



DataPartner Oy

## What's new in Invest for Excel 3.6

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## ***Microsoft Excel versions supported***

Invest for Excel 3.6 is supported for Microsoft Excel versions 2002, 2003, 2007 and 2010 (32-bit) for Windows XP, Vista and 7.

## ***Russian user manual***

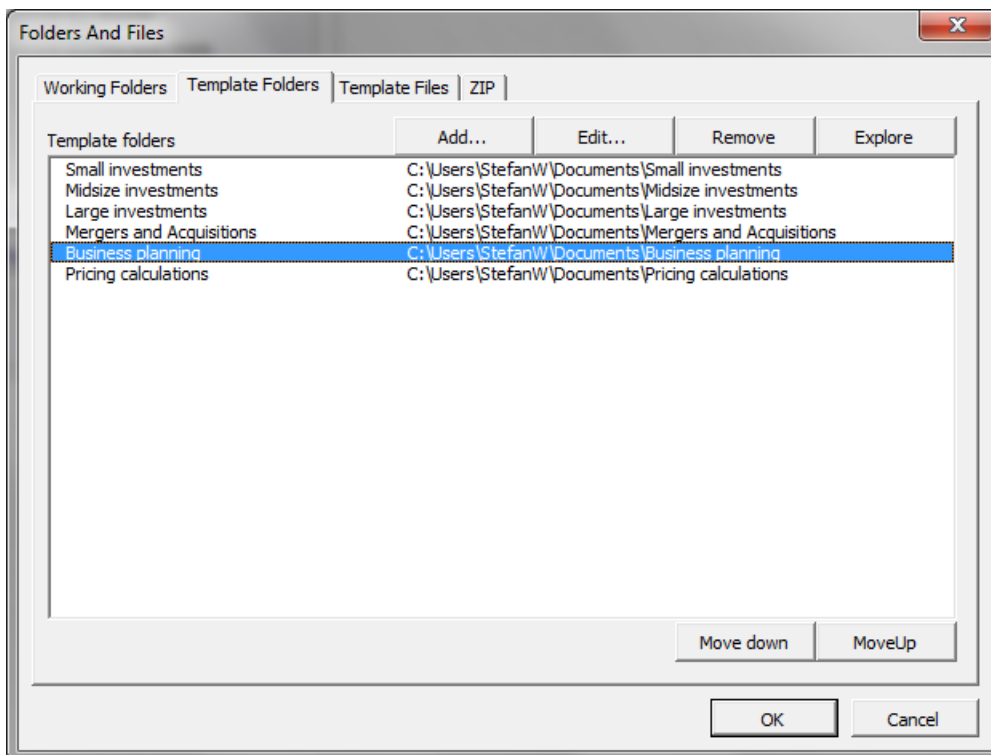
Russian user manual is included with Invest for Excel.

## ***Digitally signed program code***

Program code is signed with a digital signature which is valid until Aug 11, 2012.

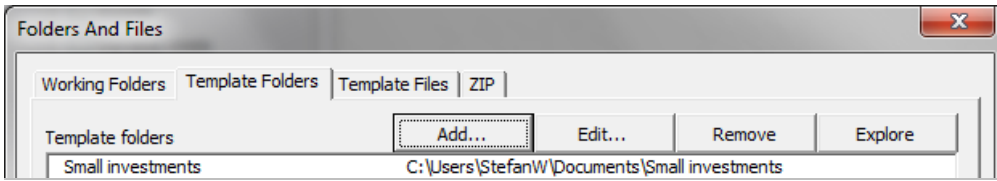
## ***Template folders***

Template folders can easily be defined for templates for different types of calculations.

