# APPLE INC. HISTORICAL AND FORWARD LOOKING FACTORS

TECHNICAL REPORT

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#### **INSTRUCTIONS**

- I. [x] refers to the index number used to reference a particular cell (see Index in the Appendix). For example, [4] refers to Number of Periods. It is important to realize this number does <u>not</u> correspond to the row number, it is strictly an index number. The index numbers follow a top down approach with respect to the model.
- II. Some of the explanations contain a "sample formula". This is only to be used as a guide to follow along when reading the "translation" of the formula from Excel code to plain English. The specific cells that are referenced in the formula may have been adjusted since the creation of this report and therefore may be different from what is present in the current version of the model.
- III. Several words and operators are used interchangeably throughout the report. For example, multiply = \*, divide = /, plus = + and subtract = -.

#### **COMPREHENSIVE SHEET**

We will begin this explanation with a general overview of the worksheet and how it integrates with both the "Sanitized" worksheet and ultimately the "Model" worksheet.

The "Sanitized" worksheet contains all the financial data for the company being analyzed. This may include annual and/or quarterly data and the number of periods of data included is dependent on user inputs. For more information on the "Sanitized" sheet, please see the technical report for this sheet. The "Sanitized" sheet serves as a database of financial information from which the comprehensive sheet will extract information and categorize it into the appropriate accounts as directed by the user's inputs. This report will include explanations for categorizing this information.

#### **INDEX CELLS**



#### [1] Reference Cell

The OFFSET function requires the use of a reference cell from which it will start. Best practice is to set the reference cell equal to A1. To allow this sheet to be a dynamic as possible we have used the INDIRECT function to allow the user to specify which sheet and cell they would like to use as the reference cell. The user should enter the reference cell they would like to use in this cell using the following form: SHEETNAME!\$A\$1

#### [2] Data Frequency

This cell pulls the value from [183] Number of Months per Period in the "Model" worksheet and uses this value to control this sheet. Therefore you can make the decision regarding which frequency to use (Quarterly, Monthly, Semi-Annual or Annual) from the model without needing to switch to this worksheet since it will automatically adjust accordingly.

Note: This cell has conditional formatting rules applied such that the cell will display a string representing the frequency, however the true value of this cell is an integer corresponding to the number of months in the period. For example, Quarterly = 3, Annual = 12.

#### [3] Data Starting Column

This cell is calculated on the basis of the "Sanitized" sheet. The "Sanitized" sheet is dynamic, therefore, this calculation allows this sheet to adapt to adjustments made in the number of annual or quarterly periods included in the sanitized sheet.

It checks if [2] Data Frequency = 4 (Quarterly), if this is true, then it will add [Data Starting Column + Number of Annual Periods + 1], which are all taken from the sanitized sheet, to arrive at the column number of the first Quarterly period in the sanitized sheet, otherwise, it checks if [2] Data Frequency = 12 (Annual), if this is true then it will add [Data Starting Column + 1] to arrive at the column number of the first annual period, otherwise it will return "N/A".

#### [4] Number of Periods

IF: [2] Data Frequency = 4 (monthly), THEN: pull the value from Number of Quarterly Periods from the "Sanitized" sheet, ELSE: pull the value from Number of Annual Periods from the "Sanitized" sheet.

#### [5] Uncapitalizing Periods Back

Enter the number of periods back that you would like to apply the uncapitalizing adjustments.

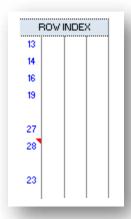
#### [6] Historical Period Number



This row returns the number of periods prior to the most recent period that the particular column represents. For example, in the image above the first column has a [6] Historical Period Number = 9. The highlighted "0" represents the most recent period. These numbers are dynamic and will change according to the inputs in the "Sanitized" sheet.

The first cell in this row checks if the value of [4] Number of Periods is either blank or equal to 0. If this is true, then it will return blank, otherwise it will take the value of this cell minus 1. The remaining cells check if the cell to the left is either blank or equal to 0. If this is true, then it will return blank, otherwise it will take the value of this cell minus 1.

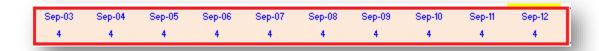
#### **ROW INDEX**



#### [7] Row Index

To avoid the tediousness of changing the formula in every cell of this comprehensive sheet when any changes are made to the "Sanitized" sheet we have included an index of the row number that relates to the particular financial data that must be pulled. This is the row number of the account from the "Sanitized" sheet and is used in subsequent OFFSET functions to specify the appropriate row to pull the data from. We have included multiple columns in each row of the row index because some accounts in this worksheet require the combination of multiple accounts from the "Sanitized" worksheet.

#### DATE HEADER



#### [8] Period Date

This checks whether [6] Historical Period Number = blank and if so returns blank, otherwise it uses the OFFSET function to pull the date corresponding to [6] Historical Period Number.

The OFFSET function requires a reference cell, the number of rows to move from the reference cell, the number of columns to move from the reference cell, the height of the array and the width of the array. The height and width of the array are optional.

Best practice is to set the reference cell equal to A1. To allow this sheet to be a dynamic as possible we have used the INDIRECT function to allow the user to specify which sheet and cell they would like to use as the reference cell. The user should enter the reference cell they would like to use in [0] Reference Cell using the following form: SHEETNAME!\$A\$1

The row number is equal to the corresponding number in [7] Row Index -1.

The column number is equal to ([4] Number of Periods - [6] Historical Period Number -1) + [3] Data Starting Column - 1).

#### [9] Quarterly Indicators

This pulls the value of the Quarterly Indicator from the "Sanitized" sheet using the same OFFSET function previously discussed. The only difference here is the row number input by the user in [7] Row Index for the corresponding row which results in the OFFSET function pulling the value from a different cell (in this case the cell corresponding to the quarterly indicator).

#### **INCOME STATEMENT**

All the following cells in the income statement use the same OFFSET function. The only difference between them is the row number input by the user in [7] Row Index. Therefore, we will describe how this formula operates and then limit our discussion to an explanation of which data to include in each of these accounts. This will help you when you are selecting which information to pull from the "Sanitize" sheet and entering the corresponding row numbers in the [7] Row Index.

#### **FORMULA**

This formula is very similar to the OFFSET formula previously discussed. The INDIRECT function is used to grab the reference cell from [0] Reference Cell. The number of rows to move from the reference cell is pulled from the [7] Row Index and the number of columns to move from the reference cell is equal to ([4] Number of Periods – [6] Historical Period Number -1) + [3] Data Starting Column – 1).

Remember we have included multiple columns in each row of the row index because some accounts in this worksheet require the combination of multiple accounts from the "Sanitized" worksheet. Therefore, this formula includes four separate OFFSET functions each that pulls a value from the Sanitized sheet that corresponds to the row number entered in each of the four slots available in [7] Row Index.

By default when a row number is entered in [7] Row Index, the values of each of these accounts from the Sanitized sheet will be added together. However, it may be the case in which you would like to instead subtract one account from another. Therefore, we have adapted this formula such that when you would like to subtract a particular account simply enter the row number as a negative number into the [7] Row Index.

#### [10] Total Net Revenues

Enter all operating revenues and income, net of any returns, from the actual income statement.

#### [11] Cost of Goods Sold Expense

Enter costs of goods sold and costs of services as shown on the actual income statement. Note: most income statements include depreciation and amortization in the cost of goods, instead of reporting depreciation and amortization as separate lines on the income statement.

#### [12] Cost of Services or Operations Expense

Enter cost of services or operations expense if it is shown as a separate item, instead of costs of goods sold, or in addition to cost of goods sold.

#### [13] Depreciation Expense (for Tangible Assets, If Reported Separately)

Enter a value here only if Depreciation is shown as a separate line on the actual income statement. If it is not shown as a separate line, enter a zero.

Note: even if you enter a zero for depreciation here, you will still enter the actual depreciation figure further down in this worksheet. See the row for Depreciation in the Special Items section that follows the balance sheets for details.

#### [14] Amortization Expense (for Goodwill and Intangibles, If Reported Separately)

Enter a value here only if amortization is shown as a separate line on the actual income statement. If it is not shown as a separate line, enter a zero.

Note: even if you enter a zero for amortization here, you will still enter the actual amortization figure further down in this worksheet. See the row for Amortization in the section for Special Items that follows the balance sheets for details.

#### [15] Depreciation and Amortization Expense (if Reported Combined)

Enter a value here only if depreciation and amortization is shown as a combined line on the actual income statement. If it is not shown as a combined line, enter a zero.

Be careful not to double count; enter a zero here if you have entered depreciation and amortization separately above.

Note: even if you enter a zero for depreciation here, then you will enter the actual depreciation and amortization figure further down in this worksheet in the section for Special Items. See the row for Depreciation in the Special Items section that follows the balance sheets for details.

#### [16] Research & Development Expense

Enter the R&D expense if it is shown on the actual statements as a separate line item.

#### [17] Sales & Marketing Expenses (if Not Included in SG&A)

Show any Sales & Marketing that are reported as a separate line item in the Actual sheet.

Note: many companies combine Sales & Marketing with General & Administrative expenses. If this is the case, simply report the combined value as shown below.

#### [18] General & Administrative Expenses (if Not Included in SG&A)

Show any General & Administrative Expenses that are reported as a separate line item in the Actual sheet.

Note: many companies combine Sales & Marketing with General & Administrative expenses. If this is the case, simply report the combined value as shown below.

#### [19] Selling, General & Administrative Expenses [if Reported As a Single Item]

Enter the total reported SG&A from the actual income statements if they are shown as a single item.

Note: some sources include depreciation and amortization with SG&A, and don't show depreciation and amortization as separate lines on the income statement.

#### [20] Minority Interest Expense/Non-Controlling Interest (If Shown as a Pre-tax Operating Expense)

Show any Minority Interest Expense that is shown as a pre-tax operating item on the Actual sheet.

Note: Some company's report Minority Interest expense in several places (as a pre-tax operating expense, a pre-tax non-operating expense, or an after-tax expense). Be sure to report it as shown on the Actual sheet, and be sure not to report it more than once on the Comprehensive sheet if it is shown only once on the Actual sheet.

#### [21] Merger and Restructuring Costs

Show any merger and restructuring costs here provided they are reported on a pre-tax basis.

#### [22] Asset Impairment Losses or Write-downs

This is a special charge for amortization and goodwill.

#### [23] Extraordinary Charges or Expenses (if Shown on a Pre-tax Basis)

Companies usually report extraordinary items like discontinued operations on an after-tax basis below, but if the company reports extraordinary expenses as a pre-tax basis, enter it here.

#### [24] Extraordinary Credit or Income (if Shown on a Pre-tax Basis)

If a company reports one-time or non-recurring sources of income on a pre-tax basis, enter it here.

#### [25] Other Operating Expenses (Income)

Enter any operating costs that don't fit in any other categories. Since expenses are shown as a positive number, be sure to show any other operating income as a negative number.

#### [26] Interest Expense (Income)

If the actual income statements report Interest Expense and Interest Income separately, then report them here separately. However, many income statements only report Net Interest Expense. If this is the case, then report Net Interest Expense in the row here for Interest Expense, and enter a zero in the row below for Interest Income.

Note: some companies only report a single item for Net Interest Expense. If they report a negative number for Net Interest Expense, it really means that the company has more interest income than expense. If this is the case, make sure your entry is also negative. If you show capitalized interest in the row below, make sure the interest expense in this row is gross expense and has not already had the capitalized interest netted out.

#### [27] Interest Capitalized

This is the portion of interest expense that is capitalized rather than expensed. If shown as a positive number, it reduces the interest expense. Therefore, if you include the capitalized interest expense in this row, make sure you report the Gross Interest Expense in Row above, not the Net Interest Expense that has already been reduced by the capitalized expense.

#### [28] Interest Income

If the actual income statements report Interest Expense and Interest Income separately, then report them here separately. However, many income statements only report Net Interest Expense. If this is the case, then report Net Interest Expense in the row above for Interest Expense, and enter a zero in the row for Interest Income.

#### [29] Reserve Expense (Income) (Increase is an Expense, Decrease is Income)

In a perfect world this is an operating expense, but many companies use it to manage earnings, and so we classify it as an extraordinary expense.

#### [30] Investment Income (Expense) (if Shown On Pre-tax Basis)

Show any Investment Income that is shown as a separate line item in the Actual sheet. Be sure to report any Investment Expense as a negative number.

#### [31] Gain (Loss) on Sale of Assets or Discontinued Operation (if Shown on Pre-tax Basis)

Sometimes companies report this as pre-tax item. Be sure to report a loss as a negative number. Be sure not to report this twice; if it is reported on an after-tax basis, report it below, not here.

#### [32] Remitted Income (Expense) or Equity Earnings (Losses) in Affiliates

Show any Remitted Income as a positive number and expense as a negative number.

#### [33] Unremitted Income (Expense) or Equity Earnings (Losses) in Affiliates

Show any Unremitted Income as a positive number, and any expense as a negative number.

## [34] Minority Interest Expense/Non-Controlling Interest (if Shown As Pre-tax Non-Operating Expense)

Show any Minority Interest Expense that is shown as a pre-tax non-operating item on the Actual sheet. Note: Some company's report Minority Interest expense in several places (as a pre-tax operating expense, a pre-tax non-operating expense, or an after-tax expense). Be sure to report it as shown on the Actual sheet, and be sure not to report it more than once on the Comprehensive sheet if it is shown only once on the Actual sheet.

#### [35] Losses on Equity Investees and Other (if Shown On Pre-tax Basis)

Report any losses on equity investees (as a positive number) if shown on the Actual sheet on a pre-tax basis.

#### [36] Other Non-Operating Income (Expense) (if Shown On Pre-tax Basis)

Sometimes statements show a pre-tax non-operating income or expense. If it is income, show it as a positive number. If expense, show it as a negative number.

#### [37] Special Non-Recurring Items Income (expense) (if shown On Pre-tax Basis)

Sometimes statements will show a non-recurring pre-tax item. If it is a source of income, show it as a positive number. If it is a loss, show it as a negative number.

#### [38] Provision for Income Tax Expense (Rebate)

This should come from the actual statements. Since this is a provision for Income Taxes Expense, it should be positive if the company is paying the taxes, and negative if it is a rebate from previous years tax payments.

#### [39] Minority Interest Expense / Non-Controlling Interests (if Shown On After-tax Basis)

Most companies show Minority Interest as an after-tax item. If that is the case, report minority interest here. However, some companies show Minority Interest as a pre-tax item. If so, then show a zero here, and report it in the pre-tax line above.

#### [40] Equity in Earnings Expense (if Shown On After-tax Basis)

See the comment on Minority Expenses.

#### [41] Extraordinary Items (if Shown On After-tax Basis)

Sometimes companies show Extraordinary Items on an after-tax basis. Enter those items here. If they are income, enter them as positive numbers; if they are losses, enter them as negative numbers. If they are combined with discontinued operations, then enter them in the combined row below. Be careful not to enter them twice.

#### [42] Discontinued Operations (if Shown On After-tax Basis)

Sometimes companies show Discontinued Operations on an after-tax basis. Enter those items here. If they are income, enter them as positive numbers; if they are losses, enter them as negative numbers. If they are combined with extraordinary items, then enter them in the combined row below. Be careful not to enter them twice.

#### [43] Extraordinary Items and Discontinued Operations (if Shown On After-tax Basis)

Sometimes companies show extraordinary items and discontinued operations combined on an after-tax basis. Enter those items here. If they are income, enter them as positive numbers; if they are losses, enter them as negative numbers. If they are reported separately (not combined), enter them separately in the rows above; be careful not to enter them twice.

#### [44] Investment Gains (Losses) (if Shown On After-tax Basis)

Sometimes companies show investment gains or losses on an after-tax basis. Report those figures here.

#### [45] All Other Income (Losses) (if Shown On After-tax Basis)

Report all other income on an after-tax basis here. If it is a loss, be sure to show it as a negative number.

#### [46] Cumulative Effect of Accounting Changes

Sometimes firms have to make accounting changes, perhaps because of accounting irregularities. When this happens, accountants put in this one item to make the current financial statements consistent with the corrected past statements.

#### [47] Net Income from Actual Sheet

This should come directly from the Income Statement on the Actual worksheet, not calculated from the rows above.

#### [48] Calculated Net Income from Comprehensive Sheet

This is Net Income calculated from the line items above. Don't enter anything here. The calculation from this formula should be the same as the net income reported one row above. If it is not the same as the row above, then you probably have omitted an item, or given an item the wrong sign.

#### <u>Formula</u>

|      | Total net revenues   |
|------|--|
| LESS | [Cost of goods sold expense + Cost of services or operations expense]  |
| LESS | IF: [Depreciation and amortization expense (if reported combined) = 0, THEN: Depreciation                              |
|      | expense (for tangible assets, if reported separately) + Amortization expense (for goodwill                             |
|      | and Intangible, if reported separately), ELSE: Depreciation and amortization expense (if                               |
|      | reported combined)]  |
| LESS | Research & development expense   |
| LESS | IF(Selling, gen. & admin. expense [if reported as a single item] = 0   |
|      | THEN: Sales & marketing expenses (if not included in SGA) + General & administrative expenses (if not included in SGA) |
|      | ELSE: Selling, gen. & admin. expense [if reported as a single item]  |
| LESS | (Minority interest expense (if shown as pre-tax operating expense) + Merger and  |
|      | restructuring costs + Asset impairment losses or write-downs + Extraordinary charges or                                |
|      | expenses (if shown on pre-tax basis))  |
| PLUS | Extraordinary credit or income (if shown on a pre-tax basis)   |
| LESS | Other operating expenses (Income)  |
| LESS | (Interest expense (Income) - Interest capitalized)   |
| PLUS | Interest income  |
| LESS | Reserve expense (income)   |
| PLUS | (Investment income (Expense) (if shown on pre-tax basis) + Gain (loss) on sale of                                      |
|      | assets or discontinued operation (if shown on pre-tax basis) + Remitted income (Expense)                               |
|      | or equity earnings (Losses) in affiliates + Unremitted income (Expense) or equity earnings                             |
|      | (Losses) in affiliates)  |
| LESS | (Minority interest expense (if shown as pre-tax nonoperating expense) + Losses   |
|      | on equity investees and other (if shown on pre-tax basis)  |
| PLUS | (Other nonoperating income (Expense) (if shown on pre-tax basis) + Special   |
|      | nonrecurring items income (Expense) (if shown on pre-tax basis))   |
| LESS | (Provision for income tax expense (Rebate)   |
| LESS | (Minority interest expense (if shown on after-tax basis) + Equity in earnings  |
|      | expense (if shown on after-tax basis))   |

#### APPLE | HISTORICAL AND FORWARD LOOKING FACTORS

**PLUS** IF: (Extraordinary items and discontinued operations (if shown on after-tax

basis = 0

THEN: Extraordinary items (if shown on after-tax basis) + Discontinued

operations (if shown on after-tax basis)

ELSE: Extraordinary items and discontinued operations (if shown on after-tax basis))

**PLUS** [Investment gains (Losses) (if shown on after-tax basis) + All other income (Losses)

(if shown on after-tax basis) + Cumulative effect of accounting changes)]

#### [49] Check to See If Calculated Net Income Is Consistent With Actual Sheet

We use this cell to check that our income statement is consistent with the Actual income statement. This cell will return "OK" if [48] Calculated Net Income from Comprehensive Sheet matches [47] Net Income from Actual Sheet. Otherwise, it will return "Error" indicating you probably have omitted an item, or given an item the wrong sign.

