Finrobot
LIMITED

USER MANUAL

TOPLINE MODEL

SPREADSHEET
PRINCIPLES
COMPLIANT

ICAEW

October 2014. Release Version 2

Contents

1. Introduction

1.1. General information

FinRobot is an automatic assembler of financial Models in Microsoft Excel. It allows you to set online parameters for your project and download a financial Model with working formulae and input fields in Microsoft Excel.

When ordering your Model online, sensitive financial data about your business does not need to be inputted, if you prefer not to. Your Model will be delivered with dummy financial data, which can be replaced with your own inputs off-line as needed.

Your Model can be further modified off-line. Unlike the black box solutions, the code and type of formulae are intentionally simple and transparent.

Currently, FinRobot provides six customisable templates or models called 'Base Model', 'Case Builder Model', 'TopLine Model', 'Manufacturing', 'Quick IRR Model' and 'Quick RE Development Model'. This Manual describes the functionality of the TopLine Model. To read more about our other Models please refer to their respective manuals (available on-line and as a download in pdf).

Initial understanding of the Model's layout and templates can be achieved by viewing screenshots of the Model from the Models' section of our site. Note that **yellow fields** are **data input fields** which can be re-populated with data off-line without any risk of unintentionally altering the functionality or structure of the Model.

SPREADSHEET PRINCIPLES COMPLIANT*

The Institute of Chartered Accountants in England and Wales (ICAEW) has recognised FinRobot's TopLine Model as being compliant with ICAEW's Twenty Principles for good spreadsheet practice. The purpose of these Principles is to help reduce the amount of time wasted, and the number of errors caused, by businesses (including accountancy practices) as a consequence of the way they and their employees use spreadsheets.

Attention

In compliance with Principle 20 of the Principles, all worksheets of the Model **are locked** except for designated **data input fields**. If you need to change working areas of the Model you can unlock any tab by going to the Review menu at the top of Excel and clicking on 'unprotect sheet' button. Default password is **finrobot,** but you may wish to substitute a password of your own choice in place of the default. We recommend the Model is locked again after any planned changes to avoid accidental overwrites by end users.

Please ensure you make a back-up after downloading your Model.

** Users should be aware that the Topline Model does not cover all aspects of good spreadsheet practice and therefore should ensure that they follow the best practice appropriate to their specific circumstances when relying upon spreadsheets.*

1.2. Software requirements

Our Models have been successfully tested for Microsoft Office Excel 2007-2013. If your installation of Microsoft Office is different, you may wish to use free Microsoft Office converters. However, we do not guarantee that the Model will retain all of its functionality and graphical representations if opened in a different version of Microsoft Office.

1.3. TopLine Model functionality

Sibling of Base Model, Topline Model has more functionality on the top line and allows you to -

- Set your own start date and calendar for forecast periods: years, quarters, or months;
- Model revenues by customer traffic or sales volume and create up to ten product lines or user groups –
    - each user group is modelled off customers' acquisition and retention rates and an average spend (check) per customer
    - each product group models gross revenues by volume and price per product and then assigns sales to up to four sales channels varied by price discounts or rebates by channel
- Assign up to five direct cost elements for each product line or user group, driven by cost per user/unit or by general inflation factors, as desired;
- Model and populate separate schedules for overhead costs for up to five line items, fixed or variable, as desired;
- Set parameters for your opening balance sheet and working capital requirements, book future CapEx program (the Model will automatically work out its depreciation schedule);
- Calculate income tax by taking into account potential loss carry forwards;
- Simulate three reporting forms: balance sheet, profit and loss statement, and cash flow statement;
- Calculate NPV and IRR for business or a project;
- Save time with an easy interface to rename key elements of your revenue and cost items to suit your business environment, again with the ability to make later changes in Excel

The TopLine Model provides more additional flexibilities and built-in functionality as described in this Manual.

2. Inputting data when assembling the Model online

Once you are a registered and logged-in user, you can click 'Assemble' button within the description box for the TopLine Model on the Models' page of the site. Alternatively, you can click on 'Assemble' button in the top left corner of your Account page and select TopLine Model in the submenu.

Data input is completed in 5 stages, or Steps. Inputs such as labels for line items, financial and operational assumptions can be changed later off-line. However, structural parameters of the Model cannot be easily altered once the Model is purchased.

Hence, there are no default settings for structural parameters. The user needs to consider the options provided and to decide what configuration is desired. Structural data is entered at Step 1 and, partially, at Steps 3 and 4. Please read more below.

When assembling a model proceed to next Step by clicking 'Next' or return to previous Step by clicking 'Back'. 'Save' button remembers all entered data. After

saving you can leave the assembly Steps and continue later by clicking ‘Continue’ button at the top of the User Account page.

If you wish to globally restore default dummy values for assembled Model navigate ‘Back’ to Step 1 and click ‘Restore Default’ button. ‘Reset’ button restores default values locally for any current Step. You can always refer to on-line Manual for more details by pressing ‘Help’ button.

2.1. Step 1. Setting the TopLine Model’s structure

The parameters of the Model selected at Step 1 are structural except for currency, currency units, corporate tax rate and Model's Start date) and cannot be changed once the Model is purchased. The following table summarise the choices available to users at Step 1 of the Model’s online assembly:

Input field	Comment
Model's language is	Current available in English or Russian. Note that switching Model’s language would completely reset your language environment including entry forms and commentary fields.
Start date is	The Model assembler would only allow a first date of any month to be the Model’s start date. Non-conforming day of the month entry will automatically revert to the first day of the month chosen by user. Note that, if your start data is not January 1st then your reporting periods and annual summaries would not fall on calendar quarter and year ends.
Step interval is	Step interval can be set to year, quarter or month. By definition, the combination of the number of periods and periods’ step would set the timeline for your Model.
Number of product lines / user groups is	Can range from 1 to 10. This is a structural feature provided for independent Revenue and Cost of Goods Sold assumptions for each product line or user group (as per revenues modelling option immediately below). Please see details on revenue and COGS assumptions below (Step 2 and Step 3 respectively).
Revenues are modelled by	Available options are sales channels and customer dynamics. This is a structural input. Your choice will impact what will appear at Step 2 and Step 3 as described below.

Number of Cost of Goods Sold Items is	Can range from 1 to 5. This is a structural feature applied to each product line or user group. Assumptions for COGS Items are entered at Step 3.
Model's currency is Customise currency	Sets the Model's currency. The Model does not conform to any currency coding standard so you can input any name or currency code as needed by typing a text value or a symbol of your choice. For example, your currency can be GBP or £. Alternatively, select most common currency codes from the pull down menu provided.
Currency units are in	Sets scales for monetary units. Default value is in thousands, or 000s. If you wish to change to millions or any other scale, you would have to make sure the revenue line in the Model is computing properly – e.g. if your revenues are expressed in millions then your sales volume is assumed to be in millions too.
Number of periods is	Can be set to any integer value between 3 and 60. By definition, the combination of the number of periods and periods' step would set the timeline for your Model. Please note that when selecting monthly or quarterly periods you are not restricted to make the total match to full number of years. For example, your project can forecast out for 38 months, or equivalent to 3 years and 2 months. In such a case, the annual summary would only pick up two months in the fourth year of your forecast.
Corporate tax rate is	Sets the income (corporate) tax rate. The default (dummy) value is 20%.
Number of Overhead Items is	Can range from 1 to 5. This is a structural feature applied to central costs assumptions for the whole business. Assumptions for Overheads Items are entered at Step 4.

2.2. Step 2. Configuring and Inputting Revenue Assumptions

Step 2 layout depends on your choice of how Revenues are modelled. If at Step 1 you opted for sales channels then you will be taken through options described in section 2.2.1 (Sales Channels). If your choice was customer dynamics' option, then Step 2 will take the route described in section 2.2.2 (User Groups).

Attention

This Step describes revenue assumptions for Product A or User Group A. Accordingly, Step 2 will show as Step 2A to highlight that the assumptions apply to the first Product A or User Group A only. On-line assembler would repeat your

inputs for all product tabs or user groups to generate your Demo. Purchased copy of the Model allows changes to input values in all product lines' / user groups' tabs present in the Model.