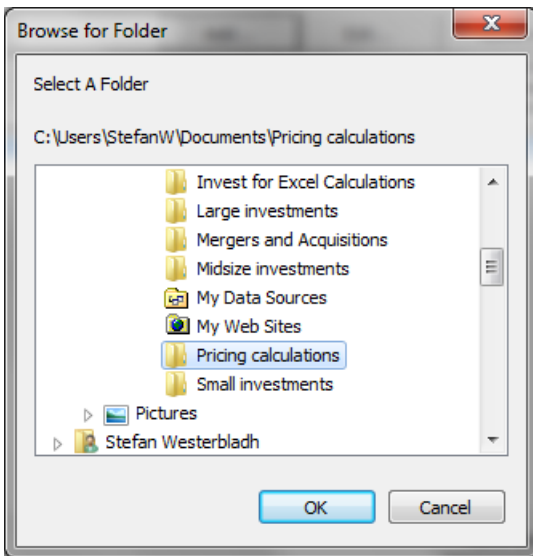


### Adding a template folder

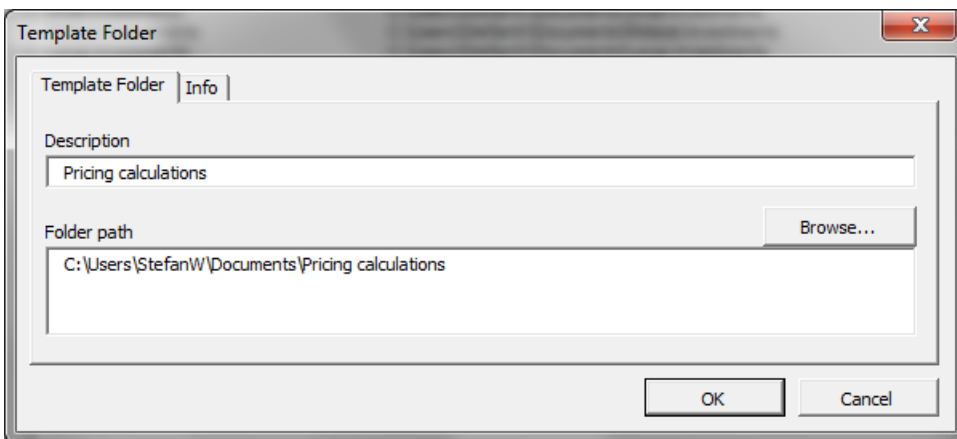
Press “Add...”



### Select a folder

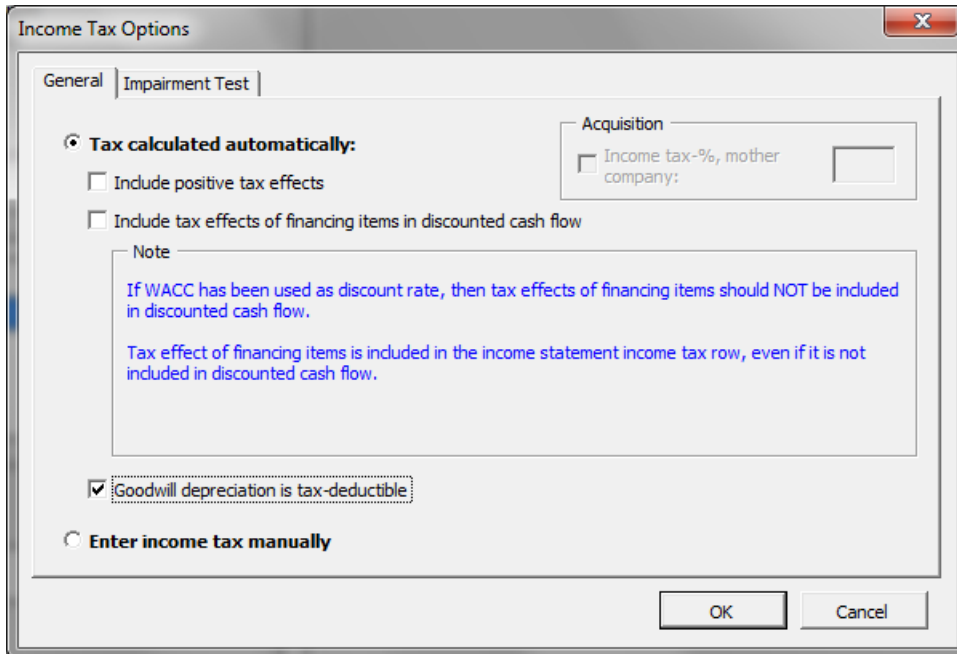


### Enter a description for the folder



## Goodwill depreciation tax-deductibility option

An option has been added to allow Goodwill depreciation to be deducted from income before tax.



## Internal Rate of Return before tax

Internal rate of return before tax can be found in the Profitability analysis table.

Internal Rate of Return (IRR)	33,04 %	>= 12 %	->	profitable
Internal Rate of Return before tax	41,81 %			
Modified Internal Rate of Return (MIRR)	23,77 %	>= 12 %	->	profitable

In some type of calculations, like real estate valuations, IRR before tax is of interest.

IRR before tax is calculated the same way as IRR, but with taxes added back to the cash flow.

When free cash flow is separated for firm and equity, IRR to Equity before tax is also available.

The IRR before tax row is hidden by default and must be unhidden manually.

IRR before tax is only available in calculation files of version 3.6 or newer.

## Tornado analysis chart

A Tornado analysis chart type is available as an option to the traditional Spider analysis chart. The Tornado chart shows how a selected result factor is affected when selected calculation rows are changed by selected minus and plus percentages.

Create Analysis Chart

Calculation: Income statement

Rows:

- Income
- Other operating income
- Variable costs
- Raw materials and consumables
- External charges
- Staff costs
- Other variable costs
- Fixed costs**
- Staff costs
- Rents
- Other fixed costs

Chart title: Tornado chart

Analyze rows (max. 5):