#### **BALANCE SHEET**

#### **ASSETS**

#### [50] Cash and Equivalents

Report only the row in the Actual sheets shown as cash.

#### [51] Marketable Securities

Report any Excess Marketable Securities.

#### [52] Notes Receivable

Report any Notes Receivable.

#### [53] Short-term Investments or Investment Securities

Report any other items that are Short-Term Investments or Investment Securities.

#### [54] Accounts Receivable

Report any Accounts Receivable.

#### [55] Tax Refund Receivable

Report any Tax Refund Receivable.

#### [56] Progress Payments

This is like a prepaid expense.

#### [57] Prepaid Expenses

Enter any Prepaid Expenses.

#### [58] Current Deferred Tax Asset

Enter any Current Deferred Tax Asset.

#### [59] Inventories

Some balance sheets show sub-categories for raw materials, work-in-process, or finished goods. Be sure to report only the total inventory.

#### [60] Other Non-Operating Current Assets

Report the total for any other current assets that are shown on the Actual statements, but that are not already reported in the rows above.

#### [61] Other Operating Current Assets

Report the total for any other current assets that are shown on the Actual statements, but that are not already reported in the rows above.

#### [62] Total Current Assets

Don't enter anything here. Check to make sure this sub-total is the same as the total current assets on the actual financial statements. If this is not the same, then there is an error.

#### Formula

Cash and equivalents + Marketable securities + Notes receivable + Short-term investments or investment securities + Accounts receivable + Tax refund receivable + Progress payments + Prepaid expenses + Current deferred tax asset + Inventories + Other nonoperating current assets + Other operating current assets))

#### [63] Long-Term Receivables

This is a long-term investment.

#### [64] Investments in Unconsolidated Subsidiaries

This is a long-term investment.

#### [65] Other Investments

This is a long-term investment.

#### [66] Net Property, Plant, & Equipment (PPE)

Report Net Property, Plant, & Equipment, which is sometimes called Net Fixed Assets. Some balance sheets show the Gross PP&E (or Gross Fixed Assets) and the Accumulated Depreciation. Be sure you report only the net figure here.

#### [67] Goodwill (if shown separately)

Enter any Goodwill shown as a separate item on the Actual balance sheets. If it is combined into a single account, Goodwill and Intangibles then show it below.

#### [68] Intangibles (if shown separately)

Enter any Intangibles shown as a separate item on the Actual balance sheets. If it is combined into a single account, Goodwill and Intangibles then show it below.

#### [69] Cost in Excess of Fair Value of Net Assets Acquired (Also Called Goodwill)

This is just another way of categorizing Goodwill. Be sure not to enter Goodwill twice.

#### [70] Goodwill and Intangibles (if shown combined)

Report any Goodwill and Intangible Assets if shown combined. If they are shown separately, then enter each above. Be careful not to double count.

#### [71] Deferred Tax Asset (Long-term)

Report any Long-Term Deferred Tax Asset shown on the Actual sheet.

#### [72] Long-term Notes Receivable

Report any Notes Receivable.

#### [73] Other Operating Long-term Assets

Include any other Operating Assets that are not included in one of the items shown on the Comprehensive sheet. If it is a Non-Operating Asset, be sure to include it in the Other Non-Operating Assets shown below.

#### [74] Deferred Charges

Report any Deferred Charges.

#### [75] Deposits

Report any Deposits.

#### [76] Investments & Advances to Subsidiaries

Report any Investments & Advances. Sometimes these are shown in two different categories (one for Investments & Advances-- Equity Method, and one for Investments & Advances-- Other Method. Be sure to report only the total here.

#### [77] Other Non-Operating Long-term Assets

Report any Other Non-Operating Assets that are not included in the items above.

#### [78] Total Assets from Actual Sheet

This should come directly from the Income Statement on the Actual worksheet, not calculated from the rows above.

#### [79] Calculated Total Assets from Comprehensive Sheet

This is calculated from the line items above. Don't enter anything here. The calculation from this formula should be the same as the Total Assets reported one row above. If it is not the same as the row above, then you probably have omitted an item, or have given an item the wrong sign.

#### Formula

Total current assets + [Long-term receivables + Investments in unconsolidated subsidiaries + Other investments + Net property, plant, & equip (PPE)] + MAX[(Goodwill (if shown separately) + Intangibles (if shown separately) + Cost in excess of fair value of net assets acquired also called goodwill)), Goodwill and intangibles (if shown combined)] + (Deferred tax asset (Long-term) + Long-term notes receivable + Other operating long-term assets + Deferred charges + Deposits + Investments & advances to subsidiaries + Other nonoperating long-term assets))

#### [80] Check to see if Total Assets are consistent with Actual sheet

We use this cell to check that our Total Assets calculated here is consistent with the Actual Total Assets. This cell will return "OK" if the calculated Total Assets from the Comprehensive sheet items matches the Total Assets from the Actual Sheet. Otherwise, it will return "Error" indicating you probably have omitted an item, or have given an item the wrong sign.

#### LIABILITIES AND EQUITY

#### [81] Notes Payable

Report any Notes Payable (this may also be called Bank Debt).

#### [82] Current Portion of Long-term Debt

Report any Current Portion of Long-Term Debt.

#### [83] Current Portion of Capitalized Leases

Report any Current Portion of Capitalized Leases.

#### [84] All Other Short-term Debt

Report any other interest bearing debt shown in the current assets, but not already reported in the three rows above.

#### [85] Accounts Payable

Report any Accounts Payable (sometimes it is called Trade Credit).

#### [86] Short-term Unearned Revenue

Sometimes companies will have a long-term contract and will report revenue even if they have not yet earned it. Enter such an amount here.

#### [87] Interest Payable (or Accrued Interest)

Companies don't pay interest daily, and instead accrue an amount that is due, but has not yet been paid. Enter those amounts here.

#### [88] Dividends Payable

Companies don't pay dividends daily, and instead accrue an amount that is due, but has not yet been paid. Enter those amounts here.

#### [89] Short-term Deferred Taxes

Enter any deferred taxes shown as a current liability.

#### [90] Taxes Payable or Accrued Taxes

Enter any taxes payable or accrued taxes shown as a current liability.

#### [91] Accrued Wages or Salary

Enter any accrued wages or salary shown as a current liability.

#### [92] Other Accrued Expenses or Accruals

Report any Accruals not included in the lines above.

#### [93] Other Non-operating Current Liabilities

Report any other current liabilities that you think are not related to operations here.

#### [94] Other Operating Current Liabilities

Report the sum of all items not included in the rows above. If in doubt about an account on the current liability section of the Actual sheet, you should classify it as an Other Operating Current Liability.

#### [95] Total Current Liabilities

Don't enter anything here, it is calculated from the accounts above. This figure should be the same as the Total Current Liabilities shown on the Actual statements. If not, then you probably have omitted an item or have double-counted an item.

#### Formula

Notes payable + Current portion of long-term debt + Current portion of capitalized leases + All other short-term debt + Accounts payable + Short-term unearned revenue + Interest payable (or accrued interest) + Dividends payable + Short-term deferred taxes + Taxes payable or accrued taxes + Accrued wages or salary + Other accrued expenses or accruals + Other nonoperating current liabilities + Other operating current liabilities

#### [96] Non-Current Portion of Long-term Debt

Enter any Non-Current Portion of Long-Term Debt.

#### [97] Mortgages

Enter any Mortgages. This might also be called Secured Debt.

#### [98] Non-Current Portion of Capitalized Leases

Enter any Non-Current Portion of Capitalized Leases.

#### [99] Convertible Debt

Enter any Convertible Debt.

#### [100] Any Other Long-term Debt

Report any other debt that charges interest.

#### [101] Provision for Risks and Charges

Enter any provision for risks and charges.

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#### [102] Reserve Accounts

Enter any reserve accounts.

#### [103] Deferred Tax Liability in Untaxed Reserves

Enter any Deferred Tax Liability shown in untaxed reserves.

#### [104] Deferred Income Taxes (Long-term)

Enter any Deferred Income Taxes.

#### [105] Deferred Income

Enter any deferred income.

#### [106] Long-term Unearned Revenue

Enter any long-term unearned revenue.

#### [107] Restructuring Obligations

Enter any restructuring obligations.

#### [108] Commitments and Contingencies

Enter any commitment and contingencies, which is another name for reserve accounts.

#### [109] Other Long-term Liabilities

Record any other long-term liabilities that do not charge interest.

#### [110] Retirement, Pension, and Health Insurance Related Liabilities

Report any liabilities shown for Retirement, Pension, or Health Insurance.

#### [111] Minority Interest

Report any Minority Interest.

#### [112] Non-Equity Reserves

Enter any non-equity reserves.

#### [113] Preferred Stock

Report any Preferred Stock.

#### [114] Common Stock (at Par)

This is the common stock at par. If there is more than one class of common stock, add them all together here.

Note: some companies report common stock at par and paid-in-capital in a single entry. If so, be sure to include it either here or in the row below, but not in both rows.

#### [115] Common Stock Capital Surplus or Paid-in-Capital

This is the common stock capital surplus or paid-in-capital. If there are multiple classes of stock, be sure to add all capital surplus accounts here.

Note: some companies report common stock at par and capital surplus as a single line. If that is the case, be sure to report the combined amount either here or above, but not in both places.

#### [116] Revaluation of Reserves

Enter any amount for revaluation of reserves.

#### [117] Other Appropriated Reserves

Enter any amount for other appropriated reserves.

#### [118] Unappropriated (Free) Reserves

Enter any amounts for unappropriated or free reserves.

#### [119] Retained Earnings

Report any Retained Earnings here.

#### [120] Equity in Untaxed Reserves

Enter any amounts for equity in untaxed reserves.

#### [121] Employee Stock Ownership Plan (ESOP) Guarantees

This should be entered as a negative number, if it is not shown as a negative number on the Actual sheet. This may also be called Stock Purchase Plan.

#### [122] Treasury Stock

This should be entered as a negative number, since it represents the dollar value of all stock that the company has repurchased.

#### [123] Common Stock Warrants and Stock Options

If Common Stock Warrants and Stock Options are shown as a separate account on the Actual balance sheet, then show them here. If they are not shown as a separate account, just put a zero here. If you want to make a special accounting adjustment, see the section below.

#### [124] Other Equity

Report any Other Equity.

#### [125] Unrealized Gain (Loss) On Marketable Securities

Enter any unrealized gains on marketable securities. If it is a loss, enter it as a negative number.

#### [126] Accumulated Other Comprehensive Income or Cumulative Other Adjustments

Report any Accumulated other comprehensive income or Cumulative Other Adjustments.

#### [127] Unrealized Gain (Loss) On Foreign Exchange

Enter any unrealized gains on foreign exchange. If it is a loss, enter it as a negative number.

#### [128] Cumulative Foreign Currency Translations

Report Cumulative Foreign Currency Translations.

#### [129] Total Shareholder Equity from Actual Sheet

This should come directly from the Balance sheet on the Actual worksheet, not calculated from the rows above. Note: It should include preferred stock and common equity.

#### [130] Calculated Total Shareholder Equity from Comprehensive Sheet

Don't enter anything here. Check to make sure this figure is the same as the Total Common Equity shown in the row above.

Note: most actual statements include preferred stock as a part of total shareholder equity, and so we also include it. However, you should verify that your source of data for the actual statement does in fact include preferred stock as a part of total shareholder equity.

#### Formula

Preferred stock + Common stock (at par) + Common stock capital surplus or paid-in-capital + Revaluation of reserves + Other appropriated reserves + Unappropriated (free) reserves + Retained earnings + Equity in untaxed reserves + ESOP guarantees + Treasury stock + Common stock warrants and stock options + Other equity + Unrealized gain (loss) on marketable securities + Accumulated other comprehensive income or cumulative other adj. + Unrealized gain (loss) on foreign exchange + Cumulative foreign currency translations

#### [131] Check To See If Shareholder Total Equity Is Consistent With Actual Sheets

We use this cell to check that our Shareholder Total Equity calculated here is consistent with the Actual Shareholder Total Equity. This cell will return "OK" if the calculated Shareholder Total Equity from the Comprehensive sheet items matches the Shareholder Total Equity from the Actual Sheet. Otherwise, it will return "Error" indicating you probably have omitted an item, or have given an item the wrong sign.

#### [132] Total Liabilities and Equity from Actual Sheet

This should come directly from the income statements on the Actual worksheet, not calculated from the rows above.

#### [133] Calculated Total Liabilities and Equity from Comprehensive Sheet

Don't enter anything (we have already entered the right formula). Check to make sure the figure shown here is the same as the figure in the row above. If not, then you probably have omitted an item, double counted an item, or have the wrong sign on an item.

#### <u>Formula</u>

Total current liabilities + (Non-current portion of long-term debt + Mortgages + Non-current portion of capitalized leases + Convertible debt + Any other long-term debt + Provision for risks and charges + Reserve accounts + Deferred tax liability in untaxed reserves + Deferred income taxes (Long-term) + Deferred income + Long-term unearned revenue + Restructuring obligations + Commitments and contingencies + Other long-term liabilities + Retirement, pension, and health insurance related liabilities + Minority interest + Non-equity reserves) + Calculated total shareholder equity from Comprehensive Sheet

#### [134] Check to see if Total Liabilities & Equity is consistent with Comprehensive sheet

We use this cell to check that our Total Liabilities & Equity calculated here is consistent with the Actual Total Liabilities & Equity. This cell will return "OK" if the calculated Total Liabilities & Equity from the Comprehensive sheet items matches the Total Liabilities & Equity from the Actual Sheet. Otherwise, it will return "Error" indicating you probably have omitted an item, or have given an item the wrong sign.

#### [135] Check for Balancing of Statements

This checks to see if the calculated Total Assets is actually equal to the Total Liabilities and Equity. If it shows "Error", then the sheets do not balance and there is a mistake in the way the items were entered.

#### REQUIRED ITEMS FROM STATEMENT OF CASH FLOWS

#### [136] Preferred Dividends Paid

This usually can be found in the statement of cash flows. This usually is shown as a negative number since it is a payment, so show it as a negative number here. If instead it is shown as a positive number on the Actual Statement of Cash Flows, show it as a negative number here.

#### [137] Common Dividends Paid

This usually can be found in the statement of cash flows. This usually is shown as a negative number since it is a payment, so show it as a negative number here. If instead it is shown as a positive number on the Actual Statement of Cash Flows, show it as a negative number here.

#### [138] Depreciation of PPE and Tangible Assets

This usually can be found in the actual Statement of Cash Flow, or in footnotes. Report the number here even if you reported a value for depreciation in the income statement. Don't worry if the two values are not equal. Sometimes the income statement will report only the portion of depreciation not due to costs of goods sold, while the Statement of Cash Flows will always report the true total depreciation. If Depreciation and Amortization are combined on the Actual statement of cash flows, then report the combined value as Depreciation, unless you know how to identify the portion due to depreciation and the portion due to amortization.

#### [139] Amortization of Goodwill and Intangibles

This usually can be found in the actual Statement of Cash Flow, or in footnotes. Report the number here even if you reported a value for amortization in the income statement. Don't worry if the two values are not equal. Sometimes the income statement will report only the portion of amortization due to costs of goods sold, while the Statement of Cash Flows will always report the true total amortization. If Depreciation and Amortization are combined on the Actual statement of cash flows, then report the combined value as Depreciation, unless you know how to identify the portion due to depreciation and the portion due to amortization.

#### REQUIRED ITEMS FROM THE FOOTNOTES OR ANNUAL REPORT

#### [140] Number of Shares Outstanding

This can usually be found in the row heading for common equity shown in the balance sheet. If not there, it usually can be found in the Annual Report. Make sure it is in the same units (e.g., millions, thousands, etc.) as the items on the financial statements.

#### REQUIRED ITEMS FROM THE FINANCIAL STATEMENTS OR USER'S JUDGMENT

#### [141] Assumed Marginal Tax Rate

This is the tax rate that the company will pay on any additional income. For most companies, the Federal rate is about 34%. With State and Local Taxes included, the rate usually is about 38%. Therefore, you should enter a rate of about 38%, unless you have additional information. The default value is the average tax rate, based on the taxes reported in the income statement.

#### OPTIONAL ITEMS FOR SPECIAL ACCOUNTING ADJUSTMENTS

#### [142] LIFO reserve (from Footnotes of Annual Report)

LIFO reserve can be found in the footnotes. Be sure to set the LIFO reserve in the year prior to the beginning of data to the same value as the last year of data. However, you may decide to not worry about the LIFO reserve. If this is the case, enter zero here.

#### [143] Interest Rate on Pension Liabilities

You will only need this item if your company has non-zero values for Retirement, Pension, and Health Related Liabilities. If these are zero, then just enter a zero here. Otherwise, enter your estimate for the company's pre-tax cost of debt.

#### [144] Interest Rate on Operating Leases

You will only need this item if your company has substantial operating lease obligations that are not already capitalized; see the comment in the next line for more details. If your company does not have substantial operating lease obligations, then just enter a zero here. Otherwise, enter your estimate for the company's pre-tax cost of debt.