Note that both options, 2.2.1 (Sales Channels) and 2.2.2. (User Groups) – do not have structural inputs. If you skip this Step your Demo version of the Model will show default values. You can assign values for any revenue assumptions off-line in the purchased copy of the Model.

2.2.1. Revenues modelled by Sales Channels

Step 2A entry form reacts to your choice made at Step 1. For example, if you configured the Model to be in 000's USD, legends at Step 2 would incorporate your choices as shown in the table below (legends dependent on Step 1 are shown in [square brackets]):

Input field	Comment
Revenue Assumptions *1st Forecast [Month]* Sales Volume, ['000s] List Price, [USD] Revenue, ['000s USD] *Forecast [Months]:2 – [N]* Volume Growth, % per annum Price Growth, % per annum	Captures forecasts for physical sales volume and product pricing assumptions. Note that data for the first forecast period is entered in absolute terms as the base level for driving subsequent periods by growth rates. If you do not wish to have independent drivers for volume and pricing, then set the volume of sales and its growth factor to 1 and 0 respectively. Your pricing and revenue lines will then show identical data for all forecast periods. Note that pricing data is in this area (List Price) is computed before discounts or rebates awarded to channels (see next block of inputs). Hence, resulting revenue in this box is computed Gross (e.g. before any discounts).
For each sales channel * 4 Editable legend Price Discount by Channel, % from List Price Sales Volume by Channel, % of Total Sales Volume Net Sales, [000s USD]	This area captures assumptions for volumes and price discounts per sales channel. You can edit name of each channel (or do it off-line later). Note that the net sales number (after discounts) immediately reacts to any changes to assumptions. For example, directing more sales to retail or direct customers with no discounts would improve net sales. Likewise, presence of heavily discounted promos or overstocks would reduce effective price and net sales achieved.

Please note that the on-line entry form allows only 'flat' (constant) assumptions for growth rates, volumes and discounts. This should not be a cause for concern. Your purchased Model allows applying revenue assumptions for each forecast period as needed. Please refer to 'working with the Model off-line' section below.

Attention

For ease of reference growth rates are set on annual basis. For example, if your Model is quarterly you do not have to apply a fraction of the year growth rate; the Model will do it for you automatically.

2.2.2. Revenues modelled by Customer Traffic (Dynamics)

Step 2A entry form reacts to your choice made at Step 1. For example, if you configured the Model to be in 000's USD, legends at Step 2 would incorporate your choices as shown in the table below (legends dependent on Step 1 are shown in [square brackets]):

Input field	Comment
1st Forecast [Month] Existing Customers, ['000s] Customer Additions, ['000s] / [Month] Customer Churn, % per annum Average Check, [USD] Revenue, ['000s USD]	Enter existing customers for any existing customer base at the start of the modelled period. Customer additions show how many new customers are acquired during each period. Churn rate, expressed in annual terms, is used to calculate what percent of customer base will churn away during each period and would not be active customers / active users in the following period. Lower churn means more effective customer retention activities or general stickiness of your business model. Average check means average spend by each customer. In advertising driven businesses this could mean how much add revenue is generated by each active user. Revenue for each period is calculated as average customer times average check.
Forecast [Months]:2 – [N] Customer Additions, ['000s] / [Month] Customer Churn, % per annum Price Change, % per annum	This area repeats Customer Additions and Churn inputs entered for the first period to highlight the fact these assumptions are used in calculating customer base for each forecast period. Price Change is a new input applied to Average Check assumed for the first forecast period to drive pricing forward from period to period. Your purchased Model allows variation in price growth assumption for each forecast period as needed. Please refer to 'working with the Model off-line' section below.

Attention

For ease of reference growth rates are set on annual basis. For example, if your Model is quarterly you do not have to apply a fraction of the year growth rate; the Model will do it for you automatically.

2.3. Step 3. Populating revenue and operating costs assumptions

Step 3 has a combination of structural and non-structural elements. The structural elements refer to your choice of fixed vs. variable drivers for Cost of Goods Sold items, or COGS. The number of COGS items shown at this Step depends on your selection made during Step 1.

At this Step, you can assign values and replace any legends for any of the COGS items to something that better describes the nature of your business. You can also make these changes off-line in the purchased copy of the Model.

Attention

Step 3 will show as Step 3A highlighting that the data applies to COGS assumptions for the first Product A or User Group A only. On-line assembler would repeat your inputs for all product tabs or user groups to generate your Demo. Purchased copy of the Model allows changes to input values in all product lines' / user groups' tabs present in the Model.

Note that Step 3 entry form reacts to your choice made at Step 1. For example, if you configured the Model to have 3 COGS items in 000's USD, legends at Step 3 would incorporate your choices as shown in the table below (legends dependent on Step 1 are shown in [square brackets]):

Input field	Comment
For each COGS item - Editable Legend * [5 line items] *1st Forecast [Month] ['000s USD]* Select Fixed or Variable driver Input Value for Selected Driver *Forecast[Months]: 2 – [N]* Input Growth Rate for Selected Driver	The fixed/variable driver option requires user to identify the type of driver for each COGS item: fixed cost element will forecast out at growth rates set by user; variable cost element is modelled as cost per product unit or per average customer (if you opted for sales channel revenue Model you will see 'expressed in units of sales', for customer dymamics option the metric will show 'per customer'). This choice is structural and cannot be reversed once the Model is purchased. By default, all COGS elements are preset to be variable costs, while all overhead elements (next Step) are fixed costs. You can change COGS' fixed-variable assumption on item-by-item basis. Fixed-variable variation is applied to all product lines / user groups and cannot vary from product to product

Please note that the on-line entry form allows only 'flat' (constant) growth / margin rates assumption. This should not be a cause for concern. Your purchased Model allows applying COGS growth and margin assumptions for each forecast period as needed. Please refer to 'working with the Model off-line' section below.

Attention

For ease of reference growth rates are set on annual basis. For example, if your Model is quarterly, you do not have to apply a fraction of the year growth rate; the Model will do it for you automatically.

2.4. Step 4. Populating overhead assumptions

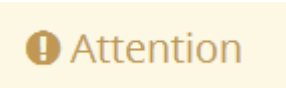
Please note that this Step has a combination of structural and non-structural elements. The structural elements refer to your choice of fixed vs. variable drivers for overhead cost elements (see detailed description below). Absolute cost base levels and values assigned to drivers are not structural and can be modified off-line. At this Step, you can also rename legends for Overhead line items.

Unlike Step 3, Step 4 is not broken into the number of product lines. The assumption is that overheads are whole at corporate level and are not allocated to individual product lines.

Note that Step 4's field legends react to your choice of inputs from Step 1. For example, if you configured the Model to have three overhead line items, then only three cost elements would appear on the screen for editing and data input. Your choice of currency and scale entered at Step 1 would also be incorporated. The following table summarises options available at Step 4 (legends and values dependent on Step 1 are shown in [square brackets]).

Input field	Comment
Overhead Assumptions Edit Overhead Item * [5 elements] *1st Forecast[Month], [GBP]['000s]* Input Value for Overhead Item *Forecast [Periods]: 2 – [N]* Choose Fixed / Variable Driver Input, % Growth or % Revenue	Captures forecasts for overhead assumptions. Note that data for the 1st forecast period is entered in absolute terms as the base level for driving subsequent periods by growth or margin rates. The fixed/variable driver input requires user to identify the type of driver for each cost element: fixed cost element will forecast out at growth rates set by user; variable cost element is modelled as a percentage of revenue (e.g. margin driven). This choice is structural and cannot be reversed once the Model is purchased. By default, all overhead elements are preset to be fixed costs. You can change this assumption on item-by-item basis.

Please note that the on-line entry form allows only 'flat' (constant) growth / margin rates assumption. This should not be a cause for concern. Your purchased Model allows applying overhead growth and margin assumptions for each forecast period as needed. Please refer to 'working with the Model off-line' section below.