- Income
- Variable costs
- Fixed costs

Analyze result factor: NPV

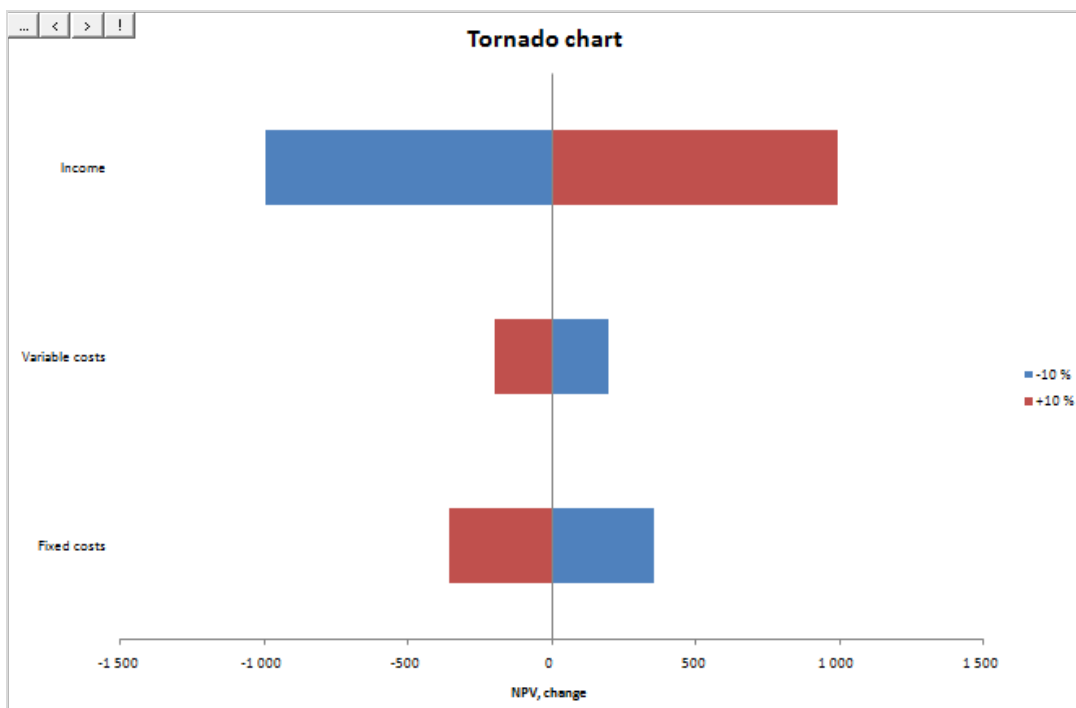
Period: 12/2010

Center value for Tornado chart:
  Zero
  Factor value

Changes in analyzed rows values, %:

Negative: -10% Positive: 10%

OK Cancel



If the factor value is selected as Center value, the chart will show the actual value of the changed result factor.

**Create Analysis Chart**

Calculation: **Income statement**

Rows:

- Income
- Other operating income
- Variable costs
- Raw materials and consumables
- External charges
- Staff costs
- Other variable costs
- Fixed costs**
- Staff costs
- Rents
- Other fixed costs

Chart title: **Tornado chart**

Analyze rows (max. 5):

- Income
- Variable costs
- Fixed costs

Analyze result factor: **NPV**

Period: **12/2010**

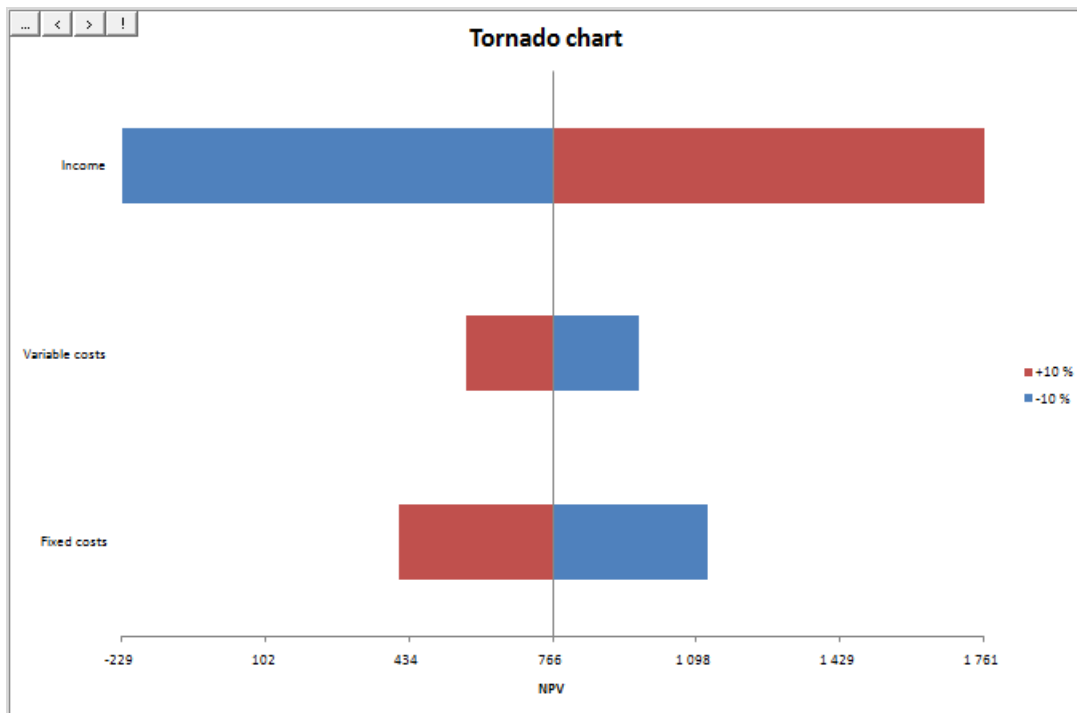
Center value for Tornado chart:

Zero  **Factor value**

Changes in analyzed rows values, %:

Negative: **-10** Positive: **10**

OK Cancel



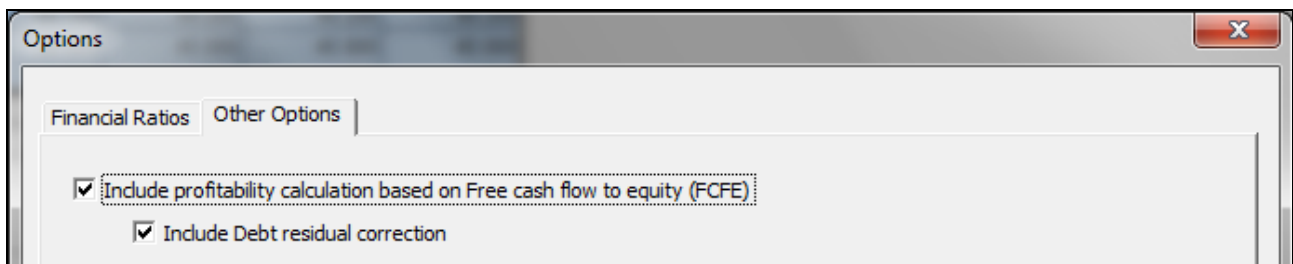
## Debt residual correction

When free cash flow to equity based profitability indicators are calculated, the return can be too favourable if there is an outstanding long-term debt that has not been corrected for.

As an example, let's look at a company with an expected outstanding interest-bearing long-term debt of 45000 at the end of the calculation term. No corrections have been done to the free cash flow to equity for this debt.

BALANCE SHEET						
EUR	12/2010	12/2011	12/2012	12/2013	12/2014	Residual
Long-term liabilities	78 700	69 700	60 700	49 200	49 200	49 200
Interest-bearing long-term debt	72 000	63 000	54 000	45 000	45 000	45 000
Interest-free long-term debt	1 200	1 200	1 200	1 200	1 200	1 200

If the option "Include Debt residual correction" is checked in the Options dialog box, Invest for Excel will automatically correct for this debt residual. The option is checked by default in new calculation files.



The debt residual correction is shown in the Profitability analysis on the Result sheet discounted to the beginning of the calculation term (or other selected calculation point) by the Cost of Equity (45000 discounted 5 years by 15% = 22373).


To Equity	
Cost of Equity	15,00 %
Discounted FCFE without residual value	100 782
+ PV of residual value to equity	12 429
- Debt residual correction	-22 373
<b>Net Present Value to equity (NPVe)</b>	<b>90 838</b>

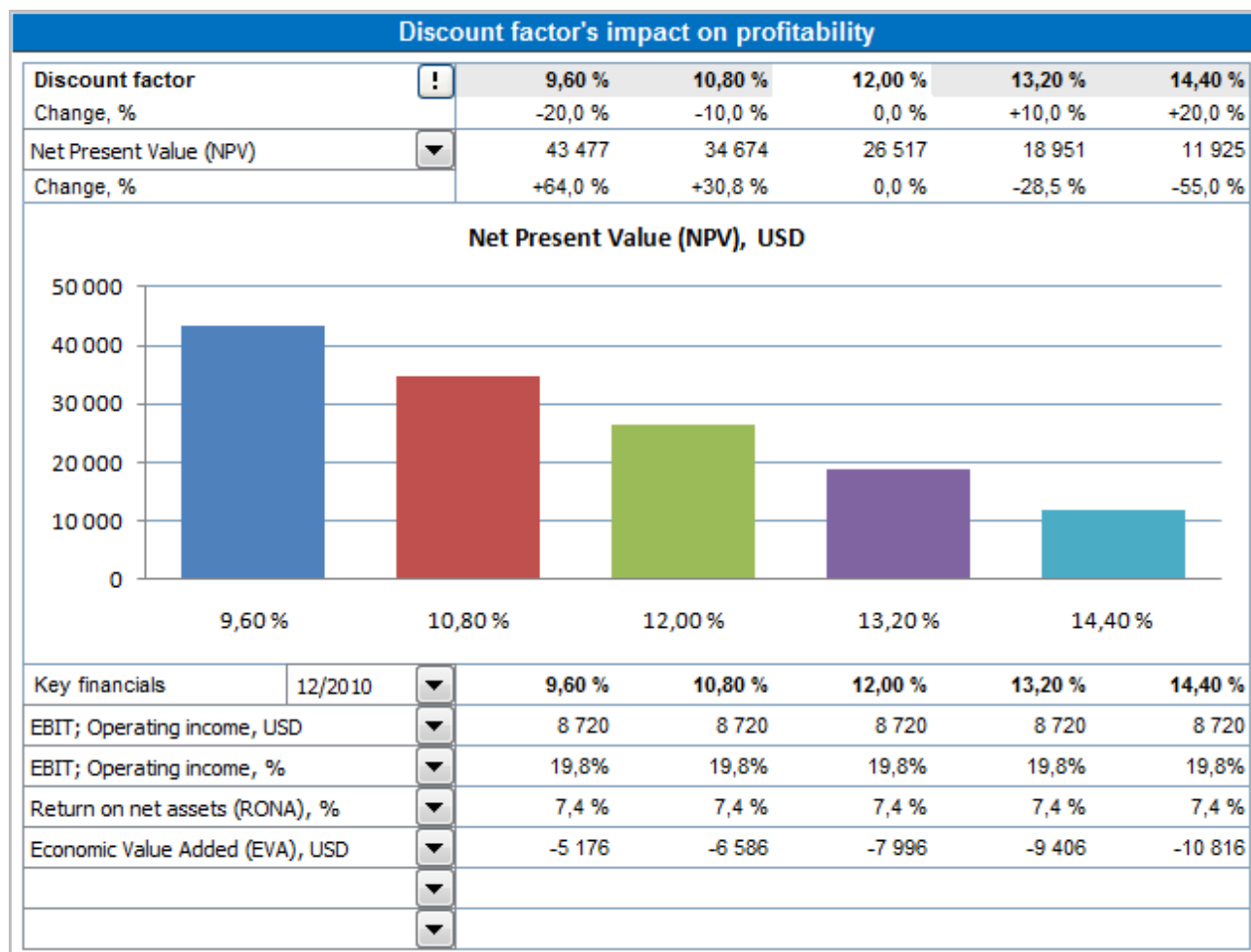
Note that if you have corrected for the debt residual in the Residual column, you should uncheck the "Include Debt residual correction" option in the Options dialog box.