#### [145] Capitalized Value of Operating Leases

Sometimes companies have substantial operating lease obligations, as shown in the footnotes. If your company does not have large lease obligations, then enter a zero here. Otherwise, calculate the Capitalized Value of Operating Leases.

#### [146] Stock Options (Warrants)

If Warrants and Stock Options are not shown in the Actual balance sheets, but you know the value from the footnotes (or some other source), you can enter that value here. If they are shown in the Actual balance sheets, but you believe the reported value is not accurate, then enter the reported value in the balance sheet account above and enter your corrected value here. The default value is the value shown on the balance sheet, which might be zero.

#### [147] Capitalized Operating Costs

Sometimes companies will capitalize an operating cost. This usually shows up in the Investing section of the Statement of Cash Flows. For example, a company might show an investment called "Cost of additions to internal use software". This is actually money the company spent on developing internal software, and so should be reported as an expense, not as additional assets. If your company has such a situation, report the amount here. Show the sign as it is shown on the Statement of Cash Flows, which is negative.

#### [148] Special Goodwill Impairment or Accounting Change

Companies can no longer amortize goodwill on an annual basis, but can only write down goodwill if the market value of the acquisition has fallen. These special write-downs, called impairments, do not affect free cash flow, but they do affect the NOPAT/Sales and Capital/Sales ratios. If you want to incorporate these special write-downs into the historical values of capital, then enter the amount of the write-down here.

#### [149] Weighted Average Cost of Capital

Enter the Weighted Average Cost of Capital that your company had in the historical years. This isn't necessary, unless you want to calculate the Economic Profit for the historical years. For a ballpark estimate of the historical Economic Profits, we use 10% for WACC. However, if you want something more accurate, then use the same approach in the WACC section to estimate the past WACCs.

#### STATEMENT OF CASH FLOWS

This section uses the data from the Income Statement and Balance Sheet above to calculate the Statement of Cash Flows rather than pulling in the values from the Sanitized sheet.

#### **OPERATING ACTIVITIES**

#### [150] Net Income

Pulls the value from [48] Calculated Net Income from Comprehensive Sheet from the income statement above

#### [151] Adjustments for reconciliation of RE Account

([119] Retained Earnings [Current Year] – [119] Retained Earnings [Prior Year]) – ([47] Net Income from Actual Sheet + ([136] Preferred Dividends Paid + [137] Common Dividends Paid)))

If you have made it to this point, we assume that all of your checks in the income statements and balance sheets are correct. If this row has any non-zero entries, it means one of two things:

First, it is possible that you made a mistake when you input the preferred and common dividends shown in the section above.

Second, it is possible that the actual statements are in error. We frequently find financial statements such that the addition to Retained Earnings is not actually equal to Net Income minus Dividends, even after taking into account translation adjustments. Sometimes these translation adjustments are shown as a separate line item, but sometimes they are shown as a direct change in Retained Earnings. If you are positive that you did not make a mistake in entering dividends and this row does show a non-zero item, don't worry about it. We will make the proper adjustment to Retained Earnings in the Condensed statements.

#### [152] Depreciation & Amortization

[138] Depreciation of PPE and Tangible Assets + [139] Amortization of Goodwill and Intangibles

#### [153] Change in Deferred Tax

([58] Current Deferred Tax Asset [Prior Year] – [58] Current Deferred Tax Asset [Current Year]) + ([71] Long-term Deferred Tax Asset [Prior Year] - [71] Long-term Deferred Tax Asset [Current Year]) + ([89] Short-term Deferred Taxes [Current Year] – [89] Short-term Deferred Taxes [Prior Year]) + ([104] Deferred Income Taxes [Current Year] – [104] Deferred Income Taxes [Prior Year])

#### [154] Change in Operating Current Assets

- (([54] Accounts Receivable [Current Year] + [55] Tax Refund Receivable [Current Year] + [56] Progress Payments [Current Year] + [57] Prepaid Expenses [Current Year] + [59] Inventories [Current Year] + [60] Other Non-Operating Current Assets [Current Year] + [61] Other Operating Current Assets [Current Year] + [55] Tax Refund Receivable [Prior Year] + [56] Progress Payments [Prior Year] + [57] Prepaid Expenses [Prior Year] + [59] Inventories [Prior Year] + [60] Other Non-Operating Current Assets [Prior Year] + [61] Other Operating Current Assets [Prior Year])

#### [155] Change in Operating Current Liabilities

([85] Accounts Payable [Current Year] + [86] Short-term Unearned Revenue [Current Year] + [87] Interest Payable (Accrued Interest) [Current Year] + [88] Dividends Payable [Current Year] + [90] Taxes Payable (Accrued Taxes) [Current Year] + [91] Accrued Wages [Current Year] + [92] Other Accrued Expenses or Accruals [Current Year] + [93] Other Non-Operating Current Liabilities [Current Year] + [94] Other Operating Current Liabilities [Current Year] - ([85] Accounts Payable [Prior Year] + [86] Short-term Unearned Revenue [Prior Year] + [87] Interest Payable (Accrued Interest) [Prior Year] + [88] Dividends Payable [Prior Year] + [90] Taxes Payable (Accrued Taxes) [Prior Year] + [91] Accrued Wages [Prior Year] + [92] Other Accrued Expenses or Accruals [Prior Year] + [93] Other Non-Operating Current Liabilities [Prior Year] + [94] Other Operating Current Liabilities [Prior Year])

#### [156] Net Cash from Operating Activities

[150] Net Income + [151] Adjustments for reconciliation of RE Account + [152] Depreciation & Amortization + [153] Change in Deferred Tax + [154] Change in Operating Current Assets + [155] Change in Operating Current Liabilities

#### **INVESTING ACTIVITIES**

#### [157] Investment in PPE

- ([66] Net Property, Plant, & Equipment [Current Year] – [66] Net Property, Plant, & Equipment [Prior Year] + [138] Depreciation of PPE and Tangible Assets)

#### [158] Investment in other long-term operating assets

- (([64] Investments in Unconsolidated Subsidiaries [Current Year] + MAX ([67] Goodwill [Current Year] + [68] Intangibles [Current Year] + [69] Cost in Excess of Fair Value of Net Assets Acquired [Current Year], [70] Goodwill and Intangibles (if shown combined) [Current Year]) + [73] Other Operating Long-term Assets) [Current Year]) – ([64] Investments in Unconsolidated Subsidiaries [Prior Year] + MAX ([67] Goodwill [Prior Year] + [68] Intangibles [Prior Year] + [69] Cost in Excess of Fair Value of Net Assets Acquired [Prior Year], [70] Goodwill and Intangibles (if shown combined) [Prior Year]) + [73] Other Operating Long-term Assets) [Prior Year]) + Depreciation

#### [159] Net Cash from Investing Activities

[157] Investment in PPE + [158] Investment in other long-term operating assets

#### FINANCING ACTIVITIES

#### [160] Changes in Short-term Investments

- (([51] Marketable Securities [Current Year] + [52] Notes Receivable [Current Year] + [53] Short-term Investments or Investment Securities [Current Year]) – ([51] Marketable Securities [Prior Year] + [52] Notes Receivable [Prior Year] + [53] Short-term Investments or Investment Securities [Prior Year])

#### [161] Changes in Long-term Investments

-(([63] Long-Term Receivables [Current Year] + [65] Other Investments [Current Year] + [72] Long-term Notes Receivable [Current Year] + [74] Deferred Charges [Current Year] + [75] Deposits [Current Year] + [76] Investments & Advances to Subsidiaries [Current Year] + [77] Other Non-Operating Long-term Assets [Current Year]) – ([63] Long-Term Receivables [Prior Year] + [65] Other Investments [Prior Year] + [72] Long-term Notes Receivable [Prior Year] + [74] Deferred Charges

[Prior Year] + [75] Deposits [Prior Year] + [76] Investments & Advances to Subsidiaries [Prior Year] + [77] Other Non-Operating Long-term Assets [Prior Year])

#### [162] Changes in Short-term Debt

([81] Notes Payable [Current Year] + [82] Current Portion of Long-term Debt [Current Year] + [83] Current Portion of Capitalized Leases [Current Year] + [84] All Other Short-term Debt [Current Year]) – ([81] Notes Payable [Prior Year] + [82] Current Portion of Long-term Debt [Prior Year] + [83] Current Portion of Capitalized Leases [Prior Year] + [84] All Other Short-term Debt [Prior Year])

#### [163] Changes in Long-term Debt

([96] Non-Current Portion of Long-term Debt [Current Year] + [97] Mortgages [Current Year] + [98] Non-Current Portion of Capitalized Leases [Current Year] + [99] Convertible Debt [Current Year] + [100] Any Other Long-term Debt [Current Year]) – ([96] Non-Current Portion of Long-term Debt [Prior Year] + [97] Mortgages [Prior Year] + [98] Non-Current Portion of Capitalized Leases [Prior Year] + [99] Convertible Debt [Prior Year] + [100] Any Other Long-term Debt [Prior Year])

#### [164] Changes in all other long-term liabilities

[101] Provision for Risks and Charges [Current Year] + [103] Deferred Tax Liability in Untaxed Reserves [Current Year] + [105] Deferred Income [Current Year] + [106] Long-term Unearned Revenue [Current Year] + [107] Restructuring Obligations [Current Year] + [108] Commitments and Contingencies [Current Year] + [109] Other Long-term Liabilities [Current Year] + [110] Retirement, Pension, and Health Insurance Related Liabilities [Current Year] + [111] Minority Interest [Current Year] + [112] Non-Equity Reserves [Current Year] + [116] Revaluation of Reserves [Current Year] + [117] Other Appropriated Reserves [Current Year] + [118] Unappropriated Reserves [Current Year] + [120] Equity in Untaxed Reserves [Current Year] + [121] Employee Stock Ownership Plan (ESOP) Guarantees [Current Year]) – ([101] Provision for Risks and Charges [Prior Year] + [103] Deferred Tax Liability in Untaxed Reserves [Prior Year] + [105] Deferred Income [Prior Year] + [106] Long-term Unearned Revenue [Prior Year] + [107] Restructuring Obligations [Prior Year] + [108] Commitments and Contingencies [Prior Year] + [109] Other Long-term Liabilities [Prior Year] + [110] Retirement, Pension, and Health Insurance Related Liabilities [Prior Year] + [111] Minority Interest [Prior Year] + [112] Non-Equity Reserves [Prior Year] + [116] Revaluation of Reserves [Prior Year] + [117] Other Appropriated Reserves [Prior Year] + [118] Unappropriated Reserves [Prior Year] + [120] Equity in Untaxed Reserves [Prior Year] + [121] Employee Stock Ownership Plan (ESOP) Guarantees [Prior Year])

#### [165] Change in Preferred

[113] Preferred Stock [Current Year] – [113] Preferred Stock [Prior Year]

#### [166] Change in Par plus PIC

([114] Common Stock (at Par) [Current Year] + [115] Common Stock Capital Surplus or Paid-in-Capital [Current Year]) – ([114] Common Stock (at Par) [Prior Year] + [115] Common Stock Capital Surplus or Paid-in-Capital [Prior Year])

#### [167] Change in common stock warrants and stock options

[123] Common Stock Warrants and Stock Options [Current Year] - [123] Common Stock Warrants and Stock Options [Prior Year]

#### [168] Change in Treasury and Cumulative Adjustments

([122] Treasury Stock [Current Year] + [124] Other Equity [Current Year] + [125] Unrealized Gain (Loss) On Marketable Securities [Current Year] + [126] Accumulated Other Comprehensive Income or Cumulative Other Adjustments [Current Year] + [127] Unrealized Gain (Loss) On Foreign Exchange [Current Year] + [128] Cumulative Foreign Currency Translations) - ([122] Treasury Stock [Prior Year] + [124] Other Equity [Prior Year] + [125] Unrealized Gain (Loss) On Marketable Securities [Prior Year] + [126] Accumulated Other Comprehensive Income or Cumulative Other Adjustments [Prior Year] + [127] Unrealized Gain (Loss) On Foreign Exchange [Prior Year] + [128] Cumulative Foreign Currency Translations)

#### [169] Preferred Dividends

Pulls the value from [136] Preferred Dividends Paid

#### [170] Common Dividends

Pulls the value from [137] Common Dividends Paid

#### [171] Net Cash from Financing Activities

[160] Changes in Short-term Investments + [161] Changes in Long-term Investments + [162] Changes in Short-term Debt + [163] Changes in Long-term Debt + [164] Changes in all other long-term liabilities + [165] Change in Preferred + [166] Change in Par plus PIC + [167] Change in common stock warrants and stock options + [168] Change in Treasury and Cumulative Adjustments + [169] Preferred Dividends + [170] Common Dividends

#### [172] Net Cash Flow

[156] Net Cash from Operating Activities + [159] Net Cash from Investing Activities + [171] Net Cash from Financing Activities

#### [173] Starting Cash

Pulls the value from [50] Cash and Equivalents from the Balance Sheet above.

#### [174] Ending Cash

[173] Starting Cash + [172] Net Cash Flow

#### [175] Check To See If Ending Cash Is Consistent With the Balance Sheet

It is nice if this is displaying "OK", but it is not essential. Unfortunately, sometimes your data source will have two years of financial statements that don't articulate with one another. This can occur if the data source used restated statements for one year, but not for an adjacent year. It is a pain in the neck, but it isn't critical, since we are more concerned with projecting future statements than "auditing" past statements.

This marks the end of the "Comprehensive" sheet. Next please switch to the next worksheet in the workbook entitled "Model".

#### MODEL

#### **CONTROL PANEL**

| Calculations     | TRUE                         |    |    |    |        |
|------------------|------------------------------|----|----|----|--------|
| Data Sheet       | MICHAEL_COMPREHENSIVE(\$A\$1 |    |    |    |        |
| Initial Period   | Sep 10                       | 2  | 9  | 10 | Sep 12 |
| Frequency        | 3                            | 4  |    |    |        |
| No. Periods Est. | 20                           | 29 | 21 | 30 | Sep 17 |
| Avg. Interest    | No                           |    |    |    |        |

Located in the top left corner of the model, this explanation flows from top to bottom, however, when a row has more than one column, the explanations flow along the row from left to right, before continuing down.

#### [176] Calculations

This is a True/False drop-down menu. Setting this cell to "False" will turn off the calculations in all cells in the worksheet, whereas setting this value to "True" will activate the calculations. This allows for quick re-calculation of all formulas, which can fix circular references and other calculation issues.

#### [177] Data Sheet

Enter the name of the worksheet which contains the financial data for the company you are analyzing followed by "!\$A\$1". This provides reference for offset or lookup formulas as to where the financial data is located. For our purposes in this report this should be a reference to the

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"Comprehensive" sheet, however we have created this model to remain dynamic in case the financial data must be extracted from another sheet.

#### **Initial Period**

#### [178] Initial Period Date



This is a drop-down menu that includes all the periods with financial data available (based on the historical data included in the database). Select the period from the dropdown menu that you would like to be the initial period in your analysis.

#### [179] Column Number of Initial Period



This cell returns the position number of the [178] Initial Period Date in the "Comprehensive" sheet.

#### [180] Number of Historical Periods



#### [181] Total Number of Periods – [179] Column Number of Initial Period + 1

This cell returns the number of historical periods included in the model based on the initial period selected by the user in [178] Initial Period Date. By taking the total number of periods in the "Comprehensive" sheet and deducting the column number of the initial period you arrive at the total number of periods in the "Comprehensive" sheet that occur after the initial period, by adding 1 to this value you also include the initial period in the count.

#### [181] Total Number of Periods



This counts the total number of historical periods available in the "Comprehensive" sheet, including those occurring before the initial period selected in [178] Initial Period Date.

#### [182] Most Recent Fiscal Period Date



This returns the date of the most recent fiscal period.

#### Frequency

#### [183] Number of Months per Period

This is a dropdown menu with the following options: 1, 3, 6, and 12. This represents the number of months per period:

- 1 = Monthly
- 3 = Quarterly
- 6 = Semi-annual
- 12 = Annual

#### [184] Number of Periods per Year

This is equal to (12 / [183] Number of Months per Period) thereby arriving at the number of reporting cycles per annum.

#### Number of Periods Estimated



#### [185] Number of Estimated Periods

Enter the number of projected periods you would like included in the analysis. Data validation restricts entry to a value between 1 and [187] The Number of Remaining Slots Available (which is equal to the maximum number of periods the model can handle minus the total number of historical periods included in the model).

#### [186] Total Number of Periods

[180] Number of Historical Periods + [185] Number of Estimated Periods

This returns the total number of periods included in the model (i.e. Historical periods + estimated periods).

#### [187] Number of Remaining Slots Available

[188] Maximum Number of Periods – [180] Number of Historical Periods

This returns the number of slots in the model that are remaining after all the historical periods have been accounted for. Therefore, this is the maximum number of estimated periods that can be included in the model. This value is used to limit the range of acceptable entries in [185] Number of Estimated Periods.

#### [188] Maximum Number of Periods

This is hardcoded with a value of 30, which is equal to the maximum number of periods that the model can hold.

#### [189] Terminal Period Date

This is equal to the date of the last projected period in the model, which is also referred to as the "Terminal Period".

#### [190] Average Interest Toggle

This is a toggle that allows the user to specify whether they would like interest expense to be computed using average debt balances (1 for Yes, 0 for No). When average interest is not selected, interest expense is computed using the beginning balance. To break the circular reference, toggle average interest off then back on. After toggling, hit F9 to recalculate.

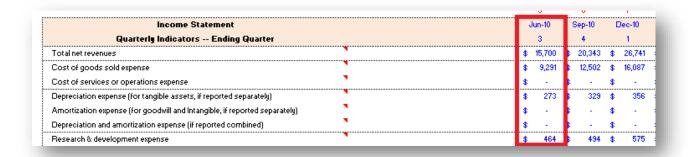
#### [191] Data Starting Row

Enter the row number of the row with the period dates in the "Comprehensive" sheet.



#### [192] Data Starting Column

Enter the column number of the column in the "Comprehensive" sheet where the actual data begins.



**Note**: Columns are represented as letters in excel, you must enter the corresponding <u>number</u>, not letter (i.e. A = 1, B = 2, C = 3).