For ease of reference growth rates are set on annual basis. For example, if your Model is quarterly you do not have to apply a fraction of the year growth rate; the Model will do it for you automatically.

2.5. Step 5. Populating opening balance sheet positions and related assumptions

This Step has no structural inputs and can be skipped during on-line assembly if you are happy to have your Demo or the full Model populated with dummy numbers. You can replace dummies off-line once the purchased Model is downloaded.

If you choose to insert your assumptions, note that such data or similar financial information on your business or project is stored on our servers for seventy-two hours only (from the date and time the Model is purchased). Beyond this timeframe, the data in the archived Model reverts to dummy numbers.

The following table summarise the choices available to users at Step 4 of the assembly:

Input field	Comment
Long Term Assets Net Working Capital Net Operating Assets Cash Debt Funding Net Debt Net Assets Equity & Reserves Net Working Capital, % Revenue Cash Rate, % per annum Debt Rate, % per annum	Allows populating data for your opening balance sheet items. The balance sheet structure is fixed and cannot be changed. If your historic balance sheet has more items than what is provided for by the assembler, we suggest you analytically aggregate these to match the number of items allowed in the Model. This step also allows for entry of interest rates assumptions for cash/debt items and working capital requirements expressed in % of Revenue. These are not structural changes and can be changed later off-line. To change interest rates and working capital assumptions directly in the Model go to the opening balance sheet tab.
Check	You cannot complete the online assembly if the total assets and liabilities amounts do not match. The check field at the bottom of the input screen would indicate an error if there is a mismatch.

2.6. Requesting free demo and purchasing options

You are done customising your Model. Click 'Next' and proceed to download and purchase options. You can now request a demo or purchase a full working version of the Model. Demo copy would have all your inputs entered during the on-line assembly but would not contain any formulae.

Select 'Request Demo' button and your free Demo would be assembled and appear in your User Account available for download. You will receive a notification via email that your Demo is ready. If you do not like your Demo you can start again by assembling new data set as desired and requesting a new Demo.

Note that you can always convert any of your Demos stored in the User Account to paid versions by clicking on 'Purchase' button next to your Demo. You will be transferred to our payment options screen. Upon payment confirmation the full working version would replace your Demo in your User Account.

Alternatively, you can opt to purchase working version of the model straightaway. In this case click on the 'Buy Options' button and the next screen will take you to the payment options. Upon payment confirmation the full working version would be assembled and appear in your User Account available for download. You will receive a notification via email that your Model is available for download.

We will store a copy of your Demo or your Model in your Account and you can always download additional copy later.

3. Working with the Model off-line

Please note that Excel file of the Model has fields marked with yellow background to highlight data input fields you can re-populate with your assumptions without any risk to altering the structural layout of the Model.

Attention

In compliance with Principle 20 of ICAEW's Twenty Principles for good spreadsheet practice, all worksheets of the Model **are locked** except for designated **data input fields**. If you need to change working areas of the Model you can unlock any tab by going to the Review menu at the top of Excel and clicking on 'unprotect sheet' button. Default password is **finrobot,** but you may wish to substitute a password of your own choice in place of the default. We recommend the Model is locked again after any planned changes to avoid accidental overwrites by end users.

3.1. 'Navigation' tab

'Navigation' tab allows clickable navigation between all tabs in Excel file of the Model. By clicking on the block with any tab name, you will be instantly 'jumped' to that tab.

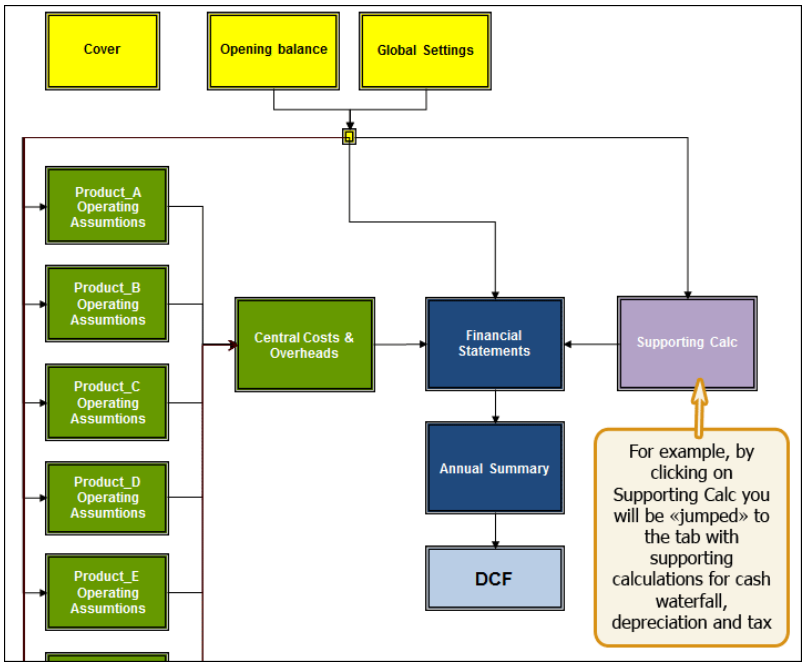


Figure 3.1. Navigation in the Excel file of the Model

Navigation hyperlink is located in the upper left corner of each tab. Clicking it will return you to 'Navigation' tab.

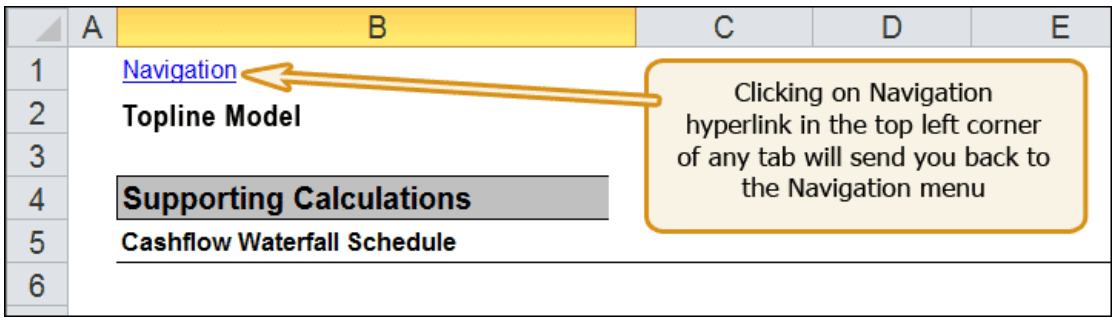


Figure 3.2. Upper left corner of 'Supporting Calc' tab showing 'Navigation' link

Attention

To make hyperlinks work cell A1 in each tab has a hidden marker containing tab's name. Although cell A1 appears empty, it is essential for the Model's navigation to work properly. Do not remove this cell.

3.2. 'Cover' tab

There are three fields at the centre of the tab. When the Model is opened for the first time, the fields show the following:

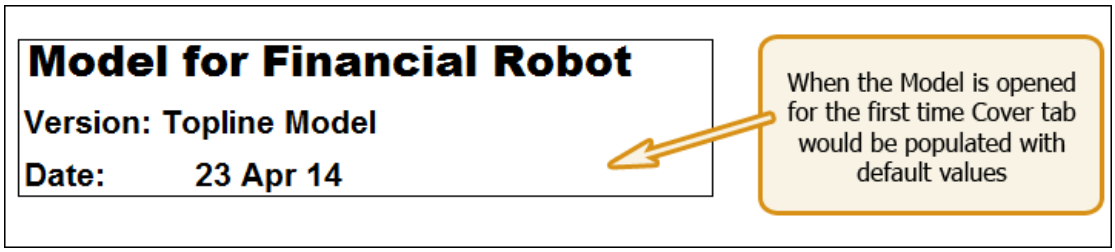


Figure 3.3. Centre of 'Cover' tab showing default values

You can edit these legends by going to the tab called 'General Settings' ('Global'). At the top of 'Global' tab you can type in your own legends for the cover page, including the project name, version or date. The latter, unless manually overridden, will always show the current date whenever the file is re-opened.