Debt residual correction is only available for calculation files of version 3.6 or newer.

## Discount rate's impact on profitability

You can analyse the discount rate's impact on profitability by entering alternative discount rates. A  $\pm 10\%$  and  $\pm 20\%$  change in the discount rate is shown as default.

Enter the default values and then click on the  button to the left. Note that the analysis requires manual updating by pressing this button.



The analysis can be done for Net Present Value, Discounted Value Added and Payback time, years. Additionally, up to six key financial ratios can be included for a selected period.

When Free cash flow to equity is included in the calculation, Net Present Value to equity and Payback time to equity, years can also be analysed. Change in Cost of equity is used for these profitability ratios.



Discount factor's impact on profitability																		
Discount factor	!	9,60 %	10,80 %	12,00 %	13,20 %	14,40 %												
Change, %		-20,0 %	-10,0 %	0,0 %	+10,0 %	+20,0 %												
Cost of equity		12,00 %	13,50 %	15,00 %	16,50 %	18,00 %												
Change, %		-20,0 %	-10,0 %	0,0 %	+10,0 %	+20,0 %												
Net Present Value to equity (NPVe)	▼	26 517	17 146	8 600	793	-6 351												
Change, %		+208,3 %	+99,4 %	0,0 %	-90,8 %	-173,8 %												
<p style="text-align: center;"><b>Net Present Value to equity (NPVe), USD</b></p> <table border="1"> <caption>Net Present Value to equity (NPVe), USD</caption> <thead> <tr> <th>Discount Rate</th> <th>NPVe (USD)</th> </tr> </thead> <tbody> <tr> <td>12,00 %</td> <td>26 517</td> </tr> <tr> <td>13,50 %</td> <td>17 146</td> </tr> <tr> <td>15,00 %</td> <td>8 600</td> </tr> <tr> <td>16,50 %</td> <td>793</td> </tr> <tr> <td>18,00 %</td> <td>-6 351</td> </tr> </tbody> </table>							Discount Rate	NPVe (USD)	12,00 %	26 517	13,50 %	17 146	15,00 %	8 600	16,50 %	793	18,00 %	-6 351
Discount Rate	NPVe (USD)																	
12,00 %	26 517																	
13,50 %	17 146																	
15,00 %	8 600																	
16,50 %	793																	
18,00 %	-6 351																	
Key financials	12/2010 ▼	9,60 %	10,80 %	12,00 %	13,20 %	14,40 %												
EBIT; Operating income, USD	▼	8 720	8 720	8 720	8 720	8 720												
EBIT; Operating income, %	▼	19,8%	19,8%	19,8%	19,8%	19,8%												
Return on net assets (RONA), %	▼	7,4 %	7,4 %	7,4 %	7,4 %	7,4 %												
Economic Value Added (EVA), USD	▼	-5 176	-6 586	-7 996	-9 406	-10 816												
	▼																	
	▼																	

## Provisions

Changes in provisions can be entered in the Income statement before EBITDA. Changes in provisions are non-cash items and will affect Free cash flow only through changes in income tax.

