Save the "Example" list and close the editor |

Once finished, you are back in the Unequal Periods Cash Flows menu and ready to perform the required calculations:

| Keys | Comment |
| :---: | :---: |
| $\begin{gathered} {[==\text { List }>]} \\ >\text { Load } \quad \text { Example } \end{gathered}$ | If the "Example" list is not already shown in the " $==$ List <br> -" button, select "Example" from the Load submenu. |
| Interest Mode Compound | Set the interest to compound. |
| 360 [ Days ] | Set the interest base number of days. |
| 5 [ r\% ] [NPV] | 1) Input the nominal interest rate and calculate NPV. Result -> NPV = 6,159.89 |
| 1000 [NPV] [ r\% ] | 2) Input the desire NPV and calculate the nominal interest rate. Result $->\mathrm{r} \%=\mathbf{6 . 1 0}$ |
| [ IRR\% ] | 3) Calculate the Internal Rate of Return. Result $->$ IRR\% = 6.32 |
| 5 [ r\% ] [ NFV ] | 4) Calculate the Net Future Value at $5 \%$ rate. <br> Result -> NFV = 7,724.45 |
| 2.5 [ MIRR ] | 5) Type the risk free rate of $2.5 \%$ and calculate the Modified Rate of Return $->$ MIRR\% = 5.76 |

Repeats the calculation but, change the Interest Mode to Simple interest.

| Keys | Comment |
| :---: | :--- |
| Interest Mode <br> Simple | Set the interest to compound. |
| $5[\mathrm{r} \% \mathrm{]}[\mathrm{NPV}]$ | 1) Input the interest rate and calculate NPV. <br> Result $->$ NPV $=7,530.21$ |
| $1000[\mathrm{NPV}][\mathrm{r} \%]$ | 2) Input the desire NPV and calculate the interest rate. <br> Result $->$ r\% $=6.57$ |
| $[\mathrm{IRR} \mathrm{\%}]$ | Calculate the Internal Rate of Return. <br> Result $->$ IRR\% $=6.83$ |
| $5[\mathrm{r} \%][\mathrm{NFV}]$ | Calculate the Net Future Value at $5 \%$ rate. <br> Result $->$ NFV $=10,681.53$ |
| $2.5[\mathrm{MIRR}]$ | 5) Type the risk free rate of 2.5\% and calculate the Mod- <br> ified Rate of Return $->$ MIRR $=6.28 \%$ |