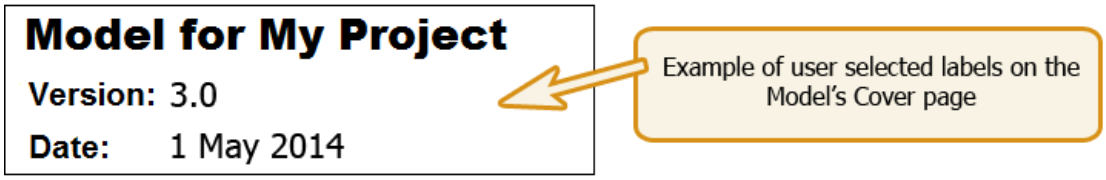


Figure 3.4. Centre of 'Cover' tab showing new parameters

3.3. 'Global' tab

In addition to Cover settings described above, ‘Global’ tab contains general data inputs required by all other tabs of the Model to function properly.

If you populated all fields when assembling the Model online, there is nothing in the Global tab that requires your immediate attention. However, if you skipped some online Steps, ‘Global’ tab would be a good place to start populating the Model with your own data as follows:

Input Area	Comment
Project & Model attributes	Your project or business name, model version and date (as illustrated immediately above) in section 3.2 'Cover' tab
Calendar	The next block of cells deals with the calendar and periodicity of the Model. Whilst you can easily change the Model's start date we generally do not recommend changing its periodicity. If, however, it is absolutely necessary, please consider that: • Any changes to the Model’s periodicity should match with the period counters in lines 14 to 16 (counters of months, quarters and years) and cell G17 (number of periods). • If not done properly, some or all period dependent functions and calculations including interest charges, amortisation schedules and annual summaries may not perform as expected and should be checked for errors.

Attention

Resetting the Model’s periodicity is for advanced users only. FinRobot does not guarantee the Model respond to change and will work correctly.

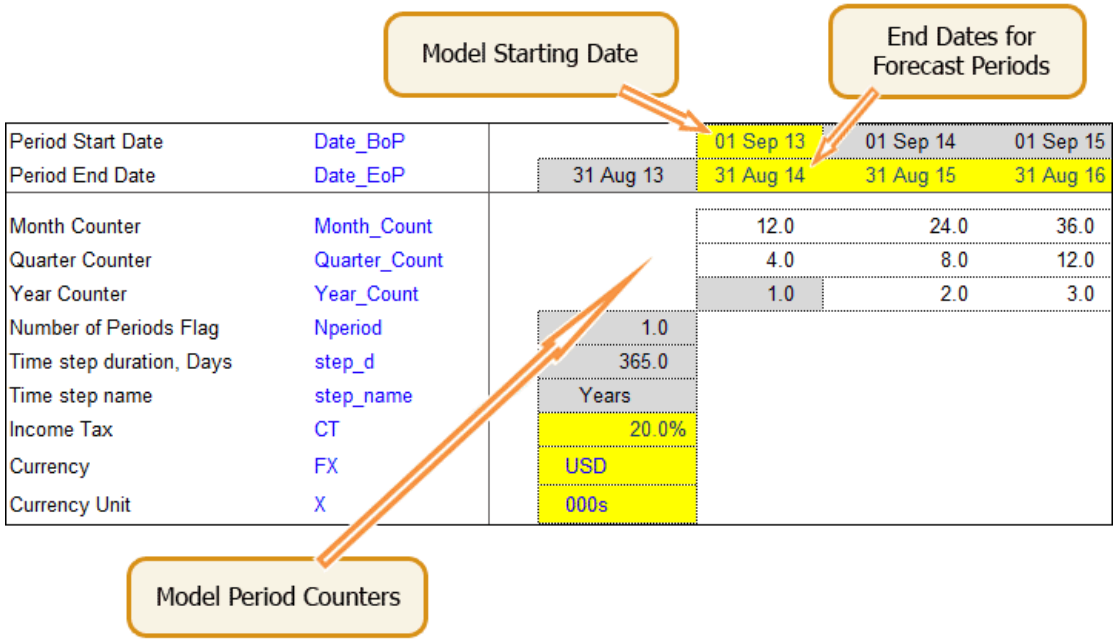


Figure 3.5. Inputs for the Model’s calendar and periodicity

Income tax, currency and units fields are located immediately below the calendar items.

Input Area	Comment
Income Tax	Default value for Corporate or Income tax rate is 20% unless changed during the assembly stage
Currency	Type in your own currency code in the field provided. The field is pure text and is not restricted to any currency code. For example, you may opt for GBP or £. Automatically applies to all financial items throughout the Model.
Currency Unit	Currency unit or scale is set to 000s by default. The field is pure text label, so if you wish to scale your Model in millions, etc. your volume and pricing per unit assumptions should be scaled accordingly. Automatically applies to all financial items throughout the Model

All remaining editable areas of 'Global' tab - as described below - are labels for various line items used elsewhere in the Model. Unless changed during the assembly stage these will show default values. You can replace any default label with something more suitable for your business. Your inputs will be picked up throughout the Model automatically.

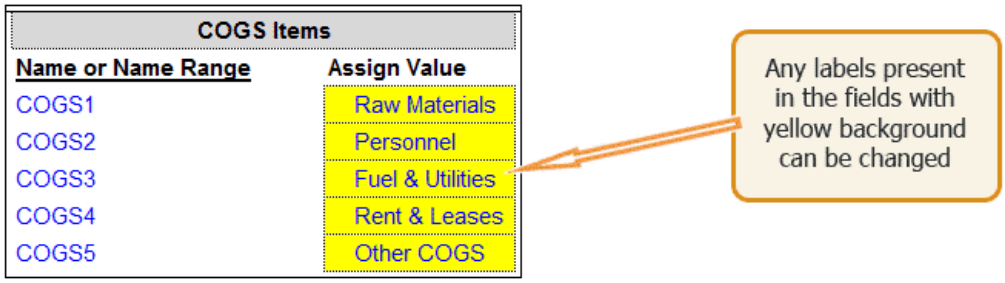


Figure 3.6. Relabeling COGS items

Input Area	Comment
Cost of Goods Sold Items	Shows labels for your Cost of Goods Sold items. These labels are picked up in Product Lines' / User Groups' tabs of the Model. You will see as many fields as the number of COGS selected during the on-line assembly.
Central Cost (Overhead) Items	Shows labels for your central costs and overhead items applied to Overhead's tab of the Model. You will see as many fields as the number of Overheads selected during the on-line assembly.

3.4. 'Opening balance' sheet tab

If you entered financial data for your opening balance sheet positions during the online assembly stage, then it will be present in the purchased Model and can be

edited in this tab as required. Rates for working capital, cash and debt funding positions are also inputted in this tab alongside respective balance sheet line items.

If balance sheet structure for your business is more detailed or itemised than what is provided for in the Model, we advise you to aggregate similar line items.

If the total amounts of assets and liabilities match, then the check field at the bottom of the tab will be green and show 'OK'. If there is a mismatch, the check field will turn red and show the amount of discrepancy between the total assets and the total liabilities.

Attention

There is an additional integrated 'OK'/'Error' check field at the top of 'Opening balance' sheet tab. It is reproduced in the same top left corner of all other tabs of the Model. 'OK' status indicates that balance sheets for all future dates in the financial statements of the Model are balanced. The check alerts users if a new input makes balance sheets to go off'.

3.5. 'Product A' – 'Product E' tabs

The layout of Product / User tabs depends on your choice of how Revenues are modelled made at Step 1 during the online assembly stage. If at Step 1 you opted for sales channels then your Model will take the appearance shown in section 3.5.1 (Sales Channels). If your choice was customer dynamics' option, then product tabs will look like those shown in section 3.5.2. (User Groups).

The number of tabs for product / user revenues and cost of goods sold (COGS) is determined by your choice made during the on-line assembly stage. The tabs are marked with letters from A to E. If only two product lines or user groups were ordered online then only 'Product A' and 'Product B' tabs will be present in the Model.

Attention

All product tabs or user group tabs are structurally equivalent. Online assembly populated all the tabs with identical data from your online entry for Product A or User Group A. You will need to review content of Product B to [E] and replace inputs with your own assumptions.