#### [193] Starting Column Number of Initial Period

[192] Data Starting Column + [179] Column Number of Initial Period – 1

This returns the column number in the "Comprehensive" sheet that the initial period (as selected in [178] Initial Period Date) can be found. This will be used in later OFFSET calculations to retrieve the historical data from the "Comprehensive" sheet.

#### [194] Period Number Row

[191] Data Starting Row – 1

This is equal to the row number in the "Comprehensive" sheet where the historical period numbers can be found.

#### [195] Quarterly Indicator Row

[191] Data Starting Row + 1

This is equal to the row number in the "Comprehensive" sheet where the quarterly indicators can be found.

#### [196] Number of Periods Prior

This is pulled from the "Comprehensive" sheet. This will be used in subsequent calculations to indicate how many periods prior to go to get the value of the account. For example, this is used in the calculation of SG&A Expense to calculate the Investment in Capitalized Operating Costs.

#### [197] Accepted Error Margin

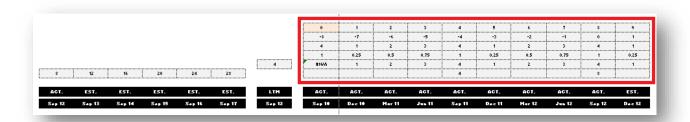
This is the error margin pulled from the "Comprehensive" sheet

#### [198] Interest Rate on Capitalized Costs

This is the interest rate on capitalized costs pulled from the "Comprehensive" sheet

#### **HISTORICAL & PROJECTS PERIODS**

#### **INDEX CELLS**



These are located along the top line, spanning the width of the model. This explanation flows from top to bottom, however, when a row has more than one column, the explanations flow along the row from left to right, before continuing down.

#### [199] Period Position Number

The value in the cell represents how many periods into the model that the current period is located, which is used to provide reference for OFFSET functions. The first historical period included in the model has a position number of 0. This period position number increases incrementally with each subsequent period until the last period in the model. Therefore, each period in the model has a unique position number which is used in later OFFSET calculations to capture the value of that specific cell.

Each of these cells check if the value in the cell to the left is less than [186] Total Number of Periods. If this is true, then it will return [the value of the cell to the left] + 1, else it will return blank. This is because if the cell to the left is not less than the total number of periods, then it was the final period and the model must now end.

#### [200] T-value

Represents the T- value for the period

- Most Recent Period = 0
- Historical Periods are less than 0 (the higher the negative number, the further back in time the period is located)
- Estimated Periods are greater than 0 (the higher the positive number, the further in the future the period is located)
- These cells are referred to by cells later in the model to determine if the period is Historical (<=0) or Projected (>0).

The formula used the OFFSET function and the value in [199] Period Position Number to pull the corresponding value from [6] Historical Period Number from the "Comprehensive" sheet. If this is blank, then this cell will return the [the value of the cell to the left] + 1, otherwise it will report the value from the "Comprehensive" sheet as a negative number indicating it is a historical period. Therefore, this formula will pull each of the values along the row [6] Historical Period Number from the "Comprehensive" sheet as a negative number until it reaches a blank cell (which will occur after the most recent period; represented by the value 0) and will then begin incrementing by 1 for the remaining periods where [199] Period Position Number is not blank.

#### [201] Period Indicator

This represents the period value of the current period within a fiscal year. For example, when the model includes quarterly data there will be 4 periods in a year. When the model includes annual data there will be only 1 period per year therefore every cell in this row will have a value equal to 1. If the model includes monthly data then there will be 12 periods in a year. Lastly if the model includes semi-annual data then there will be 2 periods per year. As a general rule the first period of the year will be equal to 1 and each subsequent period will count up until [184] Number of Periods per Year, once it reaches the Number of Periods per Year it will continue the count back starting at 1.

#### Formula

IF: [200] T-value <= 0

THEN: IF (OR([183] Number of Months per Period = 12 (i.e. Annual data), [183] Number of Months per Period = 6 (i.e. Semi-annual data), [183] Number of Months per Period = 1 (i.e. Monthly

data) THEN: 1

ELSE: [Pull from Comprehensive sheet]

ELSE: IF [Cell to the Left] < [184] Number of Periods per Year

THEN: SUM [Cell to the Left] + 1

ELSE: 1

#### [202] Annualization Fraction

[201] Period Indicator / [184] Number of Years per Period

This is a fundamental component of this model. This calculates the current period's position in the year out of the total number of periods that occur in a year, as a fraction. For example, assume we are using quarterly data. There are four periods in a year. The first period will return 1/4 = 0.25. The second period will return 2/4 = 0.5. The third period will return 3/4 = 0.75 and the fourth period will return 4/4 = 1. These numbers are used to annualize the financial data for that period to calculate what it would be on an annual basis if we assume a consistent trend going forward. For example, let's say in the first quarter a company has revenue of \$100,000. By finding dividing the current period's revenue by the Annualization fraction (0.25) we can

estimate an annualized revenue of 100,000 / 0.25 = \$400,000. This concept will be important for many calculations throughout the model.

## [203] Adjusted Period Indicator

This cell returns #N/A for all cells where [201] Period Indicator > [199] Period Position Number, whereas for all other cells it will pull the value from [201] Period Indicator. Effectively the result of this is that the cell will return "#N/A" for the periods of the first year of historical data included in the model if the data pulled begins in the middle of the year. For example, if the first period of data that is pulled into the model is the second quarter of the year, the cell will return "#N/A" because the first year will be incomplete. This is important because many subsequent calculations rely on comparing the current year to the prior year, but in the situation where the very first year of the model is incomplete we must account for this.

### [204] Fiscal Year End Period Position Number

This row only returns the [199] Period Position Number for the periods that are fiscal year ends. These position numbers are used by the Annual Index Cells to pull the financial data for that year (please see the explanation for Annual Index Cells below for more information).

#### DATE HEADER



## [205] Actual or Estimated

This row checks if [200] T-value is less than or equal to zero and if true will return the label "ACT." Indicating the current period is an actual/historical period, Otherwise it will check if [185] Number of Estimated Periods is equal to zero, if this is true is will return blank, otherwise it will return the label "EST." indicating the current period is an estimated/projected period.

#### [206] Period Date

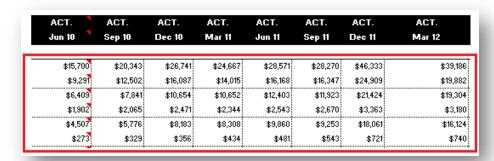
This represents the date of the current period in the model. If [200] T-value is less than or equal to zero (i.e. historical period) then this will pull the date from the "Comprehensive" sheet using the OFFSET function, otherwise if [200] T-value > zero (i.e. estimated period) then it will use the EODATE function to take the date of the prior period and add [183] Number of Months per Period to arrive at the date for the current period.

Note: The EOMONTH function has been used to adjusted the date that is pulled from the "Comprehensive" sheet to switch it to the last day of the month, however, this does not correspond to the actual period end date for the company, therefore calculations that rely on precise use of the date will be incorrect. Beware of this caveat. If you believe the dates entered in

the "Comprehensive" sheet are accurate you should remove the EOMONTH function from this formula.

The estimated periods use the EDATE function because this adds the number of months specified to arrive at the new date without altering the day of the month pulled from the previous period, whereas using the EOMONTH function would by default return the date as of the last day of the month.

### **CORE MODEL**



The OFFSET function is used in combination with the row index in many of the following cells in this model to pull the financial data from the "Comprehensive" sheet. Furthermore, many of these formulas can be broken into two parts; historical and projected.

# **INCOME STATEMENT**

### [207] Sales

#### Historical

[/] Total Net Revenue

### **Projected**

[207] Sales [Prior Period] \* (1 + [/] Sales Growth Rate)

Note: This formula also checks to make sure that [199] Period Position Number > [184] Number of Periods per Year. If it is less than [184] Number of Periods per Year then the cell will return #N/A. This is because the formula uses an annual growth rate to project the next period's sales and requires at least 1 period prior to the current period in order to make the projection.

## [208] Cost of Goods Sold (COGS)

### Historical

[Cost of Goods Sold + Cost of Services or Operations]

**PLUS** [Minority Interest Expense (Pre-tax Operating Expense)]

**PLUS** IF: [Depreciation & Amortization] = 0

THEN: Negative [Depreciation [Statement of Cash Flow] – Depreciation Expense]

\*This is to deduct any depreciation included in COGS. By taking SCF depreciation which includes all depreciation expense and deducting depreciation expense from the income statement we can determine how much depreciation has been included in COGS

ELSE: Negative (Depreciation [Statement of Cash Flow] – (Depreciation & Amortization – Amortization Expense)]

**LESS** [Amortization [Statement of Cash Flow] – Amortization Expense]

\*This deducts the amount of amortization expense that is included in COGS

**LESS** (LIFO Reserve [Current Period] – LIFO Reserve [Prior Period])

\*This change reflects the COGS that would have been shown under FIFO inventory accounting

## **Projected**

[207] Sales \* [/] COGS as a % of Sales

## [209] Gross Profit

[207] Sales - [208] Cost of Goods Sold

## [210] Selling, General And Administrative Expense (SGA)

### Historical

[Research & Development Expense + IF(Selling, General And Administrative Expense = 0, THEN: Sales & Marketing + General & Administrative, ELSE: Selling, General And Administrative Expense)]

**PLUS** Other Operating Expenses

**LESS** (Interest Rate on Operating Leases \* Capitalized value of Operating Leases)

- \* Backs out an amount equal to the "interest" that would have been paid on the "debt" that is due to the capitalized value of the operating lease. This is because we want to reverse the effect of capitalizing the operating leases. The interest rate paid on Operating Leases has caused SGA to be overstated, therefore we deduct this amount to arrive at the normalized SGA figure.
- LESS (Interest Rate on Pension Liabilities \* Retirement, Pension & Health Insurance Related Liabilities)
  - \* We treat Retirement, Pension & Health Insurance Related Liabilities as long-term debt, therefore we deduct this interest expense to exclude it rather than include it as an operating cost
- LESS (Investment in Capitalized Operating Costs [Current Period] Investment in Capitalized Operating Costs ["3" periods prior])
  - \*This is a negative number, therefore subtracting it is actually increasing SGA expense.

Note: The number of periods prior that is used (here we use "3") for Investment in Capitalized Operating Costs is determined by the value found in [196] Number of Periods Prior.

## **Projected**

[207] Sales \* [/] SGA as a % of Sales

## [211] EBITDA

[209] Gross Profit - [210] Selling, General And Administrative Expense

## [212] Depreciation

#### Historical

Depreciation [Statement of Cash Flow] – (Capitalized Interest Rate \* Cumulative Interest Capitalized)

\*Adjustment due to "Uncapitalizing" Interest (Rate \* cumulative interest capitalized)

## **Projected**

Net PPE \* Depreciation as a % of Net PPE

### [213] EBIT

[211] EBITDA – [212] Depreciation

### [214] Interest Income

#### Historical

Pulls the value from Interest Income from the "Comprehensive" sheet.

## **Projected**

IF [Period Indicator = Number of Periods per Year] (i.e. Period is the Year-end)

THEN: Pull [/] Total Interest Income

\*This is because the Year-end Interest Income is the Cumulative for the Year, therefore pulling the Year-end figure is equal to the total amount of interest over the year

ELSE: 0

#### [215] Interest Expense

### Historical

[Interest Expense (Income)]

**PLUS** [Interest rate on Operating leases \* Capitalized value of Operating Leases]

\*add an amount equal to the interest that would have been incurred if the user has chosen to capitalize Operating Leases

**PLUS** (Interest Rate on Pension Liabilities \* Retirement, Pension & Health Insurance Related Liabilities)

Note: We do not consider the Interest expense on the capitalized value of operating leases and the interest expense on pension liabilities to be operating related costs therefore, we previously backed them out of SGA and have instead added them here.

## **Projected**

IF [Period Indicator = Number of Periods per Year] (i.e. Period is the Year-end)

THEN: Pull [/] Total Interest Expense from below

\*This is because the Year-end Interest Income is the Cumulative for the Year, therefore pulling the Year-end figure is equal to the total amount of interest over the year

ELSE: 0

## [216] Non-Operating Income (Expense)

### Historical

[Investment income (Expense)]

**PLUS** [Remitted income or equity earnings + unremitted income or equity earnings]

**LESS** [Minority interest + losses on equity investees]

**PLUS** [Other non-operating income (expense)]

**PLUS** [Negative (After-Tax Minority interest / (1- Marginal tax rate)]

\* This deducts After-tax Minority interest on a pre-tax basis

PLUS [Negative (After-tax Equity in Earnings / (1 - Marginal tax rate)]

\* This deducts After-tax Equity in Earnings on a pre-tax basis

PLUS [Investment Gains + All other income / (1- Marginal tax rate)]

\* This adds Investment Gains & All other income (which are after-tax items) on a pre-tax basis

## **Projected**

[207] Sales \* [/] Non-Operating Income as a % of Sales

# [217] Earnings before Taxes (EBT)

[213] EBIT + [214] Interest Income – [215] Interest Expense + [216] Non-operating Income (Expense)

### [218] Tax Expense

#### Historical

**PLUS** [Mergers & Restructuring \* Marginal Tax Rate]

\*We do not include this expense in EBT, which means our EBT will be higher than the EBT from the comprehensive sheet, therefore Tax Expense will be understated. To rectify this we increase Tax Expense by the tax that should be paid on the increase in EBT caused by this change.

**PLUS** [Extraordinary Charges \* Marginal Tax Rate]

\*We do not include this expense in EBT, which means our EBT will be higher than the EBT from the comprehensive sheet, therefore Tax Expense will be understated. To rectify this we increase Tax Expense by the tax that should be paid on the increase in EBT caused by this change.

**LESS** [Extraordinary Credit \* Marginal Tax Rate]

\*We do not include this income in EBT, which means our EBT will be lower than the EBT from the comprehensive sheet, therefore Tax Expense will be overstated. To rectify this we decrease Tax Expense by the amount tax expense was overstated.

**PLUS** [Reserve Expense \* Marginal Tax Rate]

\*We do not include this expense in EBT, which means our EBT will be higher than the EBT from the comprehensive sheet, therefore Tax Expense will be understated. To rectify this we increase Tax Expense by the tax that should be paid on the increase in EBT caused by this change.

**LESS** [Gain (Loss) on Sale of Assets \* Marginal Tax Rate]

\*We do not include this income in EBT, which means our EBT will be lower than the EBT from the comprehensive sheet, therefore Tax Expense will be overstated. To rectify this we decrease Tax Expense by the amount tax expense was overstated.

**LESS** [Special Nonrecurring Income \* Marginal Tax Rate]

\*We do not include this income in EBT, which means our EBT will be lower than the EBT from the comprehensive sheet, therefore Tax Expense will be overstated. To rectify this we decrease Tax Expense by the amount tax expense was overstated.

**PLUS** [Provision for Income Tax Expense]

\*This was the Income Tax Expense as stated in the comprehensive sheet which must be adjusted to account for the expenses & income that we excluded in our calculations.

LESS [After-Tax Minority Interest / (1 – Marginal Tax Rate) \* Marginal Tax Rate]

\*We included this expense in EBT whereas the comprehensive sheet does not. This means our EBT will be lower than the EBT from the comprehensive sheet, therefore Tax Expense will be overstated. To rectify this we decrease Tax Expense.

\*This formula first converts the after-tax expense to a pre-tax basis and then calculates the tax related to this expense

**LESS** [After-Tax Equity in Earnings / (1 – Marginal Tax Rate) \* Marginal Tax Rate]

\*We included this expense in EBT whereas the comprehensive sheet does not. This means our EBT will be lower than the EBT from the comprehensive sheet, therefore Tax Expense will be overstated. To rectify this we decrease Tax Expense.

\*This formula first converts the after-tax expense to a pre-tax basis and then calculates the tax related to this expense

**PLUS** [(Investment Gains + All Other Income) / (1 – Marginal Tax Rate) \* Marginal Tax Rate]

- \*We included this income in EBT whereas the comprehensive sheet does not. This means our EBT will be higher than the EBT from the comprehensive sheet, therefore Tax Expense will be understated. To rectify this we increase Tax Expense.
- \*This formula first converts the after-tax income to a pre-tax basis and then calculates the tax related to this income
- LESS [Marginal Tax Rate \* (Interest Capitalized [Current Period] (Capitalized Interest Rate \* Cumulative Interest Capitalized))
  - \*Adjustment to reflect impact of "Uncapitalizing" Capitalized interest Look into this

## **Projected**

(Average Tax Rate \* EBIT) + (Marginal Tax Rate \* (- Interest Expense + Interest Income + Non-Operating Income)

\*Interest Expense is negative because this reduces the amount of tax you must pay

## [219] Net Income before Extraordinary Items

[217] Earnings before Taxes - [218] Tax Expense

## [220] After-tax Extraordinary Income (Expense)

#### Historical

- (Merger & Restructuring costs \* (1 - Marginal Tax Rate)

**LESS** [Extraordinary Charges \* (1 – Marginal Tax Rate)]

**PLUS** [Extraordinary Credit \* (1 – Marginal Tax Rate)]

**LESS** [Reserve Expense \* (1 – Marginal Tax Rate)]

**PLUS** [Gain (loss) on sale of Assets \* (1 – Marginal Tax Rate)]

**PLUS** [special non-recurring items income \* (1 – Marginal Tax Rate)]

**PLUS** IF[Extraordinary Items and Discontinued Operations = 0, THEN: Extraordinary Items + Discontinued Operations, ELSE: Extraordinary Items and Discontinued Operations]

**LESS** [Special Goodwill Impairment or Accounting Change]

### Projected

[207] Sales \* [/] Extraordinary Income as a % of Sales

## [221] Net Income (NI)

[219] Net Income before Extraordinary Items + [220] After-tax Extraordinary Income (Expense)

### **KEY PERFORMANCE METRICS & DRIVERS**

Before we discuss the Excel formulations for the following performance metrics and drivers, it is first necessary to discuss the logic behind these calculations and the inputs that are necessary for you to provide.

It is important to recognize that there are three time periods in our project; short-term, long-term and steady-state. In the short-term your projections must depend on the historical data of the firm and your own firm-specific knowledge. As the level of competition and market saturation increase over the long-term, it will become increasingly difficult for any individual firm to continue to produce extraordinary growth. Therefore the growth rate generally will decline, ultimately resulting in a steady level of growth consistent with the growth rate for the industry and the economy as a whole. This is the steady state. The length of time between the current period and the steady state is subjective and ultimately relies on the discretion of the analyst based on their knowledge of industry trends and the particular competitive advantages of the individual firm.