INCOME STATEMENT					
1000 €	12/2010	12/2011	12/2012	12/2013	12/2014
Months per interval	12	12	12	12	12
Income specified:					
☰ Sales	4 900	4 974	5 048	5 124	5 201
<b>Income</b>	<b>4 900</b>	<b>4 974</b>	<b>5 048</b>	<b>5 124</b>	<b>5 201</b>
☰ Other operating income					
Variable costs					
☰ Raw materials and consumables	-588	-597	-606	-615	-624
☰ External charges					
☰ Staff costs					
☰ Other variable costs					
<b>Gross margin</b>	<b>4 312</b>	<b>4 377</b>	<b>4 442</b>	<b>4 509</b>	<b>4 577</b>
Fixed costs					
☰ Staff costs					
☰ Rents					
☰ Other fixed costs	-1 750	-1 768	-1 785	-1 803	-1 821
Provisions, increase (-) / decrease (+)	-300	-200			500
<b>EBITDA; Operating income before depreciation</b>	<b>2 262</b>	<b>2 409</b>	<b>2 657</b>	<b>2 706</b>	<b>3 256</b>

Accumulated provisions are shown in the Balance sheet on the liabilities side.

Appropriations	0	0	0	0	0
Provisions	300	500	500	500	0
Liabilities					
☒ Long-term liabilities	0	0	0	0	0
☒ Short-term liabilities	0	0	0	0	0
Total liabilities	0	0	0	0	0
<b>SHAREHOLDERS' EQUITY AND LIABILITIES</b>	<b>1 883</b>	<b>3 770</b>	<b>5 630</b>	<b>7 524</b>	<b>9 303</b>

## Deferred taxes

Deferred taxes can be entered in the Income statement after ordinary Income taxes.  
Deferred taxes do not affect Free cash flow.

INCOME STATEMENT					
1000 €	12/2010	12/2011	12/2012	12/2013	12/2014
Months per interval	12	12	12	12	12
<b>Income specified:</b>					
Sales	4 900	4 974	5 048	5 124	5 201
<b>Income</b>	<b>4 900</b>	<b>4 974</b>	<b>5 048</b>	<b>5 124</b>	<b>5 201</b>
Other operating income					
Variable costs	-588	-597	-606	-615	-624
Raw materials and consumables	-588	-597	-606	-615	-624
<b>Gross margin</b>	<b>4 312</b>	<b>4 377</b>	<b>4 442</b>	<b>4 509</b>	<b>4 577</b>
Fixed costs	-1 750	-1 768	-1 785	-1 803	-1 821
Other fixed costs	-1 750	-1 768	-1 785	-1 803	-1 821
Provisions, increase (-) / decrease (+)	-300	-200			500
<b>EBITDA; Operating income before depreciation</b>	<b>2 262</b>	<b>2 409</b>	<b>2 657</b>	<b>2 706</b>	<b>3 256</b>
Depreciation	0	0	0	0	0
<b>EBIT; Operating income</b>	<b>2 262</b>	<b>2 409</b>	<b>2 657</b>	<b>2 706</b>	<b>3 256</b>
Financing income and expenses					
<b>EBT; Income after financing items</b>	<b>2 262</b>	<b>2 409</b>	<b>2 657</b>	<b>2 706</b>	<b>3 256</b>
Extraordinary income and charges					
<b>Income before appropriations and taxes</b>	<b>2 262</b>	<b>2 409</b>	<b>2 657</b>	<b>2 706</b>	<b>3 256</b>
Change in appropriations					
Appropriations, increase (-) / decrease (+)					
Income tax	-679	-723	-797	-812	-977
Deferred tax	-200			200	
<b>Net income for the period</b>	<b>1 383</b>	<b>1 686</b>	<b>1 860</b>	<b>2 094</b>	<b>2 279</b>

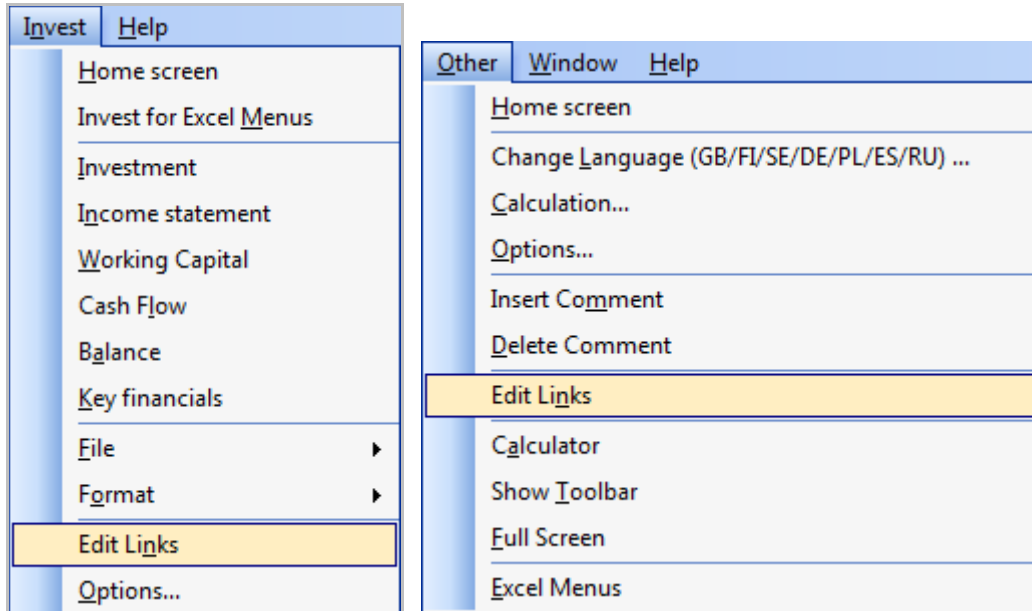
Accumulated Deferred taxes are shown under Long-term debt in the Balance sheet.