3.5.1. Revenues and COGS - Sales Channels Option

If during the online assembly stage you opted for sales channels option, your product tab would take the following appearance:

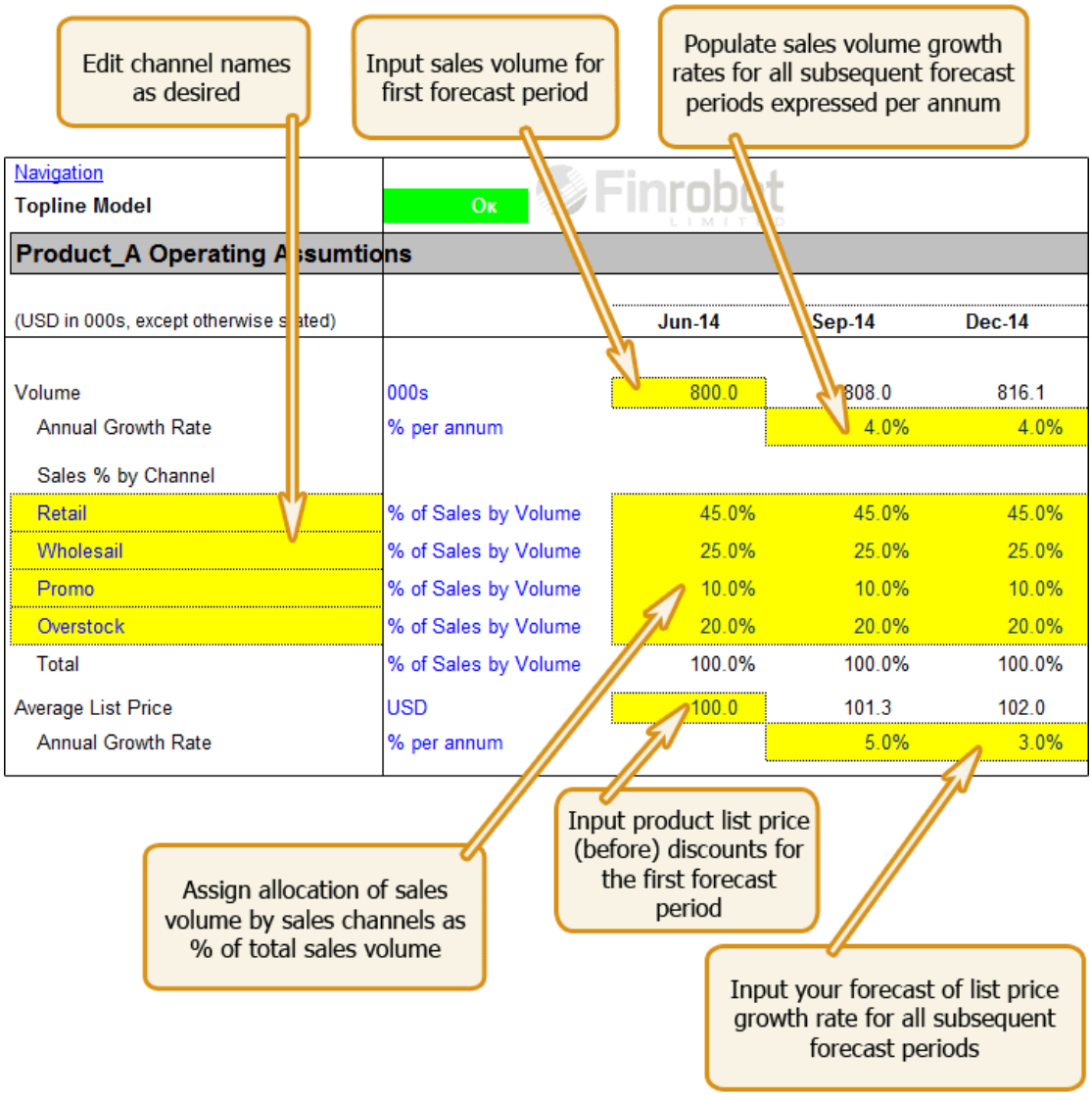


Figure 3.7. Top of Product tab – Sales Channel Option.

Note that the Model takes in growth rates expressed in annual terms. If your Model is quarterly or monthly, the Model will calendarise growth rates accordingly.

Separately, if you do not require revenues to be driven by both volume and pricing assumptions, you can set sales volume to 1 and assign 0% growth rate to the volume factor going forward. In such set up 'List Price' line will equal revenues (before discounts to channels).

Finally, you can assign various discounts and rebates to your sales channels as shown below. For example, retail or direct clients may have virtually no discounts to your list price while overstock gets sold at a very steep discount. If pricing strategy for your business differentiates by channel it obviously matters what sales volume allocation by channel is. You can change allocations over time to reflect different business objectives or seasonality patterns.

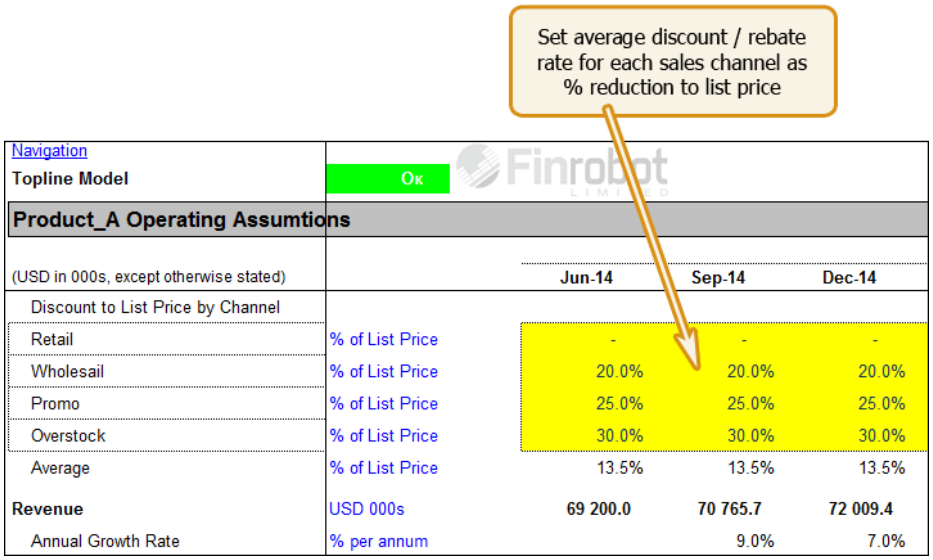


Figure 3.8. Applying price discounts to sales channels.

Your Revenue line is function of sales volume, pricing and discounts and channels mix going forward. If your change any of these assumptions Revenues will re-calculate accordingly.

This takes care of the top line. The product tab also contains inputs for Cost of Goods Sold as shown in the following picture.

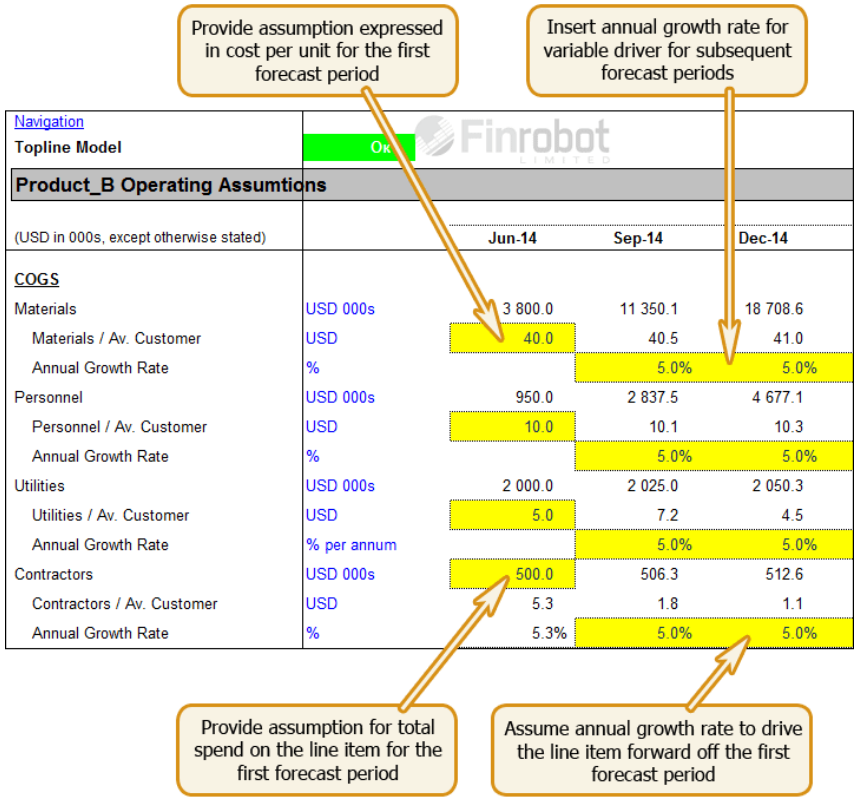


Figure 3.9. Layout for COGS inputs.