The fade rate method allows us to capture this progression from high short-term growth toward the level of steady state growth with a minimal number of inputs required. This helps us avoid the inconvenience of manually inputting a growth rate for each individual period in our projection.

## There are four variables that are required for our formula:

- 1. Starting Rate (G<sub>1</sub>): The starting growth rate
- 2. Long-term Rate (G<sub>I</sub>): The growth rate at which the company will eventually level off. This should be in the range of 4.5% to 6.5%
- 3. Time until Long-term (T): number of additional years it takes for growth to level out
- **4. Fade rate (c):** determines how steeply the company's starting rate will "fade" to the longterm rate.

| Fade rate = 0        | Fade rate > 0                   | Fade rate < 0                 |
|----------------------|---------------------------------|-------------------------------|
| Rate falls linearly. | Rate falls fast initially and   | Rate falls slow initially and |
|                      | then falls at a decreasing rate | then falls at an increasing   |
|                      | toward the end of the           | rate toward the end of the    |
|                      | projection period.              | projection period.            |

#### Fade rate method formula

$$g_t = g_1 - \left[\frac{g_L - g_1}{e^{-c(t-1)} - 1}\right] + \left[\frac{g_L - g_1}{e^{-cT} - 1}\right]e^{-c(t-1)}$$

#### PROJECTION INPUTS



Located to the far left side of the model you will find the cells where you will enter your inputs to be used in the fade rate formula. We will discuss each cell moving along the row from left to right.

The first three cells in the row allow the user to calculate an average based on the historical data that can be used as the starting rate.

## [222] Starting Date

The first cell is a dropdown list containing the dates of available historical data. Select the starting date of the data you would like to include in the sample used to calculate the average.

# [223] Ending Date

The subsequent cell to the right is another dropdown list containing the dates of available historical data. From this list select the ending date of the data you would like to include in the sample used to calculate the average.

## [224] Historical Average

#### The formula for growth calculations:

The following cell contains the formula for the geometric mean and will use the dates selected by the user in the prior two cells as the start date and end date respectively to pull the values from Sales to be used in the calculation of the geometric mean. This helps provide a more accurate picture of the average level of Sales Growth.

### The formula for other accounts:

The following cell contains a formula and will use the dates selected by the user in the prior two cells to pull the data between the start date and end date to calculate the Arithmetic mean for that sample of data.

### [225] Starting Rate Input

If you would like to manually enter the starting rate to be used, instead of using the calculated historical average, then enter the rate you would like to use in this cell.

#### [226] Starting Rate

This is the cell that will be used in the fade rate formula. This cell checks whether [225] Starting Rate Input is blank (i.e. the user has not manually entered in a starting rate) and if so it will pull the value from [224] Historical Average to be used as the Starting Rate, otherwise if the user has entered a rate into [225] Starting Rate Input it will pull that value instead.

## [227] Starting Date

The first cell is a dropdown list containing the dates of available historical data. Select the starting date of the data you would like to include in the sample used to calculate the average.

## [228] Ending Date

The subsequent cell to the right is another dropdown list containing the dates of available historical data. From this list select the ending date of the data you would like to include in the sample used to calculate the average.

## [229] Historical Average

### The formula for growth calculations:

The following cell contains the formula for the geometric mean and will use the dates selected by the user in the prior two cells as the start date and end date respectively to pull the values from Sales to be used in the calculation of the geometric mean. This helps provide a more accurate picture of the average level of Sales Growth.

#### The formula for other accounts:

The following cell contains a formula and will use the dates selected by the user in the prior two cells to pull the data between the start date and end date to calculate the Arithmetic mean for that sample of data.

### [230] Long-term Rate Input

If you would like to manually enter the Long-term rate to be used, instead of using the calculated historical average, then enter the rate you would like to use in this cell.

#### [231] Long-term Rate

This is the cell that will be used in the fade rate formula. This cell checks whether [230] Long-term Rate Input is blank (i.e. the user has not manually entered in a Long-term rate) and if so it will pull the value from [229] Historical Average to be used as the Long-term Rate, otherwise if the user has entered a rate into [230] Long-term Rate Input it will pull that value instead.

# [232] Time until Long-term

Enter the number of additional years you project it will take for growth to level out.

### [233] Fade Rate

Enter the fade rate here.

## [234] Sales Growth Rate

#### Historical

IF: [199] Period Position Number = 0

THEN: Blank

ELSE: [207] Sales [Current Period] / [207] Sales [Prior Period] – 1

## **Projected**

```
IF: [t <= [Time until Long-term (Years)]</pre>
```

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate\*Time until Long-term) -1) \* EXP(-Fade Rate \* (t - 1))

ELSE: Long-term Rate

## [235] Earnings Growth

IF: [199] Period Position Number = 0

THEN: Blank

ELSE: [221] Net Income [Current Period] / [221] Net Income [Same Period of Prior Year] – 1

### [236] Cost of Goods Sold (COGS) % of Sales

## Historical

[208] COGS / [207] Sales

## Projected

```
IF: [t <= [Time until Long-term (Years)]</pre>
```

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate \*Time until Long-term) -1) \* EXP(-Fade Rate \* (t - 1))

ELSE: Long-term Rate

### [237] Selling, General And Administrative Expense (SGA) % of Sales

#### Historical

[209] Selling, General And Administrative Expense / [207] Sales

### **Projected**

IF: [t <= [Time until Long-term (Years)]</pre>

```
THEN: IF [Fade Rate = 0: THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate*Time until Long-term) -1) * EXP(-Fade Rate * (t - 1))
```

# [238] Depreciation % of Net PPE

#### Historical

[212] Depreciation / [/] Net PPE

## Projected

```
IF: [t \le Time until Long-term (Years)] THEN: IF [Fade Rate = 0: THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * <math>[t-1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate * Time until Long-term) -1) * EXP(-Fade Rate * <math>(t-1)) ELSE: Long-term Rate
```

# [239] Non-Operating Income (Expense) % of Sales

#### Historical

[216] Non-Operating Income (Expense) / [207] Sales

#### **Projected**

```
 \begin{tabular}{l} F: [t <= [Time until Long-term (Years)] \\ THEN: IF [Fade Rate = 0: \\ THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t-1] \\ ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate * Time until Long-term) -1) * \\ EXP(-Fade Rate * (t-1)) \\ \end{tabular}
```

ELSE: Long-term Rate

## [240] After-tax Extraordinary Income (Expense) % of Sales

#### Historical

[220] After-tax Extraordinary Income (Expense) / [207] Sales

#### Projected

ELSE: (Starting Rate – [(Long-term Rate – Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate – Starting Rate)/EXP(-Fade Rate\*Time until Long-term) -1) \* EXP(-Fade Rate \* (t-1))

ELSE: Long-term Rate

## [241] Capex % of Sales

IF: [/] Capex < 0 THEN: #N/A

ELSE: [/] Capex / [207] Sales

## [242] Gross Margin

[209] Gross Profit / [207] Sales

## [243] EBITDA Margin

[211] EBITDA / [207] Sales

# [244] EBIT Margin

[213] EBIT / [207] Sales

# [245] Earnings Margin

[221] Net Income / [207] Sales

### [246] Return on Invested Capital (ROIC)

NOPAT / CHOOSE:

[1] = (0.5 \* Operating Capital [Prior Period] + Operating Capital [Current Period])

[2] = Operating Capital [Prior Period]

# [247] Return on Equity

Net Income / CHOOSE:

[1] = [0.5 \* (Total Common Equity [Prior Period] + Total Common Equity [Current Period])

[2] = Total Common Equity [Prior Period]

## [248] Return on Assets

Net Income / CHOOSE:

[1] = (0.5 \* (Total Assets [Prior Period] + Total Assets [Current Period]))

[2] = Total Assets [Prior Period]

## [249] Deferred Taxes / Net PPE

#### Historical

IF [/] Net PPE = 0

THEN: 0

ELSE: [/] Deferred Taxes / [/] Net PPE

# Projected

IF: [t <= [Time until Long-term (Years)]</pre>

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate \*Time until Long-term) -1) \* EXP(-Fade Rate \* (t - 1))

ELSE: Long-term Rate

## [250] Average Tax Rate

#### Historical

[/] Tax Expense / [/] Earnings Before Taxes

## **Projected**

IF: [t <= [Time until Long-term (Years)]</pre>

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate\*Time until Long-term) -1) \* EXP(-Fade Rate \* (t - 1))

ELSE: Long-term Rate

### [251] Marginal Tax Rate

### Historical

Pulls the value from [250] Average Tax Rate

### **Projected**

```
IF: [t <= [Time until Long-term (Years)]</pre>
```

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate\*Time until Long-term) -1) \* EXP(-Fade Rate \* (t - 1))

ELSE: Long-term Rate

## **BALANCE SHEET**

### **ASSETS**

## [252] Cash

### Historical

Cash & Equivalents

## Projected

[207] Sales \* [/] Cash as a % of Sales

## [253] Inventory

## Historical

Inventories + LIFO Reserves

\*We add LIFO Reserves to show Inventory as it would have been under FIFO accounting

# **Projected**

Pulls the value from [/] Inventory from the "Net Working Capital Schedule" below

### [254] Accounts Receivable

#### Historical

Accounts Receivable

### **Projected**

Pulls the value from [/] Accounts Receivable from the "Net Working Capital Schedule" below

## [255] Other Short-term Operating Assets

#### Historical

[Tax Refund Receivable]

PLUS [Progress Payments]

PLUS [Prepaid Expenses]

PLUS [Other Operating Current Assets]

## **Projected**

Pulls the value from [/] Other Short-term Operating Assets from the "Net Working Capital Schedule" below

## [256] Short-term Investments

#### Historical

[Marketable Securities]

PLUS [Notes Receivable]

PLUS [Short-term Investments or Investment Securities]

PLUS [Other Non-operating Current Assets]

## **Projected**

Pulls the value from [/] Short-term Investments

#### [257] Total Current Assets

[252] Cash + [253] Inventory + [254] Accounts Receivable + [255] Other Short-term Operating Assets + [256] Short-term Investments

# [258] Net PPE

#### Historical

[Net PPE]

LESS [Cumulative Reduction in Net PPE]

PLUS MINIMUM of either 0 or [the output of the entire equation below]

All Past Asset Impairment Losses or Write-downs

LESS All past Cumulative Effect of Accounting Changes

PLUS MAX of either (Goodwill + Intangibles + Cost in Excess) OR (Goodwill & Intangibles)

PLUS Other Operating Long-term Assets

PLUS Deferred Charges

PLUS Deposits

PLUS All past Statement of Cash Flow Amortization

PLUS Capitalized Value of Operating Leases

PLUS Current & Past 2 years Capitalized Operating Costs

LESS All past Special Goodwill Impairment or Accounting Change

We start with reported Net PPE and then subtract the Cumulative Net Amount of Capitalized Interest.

We also include an adjustment in this account to accommodate any special asset impairment charges that are so large that they would have caused other long-term operating assets to become negative. The MIN function returns the lowest of either zero or the output of the formula found in [259] Other Long-term Operating Assets, therefore if the output is greater than zero, the MIN function will return 0 (and it will be included in [259] Other Long-term Operating Assets). However, if it is negative (<0) then the MIN function will include it here in Net PPE and it will not be included in [259] Other Long-term Operating Assets.

### **Projected**

[207] Sales \* [/] Net PPE as a % of Sales

## [259] Other Long-term Operating Assets

#### Goodwill

We include in goodwill in this account. Goodwill is a line item to account for the difference between the purchase price of some assets and their book values. Prior to 2002, accountants allowed the amortization of goodwill over a 40 year period on straight-line basis. The amortization charge would be subtracted from the existing goodwill. Amortization charge is considered an expense of the income statement. However, in 2002, GAAP accounting rules changed and Goodwill generated through an acquisition is no longer subject to amortization. This is because it is more reasonable to assume that the premium paid is a permanent investment and therefore should not be amortized. To correct for all of the part amortization of goodwill we add to this account the cumulative total of all the current and past amortization of goodwill. To keep the balance sheets in balance, we need to undo the impact that amortization of goodwill had on retained earnings.

Instead of amortization, every year the company must look at the assets that generated the goodwill and estimate their market value. If the purchased assets' values have declined, then goodwill is reduced by the amount of the decline. The write-down is treated like amortization so it reduces net income. This is called the Impairment Test. There are situations where it might make economic sense to reduce operating capital by the amount of the write-down. To allow for this, we have included a line item in the comprehensive sheet in the Optional Items for Special Accounting Adjustments section called "Special Goodwill Impairment". If you want to incorporate the write-down then input the amount of goodwill to be deducted from capital in the year the write-down occurs. The charge will be ignored in the income statement. It won't be included as a special charge, nor will it be included in amortization or depreciation, however, long-term operating assets will be reduced by the amount of the write-down. To make the balance sheets balance retained earnings will be reduced by the amount of the charge. To make sure the write-down has no impact on FCF, the charge will be deducted from NOPAT. The net result is both assets and liabilities will be reduced the amount of the charge and FCF will be calculated as if there were no write-down. The change does affect historical ratios of capital/sales to help us choose future projected ratios that will not be upwardly biased by overvalued assets, therefore allowing us to forecast FCF more accurately.

### **Operating Leases**

These are leases that don't meet the criteria for a capital lease. However, for all practical purposes many operating leases should be treated as though they are capital leases. The footnotes of most financial statements provide enough information to find the capitalized value of an operating lease. Therefore, if your company has lots of operating lease obligations <u>you should find the capitalized value and include it on the section of special items</u> on the comprehensive worksheet. In addition, you should enter the interest rate on debt.

Therefore, we add the capitalized value of the operating lease to this account and will add the same amount to "Long-term debt". The implied interest payment (the product of the interest rate and the value of the capitalized operating lease) is subtracted from SGA and added to interest expense. How does this impact FCF? NOPAT is improved since the interest portion of the lease payment is treated as a financing cost and not an operating expense, but capital is increased because the capitalized value of the lease is added to "Other operating assets".

#### Historical

MAXIMUM of either 0 or [the output of the entire equation below]

All Past Asset Impairment Losses or Write-downs

- \*we add back all impairment losses or write-downs resulting from impairment tests on goodwill
- LESS All past Cumulative Effect of Accounting Changes
- PLUS MAX of either (Goodwill + Intangibles + Cost in Excess) OR (Goodwill & Intangibles)
- PLUS Other Operating Long-term Assets
- PLUS Deferred Charges
- PLUS Deposits
- PLUS All past Statement of Cash Flow Amortization
  - \*We don't subtract amortization when finding net income on the condensed statements, therefore the amount we don't subtract is added back
- PLUS Capitalized Value of Operating Leases
- PLUS Current & Past 2 years Capitalized Operating Costs
- LESS All past Special Goodwill Impairment or Accounting Change

The MAX function returns the greater of either zero or the output of the formula, therefore if the output is greater than zero, the MAX function will return include the output here. However, if it is negative (<0) then the MAX function will return a value of 0 in this account and instead it will be included in [258] Net PPE.

## This category contains all Long-term Operating Assets other than Net PPE.

- 1. It includes Other Operating Long-term Assets.
- 2. This includes the Cumulative of Current and Past Asset Impairment Losses and Write-downs, based on the assumption that the assets should not be written down. If you disagree, you may enter the amount you desire to write-down
- 3. We subtract the cumulative current and past accounting changes, based on the assumption that these have not changed the economic reality of the company. If the user believes that it makes economic sense to include these adjustments, then the user may enter the desired write-down (Special goodwill impairment and accounting changes).
- 4. This includes the reported balance sheet assets of Goodwill and Amortization, being careful not to "double count."
- 5. It includes Long-term Deferred Charges, since these are typically related to operations.
- 6. It includes Deposits, since these are usually related to operations.
- 7. It includes the Cumulative of Current and Past Amortization. This is based on the assumption that Amortization was created through the purchase of operating assets, but that there is no good way (other than an impairment

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- test, which we account for later) to measure the change in value of the purchased asset. Therefore, we do not amortize the asset.
- 8. If the user chooses to capitalize Operating Leases, then they are included here.
- 9. If the user chooses to "uncapitalize" Operating Costs that the company chose to capitalize, then Long-term Operating Assets should be reduced by the Cumulative Amount of Current and Past Capitalized Costs (Note that these cost are reported as a negative number in the Special section of the Comprehensive sheet, so we add a negative amount to reduce assets). We assume that the capitalized costs are being amortized over a three-year period, so we only use the current and past two years. Because the decision to capitalize costs does not affect taxes, we don't need to make any adjustment for taxes.
- 10. We subtract the Cumulative Current and Past Special Asset Impairment Charges (or write-downs, or accounting changes), because the user must believe that these write-downs are economically significant. We also include an adjustment in this account to accommodate any special asset impairment charges that are so large that they would have caused other long-term operating assets to become negative.