Liabilities					
Long-term liabilities	200	200	200	0	0
Interest-bearing long-term debt	0	0	0	0	0
Interest-free long-term debt	0	0	0	0	0
Deferred tax liabilities	200	200	200	0	0
Short-term liabilities	0	0	0	0	0
Total liabilities	200	200	200	0	0
<b>SHAREHOLDERS' EQUITY AND LIABILITIES</b>	<b>1 883</b>	<b>3 770</b>	<b>5 630</b>	<b>7 524</b>	<b>9 303</b>

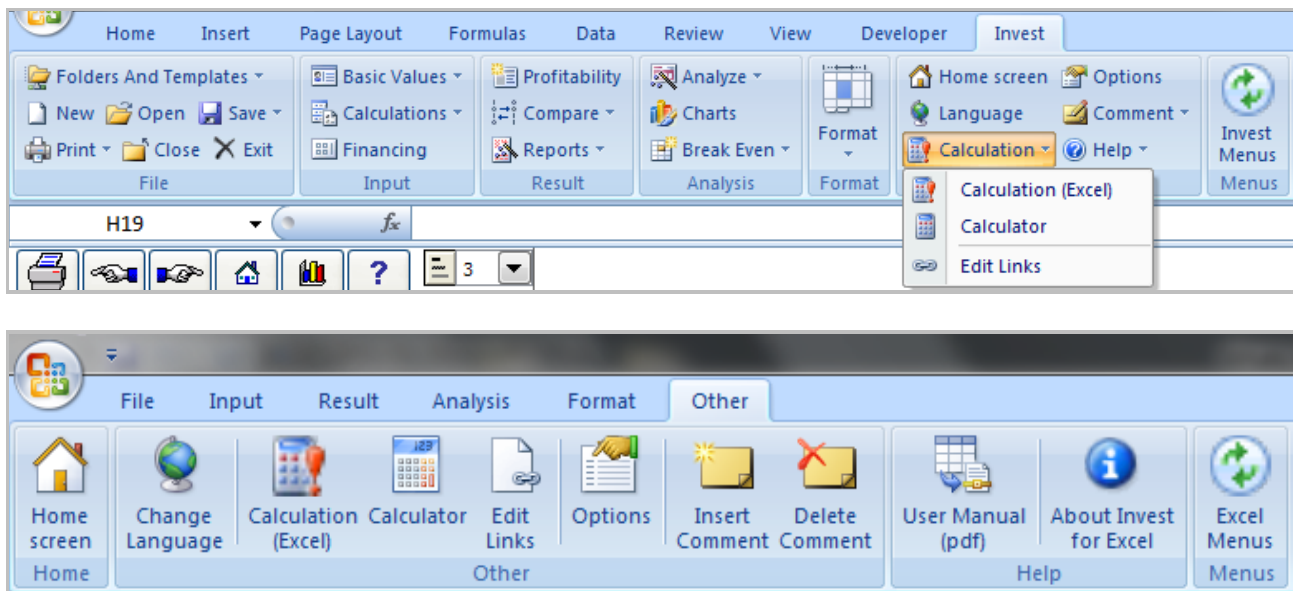
## Edit links

Links to external documents can be edited from Invest for Excel's menus.

Excel 2003:



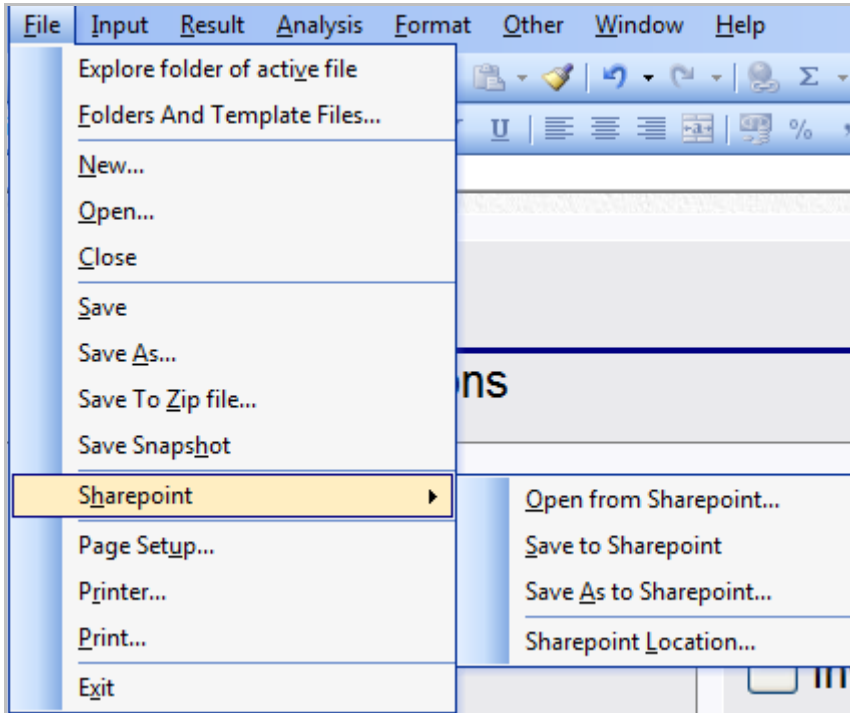
Excel 2007:



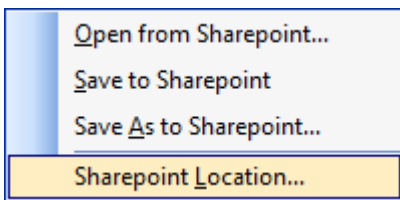
Note that editing links from Excel's menus will not work with an Invest for Excel calculation file.

## SharePoint file menu

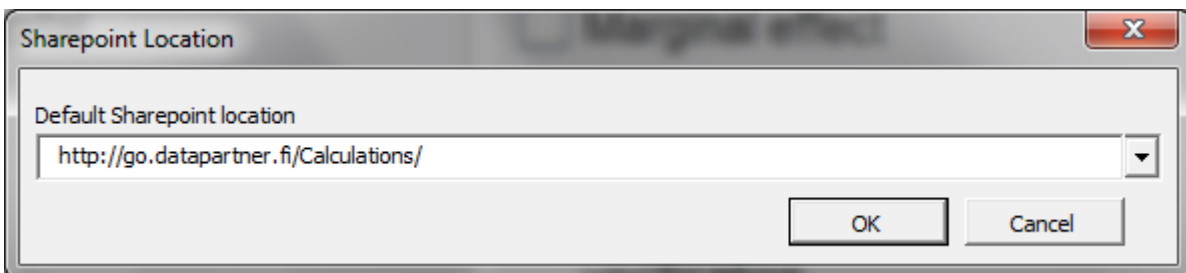
A SharePoint file menu has been added for quick open from and save to a SharePoint location. (Enterprise-version is required.)



To set default Sharepoint location, select SharePoint location in the Invest for Excel SharePoint menu.



Enter SharePoint location and press OK.



## Include equity changes

Equity changes can be included when updating financing file cash flows from the calculation file. This way it's easy to see the financing need after equity for each period.

Update Investment

Update from investment file:

InvfileSWfinequity.xls

Update total investment (Project)

	Amount	Units	Currency
Total investment in investment file:	1 300 000	1	EUR
Exchange rate:	1,000000		
Total investment in financing file:	1 300 000	1	EUR

Update investment cash flows (InvSpec)

Include equity changes

OK Cancel

## Implied Exit multiple

When perpetuity/extrapolation is used, an implied exit multiple is automatically calculated in the bottom of the perpetuity calculation table.

Perpetuity is based on			
<input checked="" type="radio"/> Net cash flow for year	12/2019	32 437	Extrapolation period
<input type="radio"/> Enter annual value (EUR)			Perpetual
Type of perpetuity			Base value (12/2019)
<input checked="" type="radio"/> Standard (no growth)			32 437
<input type="radio"/> Growing by annual percent			Discount rate
			12,00 %
			Value (12/2019)
			270 308
			Present value (1/2010)
			87 032
Implied Exit multiple		5,83	Residual value
			270 308

The implied Exit multiple is: undiscounted residual value / last years EBITDA.

## EV / EBITDA

In a valuation file Profitability analysis an EV / EBITDA-ratio is calculated.

Present value of business cash flows		Notes
± PV of operative cash flow	152 831	
<input type="checkbox"/> PV of residual value	87 032	
<b>Perpetuity is based on</b>		
<input checked="" type="radio"/> Net cash flow for year	12/2019 ▼ 32 437	Extrapolation period Perpetual ▼
<input type="radio"/> Enter annual value (EUR)		Base value (12/2019) 32 437
<b>Type of perpetuity</b>		Discount rate 12,00 %
<input checked="" type="radio"/> Standard (no growth)		Value (12/2019) 270 308
<input type="radio"/> Growing by annual percent		Present value (1/2010) 87 032
Implied Exit multiple	5,83	< Residual value 270 308
<b>Present value of business cash flows</b>	<b>239 863</b>	
- Present value of reinvestments (maintenance etc.)	0	
<b>Total Present Value (PV)</b>	<b>239 863</b>	
<input type="checkbox"/> Interest-bearing net debt of acquired company	0	
<b>Free cash flow-based equity value (EV)</b>	<b>239 863</b>	
EV / EBITDA	6,66	Based on EBITDA: 12/2009 ▼

EV is the Free cash flow-based equity value (also referred to as Enterprise value) and EBITDA can be selected from a dropdown list consisting of the periods in the calculation.