Depending on choices made during online assembly you will see between one and five COGS line items pre-set to be either fixed or variable. Variable COGS are driven by cost per unit inflated at user determined rate whilst fixed COGS would run off an absolute base booked for the first forecast period.

Attention

Note that when the downloaded Model is opened for the first time, growth and margin drivers are set flat over time but can be changed to any desired trajectory for each driver. For example, annual price growth may decelerate whilst costs as % of revenue may demonstrate improvements.

3.5.1. Revenues and COGS – Customer Dynamics (Traffic) Option

If during online assembly you opted for customer dynamics option, your product tab would take the following appearance:

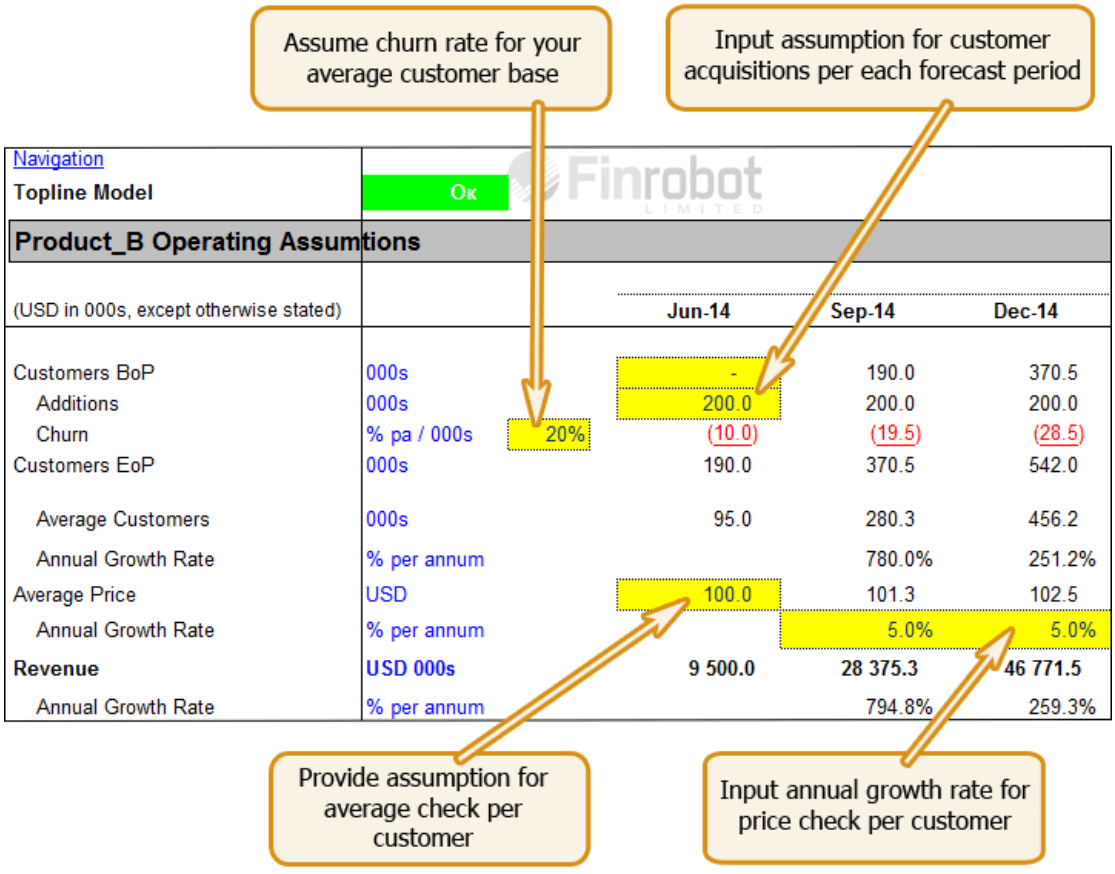


Figure 3.10. Top of Product tab – Customer Dynamics Option.

Your top line runs off customer dynamics assumptions. Every period some customers are acquired and some customers churn away from your customer base for good. Applying average check per customer to average customers for each period yields revenue figure as shown at the bottom of the above diagram.

Note that unlike volume / pricing module assumed for Sales Channels your Customer driven Revenue line is non-linear as it is a function how fast customers can be

acquired to compensate for churn of your customer base. You can smooth the trajectory by calibrate acquisition assumption and the churn rate but it is unlikely to produce a straight a straight line.

This takes care of the top line. The product tab also contains inputs for Cost of Goods Sold. The layout is identical to the one shown in Figure 3.9 above. Note that if you choose to drive your COGS items as variable drivers (per user), the total for each COGS item may show material swings as your customer base gyrates over time.

3.6. 'Central Costs' tab

'Central Costs' tab contains inputs and calculations related overhead and central costs items such as administrative and marketing expenses.

The structure and computations should match the assumptions provided during the on-line assembly stage – please refer to Section 2 of the Manual for details. If you skipped input entries during online assembly, then your Model would contain dummy numbers. Depending on your selection online each cost element is forecast forward as either variable or fixed as shown in the diagram below:

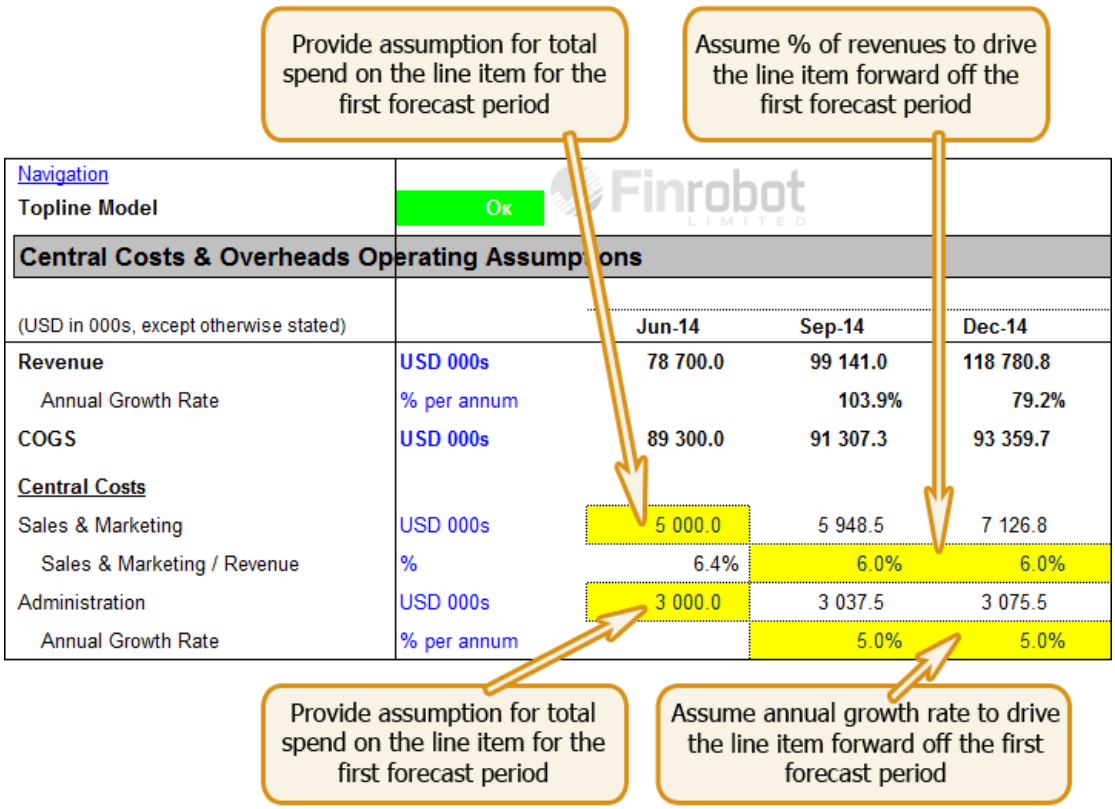


Figure 3.11. Central Costs and Overhead assumptions

Attention

Note that when the downloaded Model is opened for the first time, growth and margin drivers are set flat over time. You can assume any desired trajectory for each driver. For example, annual revenue growth may decelerate whilst costs as % of revenue may demonstrate improvements.