### **Projected**

Sales \* Other Long-term Operating Assets as a % of Sales

## [260] Long-term Investments

#### Historical

Long-Term Receivables

PLUS Investments in unconsolidated subsidiaries

PLUS Other Investments

PLUS Long-term Notes Receivables

PLUS Investments & Advances to subsidiaries

PLUS Other Non-Operating Long-term Assets

## **Projected**

Sales \* Long-term Investments as a % of Sales

### [261] Total Assets

[257] Total Current Assets + [258] Net PPE + [259] Other Long-term Operating Assets + [260] Long-term Investments

#### LIABILITIES AND SHAREHOLDER'S EQUITY

### [262] Accounts Payable

#### Historical

Accounts Payable

### **Projected**

Pulls the value from [/] Accounts Payable from the "Net Working Capital Schedule" below

## [263] Accruals

#### Historical

Short-term Unearned Revenue

PLUS Interest Payable (Accrued Interest)

PLUS Dividends Payable

PLUS Taxes Payable (Accrued Taxes)

PLUS Accrued Wages or Salary

PLUS Other Accrued Expenses or Accruals

PLUS Deferred Income

PLUS Long-term Unearned Revenue

## **Projected**

Pulls the value from [/] Accruals from the "Net Working Capital Schedule" below

## [264] Other Operating Current Liabilities

#### Historical

Other Operating Current Liabilities

### Projected

Pulls the value from [/] Other Operating Current Liabilities from the "Net Working Capital Schedule" below

#### [265] All Short-term Debt

#### Historical

Notes Payable

PLUS Current Portion of Long-term Debt

PLUS Current Portion of Capitalized Leases

PLUS All Other Short-term Debt

## Projected

Short-term Debt as a % of Value of Firm \* Value of Operations Adjusted for Half-Period Convention + Current Debt

### [266] Total Current Liabilities

[262] Accounts Payable + [263] Accruals + [264] Other Operating Current Liabilities + [265] All Short-term Debt

## [267] Long-term Debt

#### Historical

Non-Current Portion of Long-term Debt

PLUS Mortgages

PLUS Non-current Portion of Capitalized Leases

PLUS Convertible Debt

PLUS Any Other Long-term Debt

PLUS Retirement, Pension and Health Insurance Related Liabilities

PLUS Capitalized Value of Operating Leases

# **Projected**

Long-term debt as a % of Market Value of Firm \* Value of Operations Adjusted for Half-Period Convention

## [268] Deferred Taxes

#### Historical

Negative [Current Deferred Tax Asset]

LESS Deferred Tax Asset (Long-term)

PLUS Short-term Deferred Taxes

PLUS Deferred Tax Liability in Untaxed Reserves

PLUS Deferred Income Taxes (Long-term)

#### **Projected**

[/] Net PPE \* [/] Deferred Taxes as a % of Net PPE

## [269] Preferred Stock

## Historical

**Preferred Stock** 

#### **Projected**

Preferred Stock as a % of Value of Firm \* Value of Operations Adjusted for Half-Period Convention

## [270] Other Long-term Liabilities

When we value the company we will find the total value of the company and then subtract the claims held by debtholders and others. Therefore the condensed sheets "other long-term liabilities" is a catchall for many contingency accounts on the comprehensive, which are claims against the company's value. It also includes any claims by other than current equity holders (such as claims by holders of stock options).

#### Historical

Other Non-Operating Current Liabilities

PLUS Provision for Risks and Charges

PLUS Reserve Accounts

PLUS Restructuring Obligations

PLUS Commitments and Contingencies

PLUS Other Long-term Liabilities

PLUS Minority Interest

PLUS Non-equity Reserves

PLUS IF: [Stock Options (Warrants) = 0

THEN: Common Stock Warrants and Stock Options

ELSE: Stock Options (Warrants)

## **Projected**

Sales \* Other Long-term liabilities as a % of Sales

## [271] Total Liabilities

[266] Total Current Liabilities + [267] Long-term Debt + [268] Deferred Taxes + [269] Preferred Stock + [270] Other Long-term Liabilities

# [272] Par plus PIC less Treasury (and other adjustments)

#### Historical

Common Stock (at Par)

PLUS Common Stock Capital Surplus or Paid-in-capital (PIC)

PLUS Revaluation of reserves

PLUS Other Appropriated Reserves

PLUS Unappropriated (free) Reserves

PLUS Equity in Untaxed Reserves

PLUS ESOP Guarantees

PLUS Treasury Stock

PLUS Other Equity

PLUS Unrealized Gain (loss) on Marketable Securities

PLUS Accumulated Other Comprehensive Income or Cumulative Other Adjustments

PLUS Unrealized Gain (loss) on Foreign Exchange

PLUS Cumulative Foreign Currency Translations

LESS IF[Stock Options (warrants)=0,

Then: 0

Else: Stock Options (warrants) – Common Stock Warrants & Stock Options

PLUS SUM [All Past Adjustments for Reconciliation of Retained Earning]

LESS Cumulative Reduction in Book Equity as though Company had issued a Special Dividend due to Extra Cash Available from Tax Savings

### **Projected**

Value from most recent period held constant throughout projection period

## [273] Retained Earnings

#### Historical

**Retained Earnings** 

PLUS SUM [All Past Asset Impairment Losses or Write-downs]

LESS SUM [All Past Cumulative Accounting Changes]

PLUS SUM [All Past Amortization of Goodwill & Intangibles]

\*We don't subtract amortization when finding net income on the condensed statements, therefore the amount we don't subtract is added back

PLUS LIFO Reserve

LESS SUM [All Past Adjustments for Reconciliation of Retained Earning]

PLUS SUM [Capitalized Operating Costs from Past 3 Years]

LESS Cumulative Reduction in Retained Earnings

LESS SUM [All Past Special Goodwill Impairment or Accounting Change]

## **Projected**

[273] Retained Earnings [Prior Period] + [/] Additions to Retained Earnings

## [274] Total Common Equity

[272] Par plus PIC less Treasury (and other adjustments) + [273] Retained Earnings

## [275] Total Liabilities and Shareholder's Equity

[271] Total Liabilities + [274] Total Common Equity

# [276] Number of Shares Outstanding

#### Historical

Number of Shares Outstanding [from Comprehensive Sheet]

### **Projected**

Number of Shares Outstanding pulled from the "Ratios to Calculate Balance Sheet" section below.

# [277] Check to See if Sheets Balance

IF: [Absolute Value of (Total Liabilities & Equity – Total Assets) < [Error Margin]

THEN: "Balance" ELSE: "Error"

### INFO FOR MAKING THE SHEETS BALANCE

## [278] Specified Assets

Cash + Inventory + Accounts Receivable + Other Short-term Operating Assets + Net PPE + Other Long-term Operating Assets + Long-term Investments

## [279] Specified Liabilities

Accounts Payable + Accruals + Other Operating Current Liabilities + Long-term Debt + Deferred Taxes + Preferred Stock + Other Long-term Liabilities + Par + PIC plus Treasury + Retained Earnings + IF [200] T-value <= 0 (i.e. Historical period), THEN: All Short-term Debt, ELSE: Value of Operations Adjusted for Half-Period Convention \* Short-term Debt as a % of Value of Firm

## [280] Net Required Financing

[278] Specified Assets - [279] Specified Liabilities

## [281] Current Debt

MAX (0 or [280] Net Required Financing)

If the Net Required Financing is positive, it means specified assets are greater than specified liabilities. In other words, we need more financing then we currently have to support our assets. Therefore we add short-term debt.

## [282] Short-term Investments

MAX (0 or -[280] Net Required Financing)

If Net Required Financing is negative, then we have fewer specified assets than financing. In other words, we have more financing than we need to support operations, so we will put the excess into short-term investments.

### **NET WORKING CAPITAL (NWC)**

#### [283] Inventory

#### Historical

Pulled from Balance Sheet

### Projected

CHOOSE [Inventory Toggle {1 or 2}]

[1] = Sales \* Inventory as a % of Sales

[2] = Cost of Goods Sold \* Inventory as a % of Cost of Goods Sold

### [284] Accounts Receivable

#### Historical

Pulled from Balance Sheet

## **Projected**

CHOOSE [Accounts Receivable Toggle {1 or 2}]

- [1] = Sales \* Accounts Receivable as a % of Sales
- [2] = Cost of Goods Sold \* Accounts Receivable as a % of Cost of Goods Sold

# [285] Other Short-term Operating Assets

#### Historical

Pulled from Balance Sheet

## Projected

CHOOSE [Other Short-term Operating Assets Toggle {1 or 2}]

- [1] = Sales \* Other Short-term Operating Assets as a % of Sales
- [2] = Cost of Goods Sold \* Other Short-term Operating Assets as a % of Cost of Goods Sold

## [286] Non-Cash Current Assets

[283] Inventory + [284] Accounts Receivable + [285] Other Short-term Operating Assets

## [287] Accounts Payable

#### Historical

Pulled from Balance Sheet

## Projected

CHOOSE [Accounts Payable Toggle {1 or 2}]

- [1] = Sales \* Accounts Payable as a % of Sales
- [2] = Cost of Goods Sold \* Accounts Payable as a % of Cost of Goods Sold

### [287] Accruals

#### Historical

Pulled from Balance Sheet

## Projected

CHOOSE [Accruals Toggle {1 or 2}]

- [1] = Sales \* Accruals as a % of Sales
- [2] = Cost of Goods Sold \* Accruals as a % of Cost of Goods Sold

## [288] Other Operating Current Liabilities

#### Historical

Pulled from Balance Sheet

#### **Projected**

CHOOSE [Other Operating Current Liabilities Toggle {1 or 2}]

[1] = Sales \* Other Operating Current Liabilities as a % of Sales

[2] = Cost of Goods Sold \* Other Operating Current Liabilities as a % of Cost of Goods Sold

## [289] Non-Debt Current Liabilities

[287] Accounts Payable + [288] Accruals + [289] Other Operating Current Liabilities

## [290] Net Working Capital

[286] Non-Cash Current Assets - [289] Non-Debt Current Liabilities

## [291] Change in Net Working Capital

IF: [199] Period Position Number = 0 (i.e. First Period)

THEN: Blank

ELSE: [290] Net Working Capital [Current Period] - [290] Net Working Capital [Prior Period]

### [292] Capex

IF: [199] Period Position Number = 0 (i.e. First Period)

THEN: Blank

ELSE: (Net PPE [Current Period] — Net PPE [Prior Period]) + Depreciation [Income Statement] + (Other Long-term Operating Assets [Current Period] — Other Long-term Operating Assets [Prior Period])

### **WORKING CAPITAL DRIVERS**

## [293] Sales

Pulls the value from [207] Sales for the Current Period

## [294] Cost of Goods Sold

Pulls the value from [208] Cost of Goods Sold for the Current Periods

### [295] Purchases

IF: [199] Period Position Number = 0 (i.e. First Period)

THEN: #N/A

ELSE: Inventory [Current Period] – Inventory [Prior Period] + Cost of Goods Sold

# **Toggles**



To the right of the account names you will fix a column of cells that each contain a dropdown list with the option to select a value of 1 or 2. These are the toggles that you can use to specify whether you would like that particular account to be driven as a percentage of Sales (1) or as a percentage of the Cost of Goods Sold (2). The account names themselves are also dependent on which value is selected from the toggle. Please note for simplicity in this report we will assume each is driven by Sales and therefore the account title will match according, just remember that this will change if you adjust the toggle to 2 (Cost of Goods Sold). For example, "Inventory as % of Sales" vs. "Inventory as % of COGS".

Note: These drivers will be projected using the Fade rate method previously discussed, please make sure you adjust the input cells to the left of the account names to specify the desired starting rate, long-term rate, time until long-term and fade rate for each of the following drivers.

#### [296] Inventory as a % of Sales

#### Historical

```
Inventory / [CHOOSE (Toggle {1 or 2}]:

[1] = Sales

[2] = Cost of Goods Sold
```

### **Projected**

```
IF: [t <= [Time until Long-term (Years)]  
THEN: IF [Fade Rate = 0:  
    THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t - 1]  
    ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate *Time until Long-term) -1) *  
    EXP(-Fade Rate * (t - 1))  
ELSE: Long-term Rate
```

## [297] Accounts Receivable as a % of Sales

#### Historical

```
Accounts Receivable / [CHOOSE (Toggle {1 or 2}]: [1] = Sales
```

[2] = Cost of Goods Sold

## Projected

```
 \begin{tabular}{l} IF: [t <= [Time until Long-term (Years)] \\ THEN: IF [Fade Rate = 0: \\ THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t-1] \\ ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate * Time until Long-term) -1) * \\ EXP(-Fade Rate * (t-1)) \\ \end{tabular}
```

ELSE: Long-term Rate

## [298] Other Short-term Operating Assets as a % of Sales

#### Historical

```
Other Short-term Operating Assets / [CHOOSE (Toggle {1 or 2}]:
[1] = Sales
[2] = Cost of Goods Sold
```

## **Projected**

### [299] Accounts Payable as a % of Sales

#### Historical

```
Accounts Payable / [CHOOSE (Toggle {1 or 2}]:
[1] = Sales
[2] = Cost of Goods Sold
```

# **Projected**

```
ELSE: (Starting Rate – [(Long-term Rate – Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate – Starting Rate)/EXP(-Fade Rate*Time until Long-term) -1) * EXP(-Fade Rate * (t-1))
```

ELSE: Long-term Rate

## [300] Accruals as a % of Sales

### Historical

Accruals / [CHOOSE (Toggle {1 or 2}]:

- [1] = Sales
- [2] = Cost of Goods Sold

## **Projected**

```
IF: [t <= [Time until Long-term (Years)]</pre>
```

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate \*Time until Long-term) -1) \* EXP(-Fade Rate \* (t - 1))

ELSE: Long-term Rate

## [301] Other Operating Current Liabilities as a % of Sales

#### Historical

Other Operating Current Liabilities / [CHOOSE (Toggle {1 or 2}]:

- [1] = Sales
- [2] = Cost of Goods Sold

### **Projected**

IF: [t <= [Time until Long-term (Years)]</pre>

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate\*Time until Long-term) -1) \* EXP(-Fade Rate \* (t - 1))

ELSE: Long-term Rate

## [302] Accounts Receivable Days

IF: [199] Period Position Number = 0 (i.e. First Period)

THEN: Blank

ELSE: (0.5 \* (Accounts Receivable [Prior Period] + Accounts Receivable [Current Period]) \* (365 / [184] Number of Periods per Year) / Sales

## [303] Accounts Payable Days

IF: [199] Period Position Number = 0 (i.e. First Period)

THEN: Blank

ELSE: (0.5 \* (Accounts Payable [Prior Period] + Accounts Payable [Current Period]) \* (365 / [184]

Number of Periods per Year) / Purchases

## [304] Inventory Days

IF: [199] Period Position Number = 0 (i.e. First Period)

THEN: Blank

ELSE: (0.5 \* (Inventory [Prior Period] + Inventory [Current Period]) \* (365 / [184] Number of

Periods per Year) / Cost of Goods Sold

# [305] Inventory Turnover

IF: [199] Period Position Number = 0 (i.e. First Period)

THEN: Blank

ELSE: Cost of Goods Sold / (0.5 \* (Inventory [Prior Period] + Inventory [Current Period])

#### RATIOS TO CALCULATE BALANCE SHEET

## [306] Cash as a % of Sales

#### Historical

Cash / Sales

### **Projected**

IF: [t <= [Time until Long-term (Years)]</pre>

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate \*Time until Long-term) -1) \* EXP(-Fade Rate \* (t - 1))

ELSE: Long-term Rate

## [307] Net Property, Plant & Equipment (PPE) as a % of Sales

#### Historical

Net PPE / Sales

### **Projected**

IF: [t <= [Time until Long-term (Years)]</pre>

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1]

```
ELSE: (Starting Rate – [(Long-term Rate – Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate – Starting Rate)/EXP(-Fade Rate*Time until Long-term) -1) * EXP(-Fade Rate * (t-1))
```

ELSE: Long-term Rate

## [308] Other Long-term Operating Assets as a % of Sales

#### Historical

Other Long-term Operating Assets / Sales

## **Projected**

```
 \begin{tabular}{l} IF: [t <= [Time until Long-term (Years)] \\ THEN: IF [Fade Rate = 0: \\ THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t-1] \\ ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate * Time until Long-term) -1) * \\ EXP(-Fade Rate * (t-1)) \\ \end{tabular}
```

ELSE: Long-term Rate

## [309] Long-term Investments as a % of Sales

#### Historical

Other Long-term Operating Assets / Sales

# Projected

```
IF: [t \le [Time\ until\ Long-term\ (Years)]] THEN: IF [Fade\ Rate = 0:\ THEN:\ Starting\ Rate - [(Starting\ Rate - Long-term\ Rate) / Time\ Until\ Long-term] * <math>[t-1] ELSE: (Starting\ Rate - [(Long-term\ Rate - Starting\ Rate)/(EXP(-Fade\ Rate * Time\ until\ Long-term) -1)) + ((Long-term\ Rate - Starting\ Rate)/EXP(-Fade\ Rate * Time\ until\ Long-term) -1) * EXP(-Fade\ Rate * <math>(t-1))
```

ELSE: Long-term Rate

### [310] Other Long-term Liabilities as a % of Sales

#### Historical

Other Long-term Liabilities / Sales

### Projected

```
ELSE: (Starting Rate – [(Long-term Rate – Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate – Starting Rate)/EXP(-Fade Rate*Time until Long-term) -1) * EXP(-Fade Rate * (t-1))
```

ELSE: Long-term Rate

## [311] Number of Shares Outstanding

#### Historical

Pulls the value from [/] Number of Shares Outstanding from the "Balance Sheet" above.