Note that the Model takes in growth rates expressed in annual terms. If your Model is quarterly or monthly, the Model will calendarise growth rates accordingly.

3.7. 'Supporting Calc' tab

'Supporting Calc' tab keeps all supporting financial calculations in one place. These are cash waterfall, tax / loss carry-forwards, working capital requirements and CapEx/Depreciation schedules.

If you start from the top of the tab, the first schedule will look like the following:

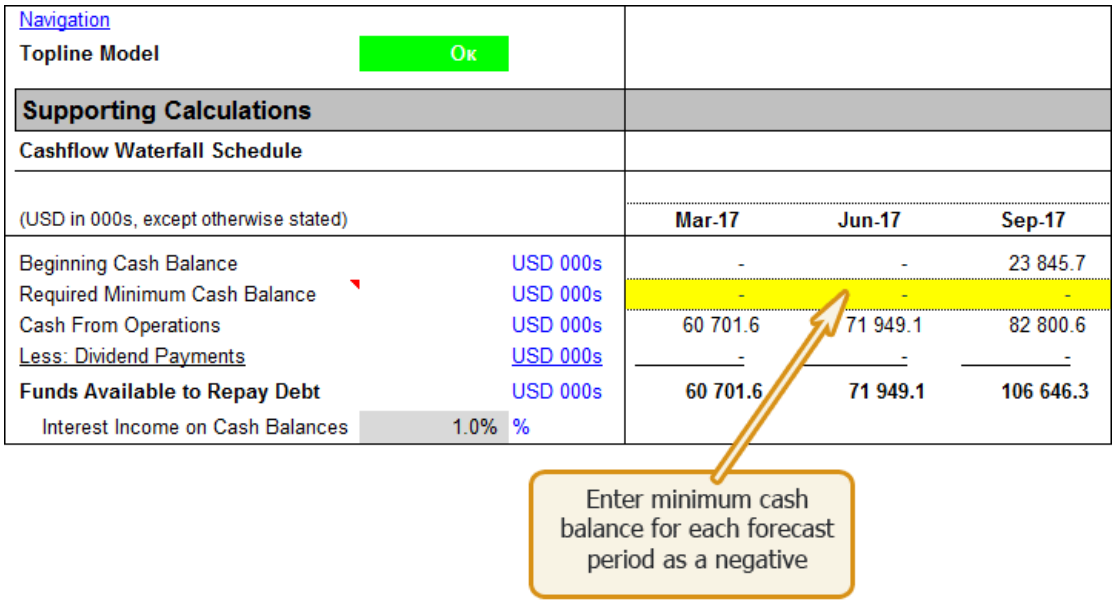


Figure 3.12. Cash Waterfall

You can use this schedule to assume minimum amount of cash required in the business at any time. The Model will take care of the rest as the next schedule will automatically works out debt borrowings and repayments based on cash available / required shown at the bottom of the waterfall.

If you wish to change assumptions for cash and debt rates, you can do so by goring to 'Opening Balance' sheet tab. Note that rates are expressed in annual terms and automatically calendarise depending on the chosen periodicity of the Model. There is no need to adjust anything if your Model is quarterly or monthly.

Attention

By default, any period interest charge for any debt obligation is calculated based on the opening position. If there are large fluctuations due to borrowing and/or repayments with a period this method may not be a good proxy for what is actually expected. However, the Model can calculate more accurate interest charges based on average debt positions. This would require the Model to go circular by turning on the cyclical interest calculation switch. The switch is located in the upper left corner of 'Financials' tab. Note, that if the switch is on, then Excel settings (options) should have iterations (cyclical) options turned on too.

The next area of the Supporting Calc tab is a tax calculater containing workings for your tax liability and cash tax payments for each forecast period. The schedule takes earnings before tax from 'Financials' tab, allows for manual adjustment to reported

earnings, and finally provides for any loss carried forward in case there is a taxable loss in any given period, which can be carried forward and offset against taxable income in the future.

The default assumption is that taxable turnover matches the reported in 'Financial' tab, and no manual adjustments are necessary.

Attention

FinRobot does not provide tax advice and the Model is not attempting to represent a real tax environment. You should seek advice from a tax specialist if you wish to model a tax environment compliant with tax laws and regulations relevant to your business.

The last table in the tab contains all inputs and workings necessary to drive investment and depreciation, which are fed into financials. Provide assumptions for your future CapEx programme, deprecation rates for existing and new investments and the Model will take care of the rest.

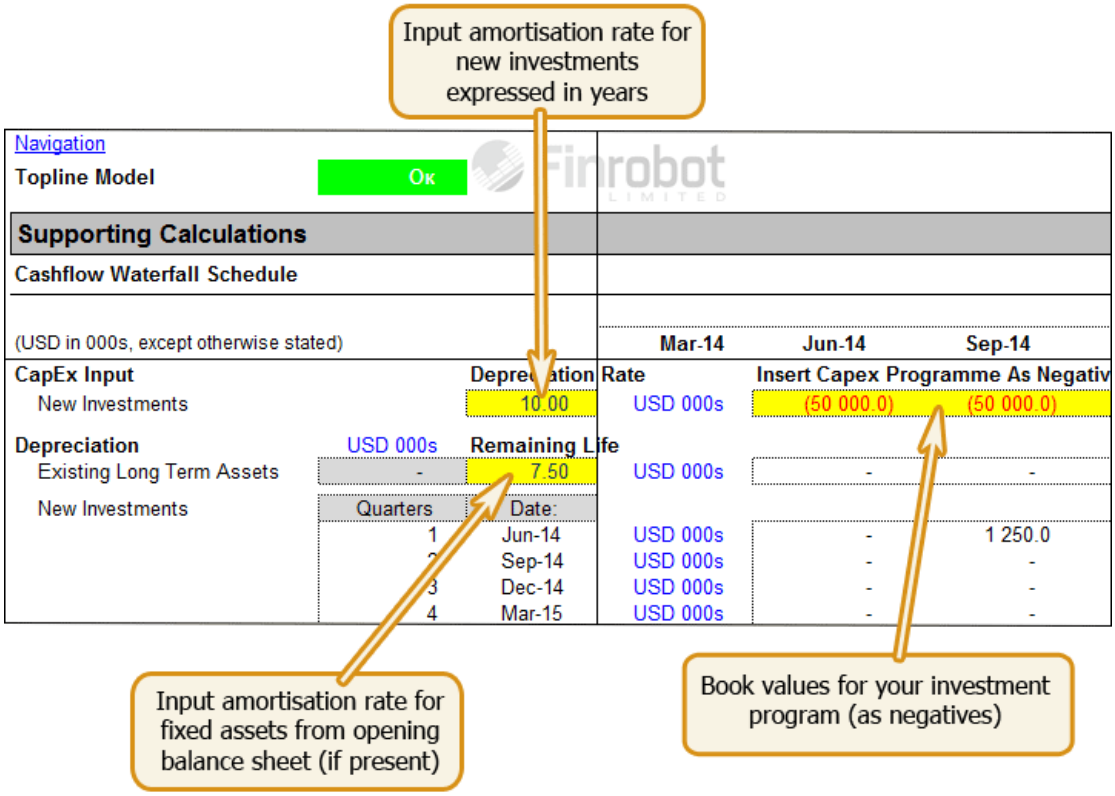


Figure 3.13 CapEx and Depreciation Assumptions

3.8. 'Financials' tab

'Financials' tab contains three standard financial reports, viz. profit and loss, balance sheet and cash flows. The tab does not require user inputs except for Exceptional Items and Equity distributions as described below. All other data are picked up from tabs covered in the preceding sections of the Manual.