## Projected

#### **DIVIDEND AND DEBT RATIOS**

## [312] Dividend Policy: Growth Rate

#### Historical

```
IF: [199] Period Position Number = 0 (i.e. First Period)
```

THEN: Blank

ELSE: (Common Dividends [Current Period] / Common Dividends [Prior Period]) – 1

## Projected

```
IF: [t \le Time until Long-term (Years)]
THEN: IF [Fade Rate = 0:

THEN: Starting Rate — [(Starting Rate — Long-term Rate) / Time Until Long-term] * [t-1]
ELSE: (Starting Rate — [(Long-term Rate — Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate — Starting Rate)/EXP(-Fade Rate*Time until Long-term) -1) * EXP(-Fade Rate * (t-1))
ELSE: Long-term Rate
```

# [313] Long-term Debt as a % of the Value of the Firm

#### Historical

#N/A

## Projected

IF: [t <= [Time until Long-term (Years)]</pre>

```
THEN: IF [Fade Rate = 0: THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate*Time until Long-term) -1) * EXP(-Fade Rate * (t - 1))
```

# [314] Preferred Stock as a % of the Value of the Firm

#### Historical

#N/A

## **Projected**

```
IF: [t <= [Time until Long-term (Years)]  
THEN: IF [Fade Rate = 0:  
    THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t - 1]  
    ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate *Time until Long-term) -1) *  
    EXP(-Fade Rate * (t - 1))
```

## [315] Coupon Rate on Preferred Stock

#### Historical

```
Preferred Dividends / IF [Average Interest Toggle] = 1
THEN: 0.5 * (Preferred Stock [Prior Period] + Preferred Stock [Current Period])
ELSE: Preferred Stock [Prior Period]
```

### **Projected**

```
IF: [t <= [Time until Long-term (Years)]  
THEN: IF [Fade Rate = 0:  
    THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t - 1]  
    ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate *Time until Long-term) -1) *  
    EXP(-Fade Rate * (t - 1))
```

# [316] Short-term Debt as a % of the Value of the Firm

#### Historical

#N/A

# Projected

IF: [t <= [Time until Long-term (Years)]</pre>

```
THEN: IF [Fade Rate = 0: THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate*Time until Long-term) -1) * EXP(-Fade Rate * (t - 1))
```

#### **INTEREST RATES**

## [317] Interest Rate on Cash

#### Historical

#N/A

## **Projected**

ELSE: Long-term Rate

## [318] Interest Rate on Short-term Investments

## Historical

#N/A

## **Projected**

### [319] Interest Rate on Current Debt

### Historical

#N/A

## Projected

```
IF: [t <= [Time until Long-term (Years)]
THEN: IF [Fade Rate = 0:</pre>
```

```
THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate *Time until Long-term) -1) * EXP(-Fade Rate * (t - 1))
```

ELSE: Long-term Rate

## [320] Interest Rate on Long-term Debt

#### Historical

#N/A

## **Projected**

```
IF: [t <= [Time until Long-term (Years)]</pre>
```

THEN: IF [Fade Rate = 0:

THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] \* [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate \* Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate \*Time until Long-term) -1) \* EXP(-Fade Rate \* (t - 1))

ELSE: Long-term Rate

## INTEREST (INCOME) / EXPENSE / PREFERRED DIVIDENDS

### [321] Interest Income on Cash

#### Historical

#N/A

## **Projected**

Interest Rate on Cash \* IF [Average Interest Toggle] = 1, THEN: 0.5 \* (Cash [Prior Period] + Cash [Current Period]),

ELSE: Cash [Prior Period]

### [322] Interest Income on Short-term Investments

#### Historical

#N/A

#### **Projected**

Interest Rate on Short-term Investments \* IF [Average Interest Toggle] = 1,

THEN: 0.5 \* (Short-term Investments [Prior Period] + Short-term Investments [Current Period]),

ELSE: Short-term Investments [Prior Period]

## [323] Total Interest Income

#### Historical

Pulls the value for [/] Interest Income from the Income Statement.

### **Projected**

[321] Interest Income on Cash + [322] Interest Income on Short-term Investments

## [324] Interest Expense on all Current Debt

#### Historical

#N/A

## **Projected**

Interest Rate on All Current Debt \* IF [Average Interest Toggle] = 1,

THEN: 0.5 \* (All Current Debt [Prior Period] + All Current Debt [Current Period]),

ELSE: All Current Debt [Prior Period]

## [325] Interest Expense on all Long-term Debt

#### Historical

#N/A

## **Projected**

Interest Rate on All Long-term Debt \* IF [Average Interest Toggle] = 1,

THEN: 0.5 \* (All Long-term Debt [Prior Period] + All Long-term Debt [Long-term Period]),

ELSE: All Long-term Debt [Prior Period]

### [326] Total Interest Expense

#### Historical

Pulls the value for [/] Interest Expense from the Income Statement.

### **Projected**

[324] Interest Expense on all Current Debt + [325] Interest Expense on all Long-term Debt

### [327] Preferred Dividends

#### Historical

Pulls the value from [/] Preferred Dividends from beneath the Statement of Cash Flows

### **Projected**

Coupon Rate on Preferred Stock \* IF [Average Interest Toggle] = 1

THEN: 0.5 \* (Preferred Stock [Prior Period] + Preferred Stock [Current Period])

ELSE: Preferred Stock [Prior Period]

## STATEMENT OF CASH FLOWS

#### **OPERATING ACTIVITIES**

### [328] Net Income

Cumulative Net Income YTD from the Income Statement

# [329] Depreciation

Cumulative Depreciation YTD from the Income Statement

# [330] Change in Deferred Tax

Deferred Tax [Current Period] – Deferred Tax [Ending Balance of Prior Year]

# [331] Change in Inventory

- (Inventory [Current Period] – Inventory [Ending Balance of Prior Year])

# [332] Change in Accounts Receivable

- (Accounts Receivable [Current Period] – Accounts Receivable [Ending Balance of Prior Year])

#### [333] Change in Other Short-term Operating Assets

- (Other Short-term Operating Assets [Current Period] — Other Short-term Operating Assets [Ending Balance of Prior Year])

#### [334] Change in Accounts Payable

(Accounts Payable [Current Period] – Accounts Payable [Ending Balance of Prior Year])

#### [335] Change in Accruals

(Accruals [Current Period] – Accruals [Ending Balance of Prior Year])

#### [336] Change in Other Current Liabilities

(Other Current Liabilities [Current Period] – Other Current Liabilities [Ending Balance of Prior Year])

## [337] Net Cash from Operating Activities

[328] Net Income + [329] Depreciation + [330] Change In Deferred Tax + [331] Change In Inventory + [332] Change In Accounts Receivable + [333] Change In Other Short-term Operating Assets +

[334] Change In Accounts Payable + [335] Change In Accruals + [336] Change In Other Current Liabilities

#### **INVESTING ACTIVITIES**

#### [338] Investment in PPE

- (Net PPE [Current Period] – Net PPE [Ending Balance of Prior Year]) – Depreciation [Statement of Cash Flow]

### [339] Investment in Other Long-term Operating Assets

- (Other Long-term Operating Assets [Current Period] – Other Long-term Operating Assets [Ending Balance of Prior Year])

## [340] Net Cash from Investing Activities

[338] Investment in PPE + [339] Investment in Other Long-term Operating Assets

#### FINANCING ACTIVITIES

## [341] Change in Short-term Investments

- (Short-term Investments [Current Period] — Short-term Investments [Ending Balance of Prior Year])

## [342] Change in Long-term Investments

- (Long-term Investments [Current Period] – Long-term Investments [Ending Balance of Prior Year])

## [343] Change in Short-term Debt

(Short-term Debt [Current Period] – Short-term Debt [Ending Balance of Prior Year])

#### [344] Change in Long-term Debt

(Long-term Debt [Current Period] – Long-term Debt [Ending Balance of Prior Year])

## [345] Preferred Dividends

- Preferred Dividends [Cumulative YTD]

## [346] Change in Preferred Stock

Preferred stock [Current Period] – Preferred Stock [Ending Balance of Prior Year]

### [347] Change in Other Long-term Liabilities

Other Long-term Liabilities [Current Period] – Other Long-term Liabilities [Ending Balance of Prior Year]

## [348] Change in Common Stock (Par + PIC)

Par plus PIC less Treasury (and other adjustments) [Current Period] - Par plus PIC less Treasury (and other adjustments) [Ending Balance of Prior Year]

## [349] Change in Common Dividends

- Common Dividends [Cumulative YTD]

## [350] Net Cash from Financing Activities

[341] Change in Short-term investments + [342] Change in Long-term investments + [343] Change in Short-term debt + [344] Change in Long-term debt + [345] Preferred Dividends + [346] Change in Preferred Stock + [347] Change in Other Long-term liabilities + [348] Change in Common Stock (Par + PIC) + [349] Common Dividends

## [351] Net Cash Flow

[337] Net Cash from Operating Activities + [340] Net Cash from Investing Activities + [350] Net Cash from Financing Activities

## [352] Starting Cash

[/] Cash [Ending Balance of Prior Year]

### [353] Ending Cash

[351] Net Cash Flow + [352] Starting Cash

## [354] Preferred Dividends

#### Historical

- [Preferred Dividends (Pulled from the "Comprehensive Sheet")]

#### **Projected**

Pulls the value from [/] Preferred Dividends

#### [355] Common Dividends

#### Historical

- [Common Dividends (Pulled from the "Comprehensive Sheet")]

#### **Projected**

Common Dividends [Prior Period] \* (1 + Dividend Policy: Growth Rate)

## [356] Additions to Retained Earnings

[/] Net Income – [354] Preferred Dividends - [355] Common Dividends

# "UNCAPITALIZING" CAPITALIZED INTEREST

## [357] Capitalized Interest

#### Historical

Interest Capitalized (from Comprehensive Sheet)

# **Projected**

#N/A

#### [358] Rate

This is located to the left of the account header. Enter the rate, as a percentage, to be used in the formula for [359] Reduction in Depreciation

## [359] Reduction in Depreciation (Assuming Straight-line)

Rate \* SUM [All Past Capitalized Interest]

## [360] Addition to Interest Expense

#### Historical

Capitalized Interest

## **Projected**

#N/A

## [361] Reduction in Tax Expense

## Historical

- ([359] Reduction in Depreciation – Addition to Interest Expense) \* Marginal Tax Rate

### **Projected**

#N/A

# [362] Annual Reduction in Retained Earnings

#### Historical

- ([359] Reduction in Depreciation – Addition to Interest Expense) \* (1 - Marginal Tax Rate)

# **Projected**

#N/A

## [363] Cumulative Reduction in Gross PPE

#### Historical

SUM [All Past & Current Capitalized Interest]

# **Projected**

#N/A

# [364] Cumulative Depreciation of Capitalized Interest

#### Historical

SUM [All Past & Current Reduction in Depreciation]

## **Projected**

#N/A

## [365] Cumulative Reduction in Net PPE

## Historical

[363] Cumulative Reduction in Gross PPE – [364] Cumulative Depreciation of Capitalized Interest

## **Projected**

#N/A

## [366] Cumulative Reduction in Retained Earnings

#### Historical

SUM [All Past & Current Reduction in RE]

## **Projected**

#N/A

# [367] Cumulative Reduction in Book Equity As Though Company Had Issued Special Dividend Due

## To Extra Cash Available From Tax Savings

#### Historical

SUM [All Past & Current Reduction in Tax Expense]

### **Projected**

#N/A

# **ANALYSIS OF FINANCIAL STATEMENTS**

#### FREE CASH FLOW

### [368] Assumed Marginal Tax Rate

#### Historical

Marginal Tax Rate from the "Comprehensive" sheet

## **Projected**

[/] Marginal Tax Rate

# [369] Reported Income Tax Expense

Pulls the value from [/] Tax Expense from the "Income Statement"

#### [370] Taxes Reported But Not Paid

IF: [199] Period Position Number = 0 (i.e. First Period)

THEN: #N/A

ELSE: Deferred Taxes [Current Period] – Deferred Taxes [Prior Period]

## [371] Actual Taxes Paid

[369] Reported Income Tax Expense - [370] Taxes Reported But Not Paid

# [372] Taxes Saved Due to Net Interest Expenses

[368] Assumed Marginal Tax Rate \* (Interest Expense – Interest Income)

## [373] Tax Paid on Non-Operating Income

[368] Assumed Marginal Tax Rate \* Non-Operating Income (Expense)

### [374] Tax on Operating Income

#### Historical

[371] Actual Taxes Paid + [372] Taxes Saved Due to Net Interest Expenses - [373] Tax Paid on Non-Operating Income

### **Projected**

(Operating Profit \* Marginal Tax Rate) – Taxes Reported But Not Paid

### [375] Net Operating Profit after Taxes (NOPAT)

[/] Operating Profit - [374] Tax on Operating Income

## [376] NOPAT / Sales

[375] Net Operating Profit after Taxes (NOPAT) / [207] Sales

# [377] NOPAT Adjusted for Extraordinary Income

NOPAT + After-Tax Extraordinary Income (Expense)

### [378] Operating Current Assets

Cash + Inventory + Accounts Receivables + Other Short-term Operating Assets

## [379] Operating Current Liabilities

Accounts Payable + Accruals + Other Operating Current Liabilities

#### [380] Net Operating Working Capital

[378] Operating Current Assets - [379] Operating Current Liabilities

#### [381] Operating Long-term Capital

Net PPE + Other Long-term Operating Assets

## [382] Operating Capital

[380] Net Operating Working Capital + [381] Operating Long-term Capital

#### [383] Operating Capital / Sales

[382] Operating Capital / [207] Sales

## [384] Investment in Operating Capital

IF: [199] Period Position Number = 0 (i.e. First Period)

#### APPLE | HISTORICAL AND FORWARD LOOKING FACTORS

THEN: #N/A

ELSE: Operating Capital [Current Period] – Operating Capital [Prior Period]

# [385] Special Goodwill Impairment or Accounting Change

#### Historical

Special Goodwill Impairment from the "Comprehensive Sheet"

# **Projected**

#N/A

# [386] Free Cash Flow from Ongoing Operations

#### Historical

NOPAT – Investment in Operating Capital – Special Goodwill Impairment or Accounting Change

## **Projected**

NOPAT – Investment in Operating Capital

## [387] Free Cash Flow (including Extraordinary Income)

#### Historical

[377] NOPAT Adjusted for Extraordinary Income - [384] Investment in Operating Capital - Special Goodwill Impairment or Accounting Change

#### **Projected**

[377] NOPAT Adjusted for Extraordinary Income - [384] Investment in Operating Capital

#### [388] Economic Profit

NOPAT Adjusted – (WACC \* Operating Capital [Prior Period])

#### VALUATION

## COST OF CAPITAL AND LONG-TERM ROIC

## [389] Cost of Equity

#### Historical

Cost of Equity from the "Comprehensive sheet"

# **Projected**

IF: [t <= [Time until Long-term (Years)]</pre>

THEN: IF [Fade Rate = 0:

```
THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t - 1] ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate *Time until Long-term) -1) * EXP(-Fade Rate * (t - 1))
```

ELSE: Long-term Rate

## [390] Weighted Average Cost of Capital

#### Historical

WACC from the "Comprehensive sheet"

# Projected

```
IF: [t <= [Time until Long-term (Years)]  
THEN: IF [Fade Rate = 0:  
    THEN: Starting Rate - [(Starting Rate - Long-term Rate) / Time Until Long-term] * [t - 1]  
    ELSE: (Starting Rate - [(Long-term Rate - Starting Rate)/(EXP(-Fade Rate * Time until Long-term) -1)) + ((Long-term Rate - Starting Rate)/EXP(-Fade Rate *Time until Long-term) -1) * EXP(-Fade Rate * (t - 1))
```

ELSE: Long-term Rate

## [391] Long-term Return on Invested Capital

#### Historical

Pulls the value from [/] Return on Invested Capital from the "Key Performance Metrics and Drivers" section above

# Projected

#### **CALCULATING VALUE**

#### [392] Discount Factor

## Historical

#N/A

#### Projected

CHOOSE [Toggle {1 or 2}]

#### APPLE | HISTORICAL AND FORWARD LOOKING FACTORS

[1] = (1 / (1 + (WACC / [Number of Periods per Year]))) [2] = (1 / (1 + WACC) ^ [(Current Period Date – Prior Period Date)/365]

# [393] Value of Operations

#### Historical

#N/A

## **Projected**

IF: [200] T-value = [185] Number of Estimated Periods`

THEN: CHOOSE (Toggle {1 or 2})

[1] = Terminal Value

[2] = Terminal Value + Free Cash Flow (including Extraordinary Income)

ELSE: CHOOSE (Toggle {1 or 2})

[1] = (Free Cash Flow (including Extraordinary Income) [Next Period] + Value of Operations [Next Period]) \* Discount Factor

[2] = IF: [200] T-value = 0 (i.e. Most recent period)

THEN: 0 + (Value of Operations [Next Period] \* Discount Factor)

ELSE: Free Cash Flow (including Extraordinary Income) + (Value of Operations [Next Period] \* Discount Factor

# [394] Value of Operations adjusted for Half-Period Convention

# \*Change picture



#### Historical

#N/A

## Projected

Value of Operations \* (1 + WACC) ^ (0.5 \* ((Current Period Date – Prior Period Date)/365)

#### [395] Target Date

\*Change picture



Enter the target date you would like to know the Value of Operations

# [396] Number of Years from Most Recent Period to Target Date



(Target Date - Most Recent Period Date) / 365

## [397] Value of Investments

#### Historical

#N/A

#### **Projected**

Short-term Investments + Long-term Investments

# [398] Total Value of Firm

# Historical

#N/A

## **Projected**

Value of Operations adjusted for Half-Period Convention + Value of Investments

# [399] Value of All Debt, Preferred Stock and Other Non-Operating Liabilities

#### Historical

#N/A

#### **Projected**

All Short-term debt + Long-term debt + Preferred Stock + Other Long-term Liabilities

## [400] Value of Equity

#### Historical

#N/A

### Projected

Total Value of Firm – Value of All Debt, preferred Stock, and Other Non-Operating Liabilities

#### [401] Number of Shares

#### Historical

#N/A

#### **Projected**

Pulls the value from [/] Number of Shares Outstanding from the "Balance Sheet" below

# [402] Estimated Price per Share

#### Historical

#N/A

#### **Projected**

Value of Equity / Number of Shares

#### TERMINAL YEAR VALUE CALCULATIONS

# [403] Operating Capital

IF: [The Last Period in the Model] = Historical (i.e. there are no projected periods)

THEN: #N/A

ELSE: Operating Capital [Terminal Period]

#### [404] Return on Invested Capital

IF: [The Last Period in the Model] = Historical (i.e. there are no projected periods)

THEN: #N/A

ELSE: IF [Cell to the right] is NOT blank (i.e. user has manually input a ROIC)

THEN: [Cell to the right] (i.e. User-defined ROIC) ELSE: Return on Invested Capital [Terminal Year]

# [405] Weighted Average Cost of Capital

IF: [The Last Period in the Model] = Historical (i.e. there are no projected periods)

THEN: #N/A

ELSE: IF [Cell to the right] is NOT blank (i.e. user has manually input a WACC)

THEN: [Cell to the right] (i.e. User-defined WACC)

ELSE: WACC [Terminal Year]

### [406] Sales Growth Rate %

IF: [The Last Period in the Model] = Historical (i.e. there are no projected periods)

THEN: #N/A

ELSE: IF [Cell to the right] is NOT blank (i.e. user has manually input a Sales Growth Rate)

THEN: [Cell to the right] (i.e. User-defined Sales Growth Rate)

ELSE: Sales Growth Rate [Terminal Year]

## [407] Assumed Long-term Return on Invested Capital

IF: [The Last Period in the Model] = Historical (i.e. there are no projected periods)

THEN: #N/A

ELSE: IF [Cell to the right] is NOT blank (i.e. user has manually input an assumed long-term ROIC)

THEN: [Cell to the right] (i.e. User-defined long-term ROIC)

ELSE: Assumed Long-term Return on Invested Capital [Terminal Year]

#### [408] Terminal Value

IF: [The Last Period in the Model] = Historical (i.e. there are no projected periods)

THEN: #N/A

ELSE: IF: [WACC > Sales Growth Rate]

THEN: (((Assumed Long-term ROIC – Sales Growth Rate) \* Operating Capital) / (WACC – Sales Growth Rate)) + (((ROIC – Assumed Long-term ROIC) \* Operating Capital) / WACC)

ELSE: "Error: WACC < g"

Note: If you receive the message "Error: WACC < g", then you must change your long-term growth rate in sales.