Attention

The financial statements are purposefully generic. As our clients are located in various countries and operate under different accounting standards we cannot make the Model comply to a specific accounting standard.

Instead, we make reports relatively simple and easy to navigate or to adjust if needed. Our experience shows that the majority of our clients are satisfied with our approach, particularly for the purposes of preparing management accounts and/or investment decision analysis.

The Net Exceptional Item allows for manual entry of exceptional items, which are not practical to model, but are known occurrences within the forecast period. For example, a known gain from disposing of non-core other assets. Note that the Model implicitly assumes that any exceptional loss or gain is a cash item. If your circumstances are such that an exceptional item is a non-cash expense, you need (i) to disconnect the link between extraordinary P&L items and extraordinary cash flow items and (ii) to link your extraordinary P&L item to a corresponding line of the balance sheet (e.g. write off a balance sheet position). Note that such adjustments would require good working knowledge of the Model. Otherwise, there is a risk that the balance sheet would 'go off' and the check flag would indicate red.

The Equity Issue line of the cash flow allows for manual entry of any forecast cash distributions (dividends or buybacks) or capital fundraising (issue). A positive entry means equity is raised. Negative means cash is returned to shareholders. If you wish to use the line for a dividend programme, it is possible to link up the cash flow equity line to a % net income from P&L.

Finally, ‘Financials’ tab has an iterative calculations switch. Please refer to section 3.8 above for details.

3.9. 'Annual Summary' tab

Annual Summary' tab is designed to automatically aggregate data for monthly and quarterly models into an annual summary. The tab does not require any user input.

Please note that if your monthly or quarterly forecast periods do not accrue to full number of years, the last forecast year in 'Annual Summary' tab will pick up the residual period of less than one full year.

The minimum number of years shown in 'Annual Summary' tab is three. Hence, if your project is less than two years you are likely to see 0 in the last column of the summary. Note that for any length of the project the summary would pick up last available projected balance sheet irrespective whether its date falls on a year end, or not.

3.10. 'DCF Analysis' tab

'DCF Analysis' tab provides valuation metrics with respect to your project or business as outlined in the Model. The outputs are presented in grid form for Firm Value and Equity Value based on DCF approach. IRR analysis is presented on Firm Value basis only.

Additional analysis is available with respect to the terminal value for going concern exit value. You can compare implied perpetuity growth to assumed multiple for terminal value and vice verse.

'DCF Analysis' tab picks up the data from 'Annual Summary' tab. Hence, all financial information is presented on annual basis irrespective of the underlying periodicity of the Model.

Attention

Please note that if your project is finite and its length does not accrue to full years of forecast, then NPV and IRR may require adjustments as set out below. For projects with duration of less than two years, we advise setting Terminal Value to zero.

To run and interpret data with the help of 'DCF Analysis' tab please consider the following:

Input Area	Comment
Terminal Value Exit Multiple	Insert your input for terminal value EBITDA multiple into the yellow input cell provided. The model will populate the output grid based on a step of +/-0.5x If your project is finite you may consider assigning zero for the exit EBITDA multiple. This will make sure there is no terminal value to account for going concern value beyond your forecast horizon. Note that any projects with life of less than two years would not have any Terminal Value computed as the minimum forecast length to capture Terminal Value impact is set to three years or more If the number of your forecast periods do not accrue to full years there may be a problem with how the terminal value is computed. The Annual Summary will pick up less than the full year of cash flows and EBITDA for terminal value computations. As a result, terminal value and NPV for the business will come out less than expected. There is a quick fix to correct this by increasing the exit multiple accordingly. For example, if your last annual summary contains only six months of cash flows, adjust your exit multiple by increasing it by 2x
WACC	This is the rate at which the cash flows are discounted. You need to insert one central value to the left of the output grid and the Model will populate the grid vertically based on a step of +/-1% Additionally, in case of timeline not matching to full number of years you should consider adjusting the discount rate for the last year of forecasts. To do this, in line 59 (calculation of average annual discount rate) in the column corresponding to the last year of forecasts (incomplete year), the discount factor step up from the preceding year should be changed from 1 to a different number. For example, if the last (incomplete) year contains only 3 months, then the step up in discount factor should be equal to 0.5+(3/12)*0.5 = 0.625

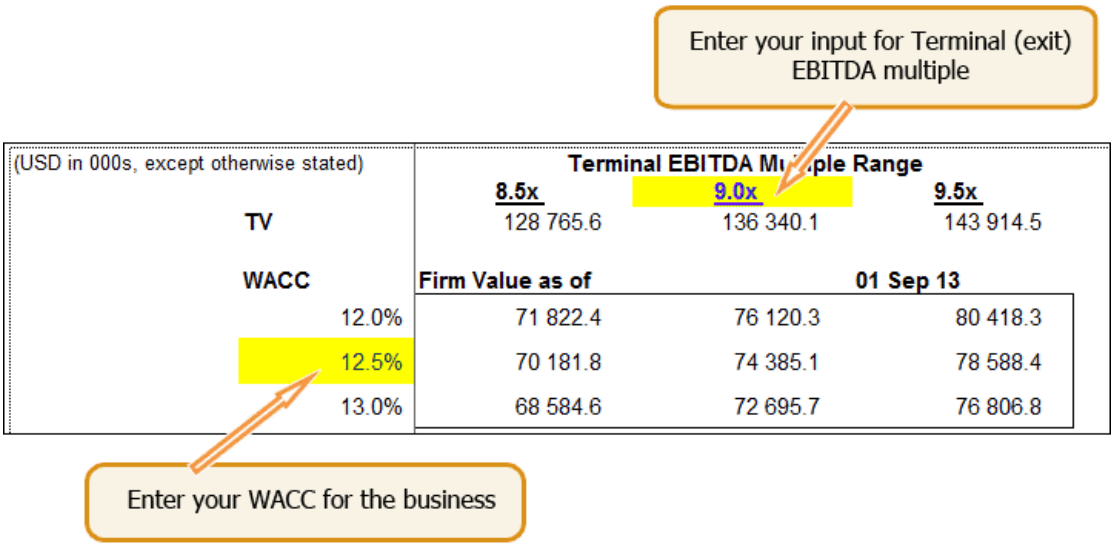


Figure 3.14. WACC and exit multiple assumptions

Input Area	Comment
Capital Invested	By default, capital invested in the business to date equals to the amount of net operating assets as per the opening balance sheet, and can be adjusted upwards or downwards if the actual capital spent is higher or lower respectively. Note that for new greenfield projects the capital invested amounts may equal zero
Valuation Date Balance Sheet Date Investment Date	The Valuation Date is used to value projects at a specific date other than the start of the project. The Balance Sheet date will carry net debt and investments forward to the Valuation Date to make sure Firm Value and Equity Value are computed on the same basis. The Investment Date is used to calculate IRR. It is helpful if you want to analyse returns on investments done in the distant past relative to future cash flows. For greenfield projects the Investment Date is irrelevant
Unlevered Tax Schedule	'DCF Analysis' tab contains a separate tax schedule in order to compute unlevered tax charge consistent with application of WACC (as per MM2 theorem). The unlevered tax schedule provides for manual adjustments to book items disallowed for tax relief purposes

Attention

IRR function implies that either there is some invested capital upfront or that first period cash flow is a negative. If this is not the case, for example, you project shows positive cash flows for all periods and requires no upfront capital IRR calculation would return an error.