Note: This calculation assumes competition will result in a gradual reduction of the return on new capital, forcing the ROIC on new capital to fall from  $ROIC_T$  to some long-term sustainable  $ROIC_L$ , which may be greater than the WACC.

#### SELECTED RATIOS AND OTHER DATA

### [409] Projected Economic Profit

#### Historical

#N/A

#### **Projected**

NOPAT (Adjusted) [Cumulative YTD] / Annualization Fraction – (WACC \* Operating Capital [Ending Balance of Prior Year])

# [410] Projected Market Value Added (MVA)

#### Historical

#N/A

## **Projected**

Value of Operations adjusted for half-period convention – Operating Capital

## [411] Price / Earnings ratio

#### Historical

#N/A

#### **Projected**

Value of Equity / (Net Income [Cumulative YTD] / Annualization Fraction)

## [412] Market to Book ratio

#### Historical

#N/A

## **Projected**

Value of Equity / Total Common Equity

## [413] Enterprise Value / EBITDA ratio

#### Historical

#N/A

## **Projected**

Total Value of the Firm / (EBITDA [Cumulative YTD] / Annualization Fraction)

## [414] Enterprise Value / Sales ratio

#### Historical

#N/A

#### **Projected**

Total Value of the Firm / (Sales [Cumulative YTD] / Annualization Fraction)

## [415] Times-Interest-Earned ratio

### Historical

#N/A

#### **Projected**

IF (Interest Expense [Cumulative YTD] – Interest Income [Cumulative YTD) > 0

THEN: EBIT [Cumulative YTD] / (Interest Expense [Cumulative YTD] – Interest Income [Cumulative

YTD]) ELSE: #N/A

# [416] Long-term Debt / Value of Operations

#### Historical

#N/A

### **Projected**

Long-term Debt / Value of Operations adjusted for Half-Period Convention

# [417] Target Valuation Date

Enter the Target Date for your valuation

## [418] Number of Periods

MATCH [Target Date] from [All Periods in Model]

Match type = 1

- finds the largest value that is less than or equal to [Target Date]
- Returns the number of columns over to find the closest Fiscal Period that is prior to the Target Date

#### [419] Most Recent Fiscal Period Prior to Target Date

This cell uses the value from [418] Number of Periods to find the period that is most recent, but prior to the Target Date and returns the date of this period.

## [420] Number of Days from Target to Fiscal Period-End Prior to Target

([417] Target Valuation Date – [419] Most Recent Fiscal Period Prior to Target Date)

## [421] Value of Operations

Value of Operations adjusted for Half-Period Convention for Most Recent Fiscal Period Prior to Target Date + ((Value of Operations adjusted for Half-Period Convention for Period after Most Recent Period - Value of Operations as of [Date] for Most Recent Fiscal Period Prior to Target Date) \* (Number of Days from Target to Most Recent Period Prior to Target / 365))

### [422] Value of Investments

Value of Investments for Most Recent Fiscal Period Prior to Target Date + ((Value of Investments for Period After Most Recent Period – Value of Investments for Most Recent Fiscal Period Prior to Target Date) \* (Number of Days from Target to Most Recent Period Prior to Target / 365))

## [423] Total Value of Firm

Value of Operations + Value of Investments

## [424] Value of All Debt, Preferred Stock and other Non-Operating Liabilities

Value of All Debt, Preferred Stock and Other Non-Operating Liabilities for Most Recent Fiscal Period Prior to Target Date + ((Value of All Debt, Preferred Stock and Other Non-Operating Liabilities for Period After Most Recent Period – Value of All Debt, Preferred Stock and Other Non-Operating Liabilities for Most Recent Fiscal Period Prior to Target Date) \* (Number of Days from Target to Most Recent Period Prior to Target / 365))

## [425] Value of Equity

[423] Total Value of Firm - [424] Value of All Debt, Preferred Stock and other Non-Operating Liabilities

## [426] Number of Shares

Number of Shares for Most Recent Fiscal Period Prior to Target Date + ((Number of Shares for Period After Most Recent Period – Number of Shares for Most Recent Fiscal Period Prior to Target Date) \* (Number of Days from Target to Most Recent Period Prior to Target / 365))

## [427] Estimated Price per Share for Target Valuation Date

[425] Value of Equity / [426] Number of Shares

#### **DIVIDEND ANALYSIS**

## [428] Cost of Equity

### Historical

#N/A

#### **Projected**

Pulls the value from [/] Cost of Equity

## [429] Dividend Paid per Period

Pulls the value from [/] Common Dividends from below the Statement of Cash Flow

## [430] Dividend Paid per Year

[429] Dividend Paid per Period [Cumulative YTD] / Annualization Fraction

# [431] % Growth in Dividend

Pulls the value from [/] Dividend Policy: Growth Rate from the "Dividend and Debt Ratios" section.

## [432] Share Buyback

Negative [/] Change in Common Stock from the "Statement of Cash Flow"

### [433] Number of Shares

Pulls the value from [/] Number of Shares from the "Calculating Value" section above.

#### [434] PV of Dividends

IF: [200] T-value < 0 (i.e. Historical) OR [200] T-value >= [185] Number of Estimated Periods (i.e. Terminal Value)

THEN: #N/A

ELSE: IF: ((Cost of Equity - Dividend Growth Rate from [{0,1 or 2} Periods forward] = 0)

THEN: #N/A

ELSE: Dividend Paid per Period from [0, 1 or 2 Periods forward] / [Cost of Equity – Dividend

Growth Rate from [{0,1 or 2} Periods forward] / Number of Periods per Year

## [435] Implied Value per Share

#### Historical

#N/A

#### **Projected**

[434] PV of Dividends / [433] Number of Shares

# [436] Cumulative Net Income YTD

Net Income before Extraordinary Items [Cumulative YTD]

#### [437] % Growth in Net Income

IF: [199] Period Position Number = 0

THEN: 0

ELSE: (([436] Cumulative Net Income YTD / Annualization Fraction) / [436] Cumulative Net Income

YTD [Ending Balance of Prior Year]) – 1

### [438] Net Cash Flow

Pulls the value from [/] Net Cash Flow from the Statement of Cash Flow

# [439] Cumulative Free Cash Flow YTD

Free Cash Flow including Extraordinary Income [Cumulative YTD]

## [440] PP&E

Pulls the value from [/] Net PPE from the Balance Sheet

## [441] Dividend / FCF

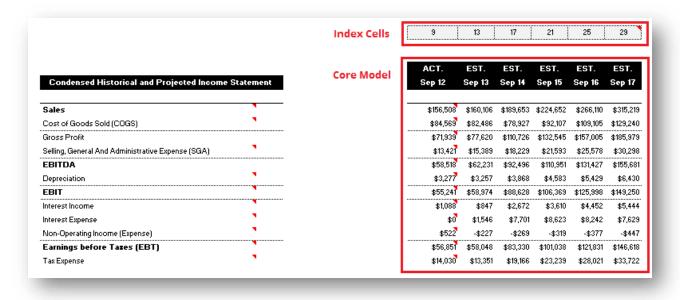
[430] Dividend Paid per Year / [439] Cumulative Free Cash Flow YTD

# [442] Dividend / Net Income

[430] Dividend Paid per Year / [436] Cumulative Net Income YTD

This marks the end of the Historical and Projected Periods section. Now please navigate to the left to arrive at the section for annual data.

#### ANNUAL FINANCIAL DATA



The annual data is located immediately to the right of the account headers as seen in the picture above. There are 6 periods of annual data included for analysis in this section.

#### **INDEX CELLS**



These are located along the top of the core model and determine which period of data is pulled from the "Historical and Projected" section into the corresponding column of the core model of the annual data section here.

Our explanation will actually flow backwards from right to left, beginning with the last cell which represents the sixth year of annual data. We will refer to each cell by the year it represents.

**Year 6**: This cell returns a value equal to the [199] Period Position Number of the last full year-end in the model of the "Historical and Projected" section.

**Year 5:** This cell returns a value equal to the value contained in Year 6 less the number of periods in a full year. For example, if the "Historical and Projected" section contains quarterly data, then this will return a value equal to the value in Year 6 less 4 to arrive at the [199] Period Position Number of the year-end prior to that of Year 6.

This pattern continues, such that **Year 4** returns the [199] Period Position Number for the year-end that is one year prior to Year 5 and Year 3 is one year prior to Year 4 and so on until the [199] Period Position Number has been determined for each of the 6 most recent year-ends. If there are less than 6 full years of financial data found in the "Historical and Projected" section then this section will pull in as many years as are available, leaving the remaining columns in this section blank.

Therefore, the value of each of these cells represents the [199] Period Position Number for each of the most recent year-ends from the "Historical and Projected" section. This will be used in the OFFSET formulas of the core model below to pull in the correct data from the corresponding column of the "Historical and Projected" section to the left.

# DATE HEADER



### [443] Actual or Estimated

This row uses the corresponding index cell to pull the value from [205] Actual or Estimated from the "Historical and Projected" section. This indicates whether the data pulled represents historical (i.e. actual) or projected (i.e. estimated) financial data.

## [444] Period Date

This row uses the corresponding index cell to pull the value from [206] Period Date from the "Historical and Projected" section. This represents the date of the financial data that has been pulled into this column.

#### **CORE MODEL**

The financial data in this section is either calculated, pulled from the period of the "Historical and Projected" section that corresponds to the [199] Period Position Number contained in the index cell or is an aggregate of data included in the "Historical and Projected" section by summing the full year of data. Therefore many of the following cells will have similar formulas.

# **INCOME STATEMENT**

| [445] Annual Data: Sales                                       |
|--|
| [446] Annual Data: Cost of Goods Sold                          |
| [447] Annual Data: Gross Profit                                |
| [448] Annual Data: Selling, General And Administrative Expense |
| [449] Annual Data: EBITDA                                      |
| [450] Annual Data: Depreciation                                |
| [451] Annual Data: EBIT  |
| [452] Annual Data: Interest Income                             |
| [453] Annual Data: Interest Expense                            |
| [454] Annual Data: Non-Operating Income (Expense)              |
| [455] Annual Data: Earnings before Taxes (EBT)                 |
| [456] Annual Data: Tax Expense                                 |
| [457] Annual Data: Net Income before Extraordinary Items       |
| [458] Annual Data: After-tax Extraordinary Income (Expense)    |
| [459] Annual Data: Net Income                                  |

### General Formula:

All of the accounts included in the table above have the same general formula. This formula utilizes the corresponding Index Cell which contains the period position number of the fiscal year-end. The OFFSET function uses this to find the sum of all the account values for the year by selecting,

the year-end and X number of periods prior to that cell (x = Number of Periods per Year). For example, if the model is using quarterly data it will find the sum of the fiscal year-end period and the 3 periods prior to that to find the value of that account for the fiscal year.

#### **KEY PERFORMANCE METRICS & DRIVERS**

[460] Annual Data: Sales Growth Rate

[445] Annual Data: Sales / [207] Sales [Prior Year Cumulative] – 1

[461] Annual Data: Earnings Growth

[459] Annual Data: Net Income / [/] Net Income [Prior Year Cumulative] – 1

[462] Annual Data: Cost of Goods Sold (COGS) % of Sales

[446] Annual Data: Cost of Goods Sold / [445] Annual Data: Sales

[463] Annual Data: Selling, General and Administrative Expenses as % of Sales

[448] Annual Data: Selling, General And Administrative Expense / [445] Annual Data: Sales

[464] Annual Data: Depreciation % of Net PPE

[450] Annual Data: Depreciation / [/] Annual Data: Net PPE

[465] Annual Data: Non-Operating Income (Expense) % of Sales

[454] Annual Data: Non-Operating Income (Expense) / [445] Annual Data: Sales

[466] Annual Data: After-tax Extraordinary Income (Expense) % of Sales

[458] Annual Data: After-tax Extraordinary Income (Expense) / [445] Annual Data: Sales

[467] Annual Data: Capex % of Sales

[/] Annual Data: Capex / [445] Annual Data: Sales

[468] Annual Data: Gross Margin

[447] Annual Data: Gross Profit / [445] Annual Data: Sales

[469] Annual Data: EBITDA Margin

[449] Annual Data: EBITDA / [445] Annual Data: Sales

## [470] Annual Data: EBIT Margin

[451] Annual Data: EBIT / [445] Annual Data: Sales

## [471] Annual Data: Earnings Margin

[459] Annual Data: Net Income / [445] Annual Data: Sales

# [472] Annual Data: ROIC

[/] Annual Data: NOPAT / CHOOSE:

[1] = (0.5 \* Operating Capital [Prior Year] + Operating Capital [Current Year])

[2] = Operating Capital [Prior Year]

## [473] Annual Data: ROE

[459] Annual Data: Net Income / CHOOSE:

[1] = [0.5 \* (Total Common Equity [Prior Year] + Total Common Equity [Current Year])

[2] = Total Common Equity [Prior Year]

## [474] Annual Data: ROA

[459] Annual Data: Net Income / CHOOSE:

[1] = [0.5 \* (Total Assets [Prior Year] + Total Assets [Current Year])

[2] = Total Assets [Prior Year]

## [475] Annual Data: Deferred Taxes / Net PPE

IF [/] Annual Data: Net PPE = 0

THEN: 0

ELSE: [/] Annual Data: Deferred Taxes / Annual Data: [/] Net PPE

## [476] Annual Data: Average Tax Rate (Taxes / EBT)

[/] Annual Data: Tax Expense / [/] Annual Data: Earnings Before Taxes

#### [477] Annual Data: Marginal Tax Rate

IF: (-Interest Expense + Interest Income + Non-Operating Income) = 0

THEN: "NA"

Else: [Tax Expense – (Average Tax Rate \* EBIT)] / [-Interest Expense + Interest Income + Non-

Operating Income]

# **BALANCE SHEET**

#### **ASSETS**

| [478] Annual Data: Cash                                  |
|--|
| [479] Annual Data: Inventory                             |
| [480] Annual Data: Accounts Receivable                   |
| [481] Annual Data: Other Short-term Operating Assets     |
| [482] Annual Data: Short-term Investments                |
| [483] Annual Data: Total Current Assets                  |
| [484] Annual Data: Net Property, Plant & Equipment (PPE) |
| [485] Annual Data: Other Long-term Operating Assets      |
| [486] Annual Data: Long-term Investments                 |
| [487] Annual Data: Total Assets                          |

#### LIABILITIES

| [488] Annual Data: Accounts Payable                                   |
|---|
| [489] Annual Data: Accruals   |
| [490] Annual Data: Other Operating Current Liabilities                |
| [491] Annual Data: All Short-term Debt                                |
| [492] Annual Data: Total Current Liabilities                          |
| [493] Annual Data: Long-term Debt                                     |
| [494] Annual Data: Deferred Taxes                                     |
| [495] Annual Data: Preferred Stock                                    |
| [496] Annual Data: Other Long-term Liabilities                        |
| [497] Annual Data: Total Liabilities                                  |
| [498] Annual Data: Par plus PIC Less Treasury (and other adjustments) |
| [499] Annual Data: Retained Earnings (RE)                             |
| [500] Annual Data: Total Common Equity                                |
| [501] Annual Data: Total Liabilities and Equity                       |

## General Formula:

All of the accounts included in the tables above for Assets and Liabilities have the same general formula. This formula utilizes the corresponding Index Cell which contains the period position number of the fiscal year-end. The OFFSET function uses the value from the Index cell to find the ending balance of each of the above balance sheet items and returns the value here for the corresponding year of annual data.

### [502] Check to see if sheets balance

This checks to make sure that Total Assets equals Total Liabilities and Equity. If so, it should show "Balance". If not, it will show "Error". If it says "Error", then check your Comprehensive Statements.

#### INFO FOR MAKING THE SHEETS BALANCE

## [503] Annual Data: Specified Assets

This formula utilizes the corresponding Index Cell which contains the period position number of the fiscal year-end. The OFFSET function uses the value from this Index cell to pull the ending balance.

## [504] Annual Data: Specified Liabilities

This formula utilizes the corresponding Index Cell which contains the period position number of the fiscal year-end. The OFFSET function uses the value from this Index cell to pull the ending balance.

#### [505] Annual Data: Net Required Financing

[278] Specified Assets - [279] Specified Liabilities

#### [506] Annual Data: Current Debt

MAX (0 or [280] Net Required Financing)

If the Net Required Financing is positive, it means specified assets are greater than specified liabilities. In other words, we need more financing then we currently have to support our assets. Therefore we add short-term debt.

#### [507] Annual Data: Short-term Investments

MAX (0 or -[280] Net Required Financing)

If Net Required Financing is negative, then we have fewer specified assets than financing. In other words, we have more financing than we need to support operations, so we will put the excess into short-term investments.

#### **NET WORKING CAPITAL**

| <br>[508] Annual Data: Inventory       |
|--|
| [509] Annual Data: Accounts Receivable |

[510] Annual Data: Other Short-term Operating Assets

[511] Annual Data: Non-Cash Current Assets
[512] Annual Data: Accounts Payable
[513] Annual Data: Accruals
[514] Annual Data: Other Operating Current Liabilities
[515] Annual Data: Non-Debt Current Liabilities

[516] Annual Data: Net Working Capital

#### General Formula:

All of the accounts included in the table above have the same general formula. This formula utilizes the corresponding Index Cell which contains the period position number of the fiscal year-end. The OFFSET function uses the value from the Index cell to find the ending balance of each of the above balance sheet items and returns the value here for the corresponding year of annual data.

## [517] Annual Data: ΔWC

[516] Annual Data: Net Working Capital [Current Year] - [516] Annual Data: Net Working Capital [Prior Year]

## [518] Annual Data: Capex

IF: [Annual Index Cell] – Number of Periods per Year < 0 (i.e. no data for prior year)

THEN: "NA"

ELSE: (Net PPE [Current Year] – Net PPE [Prior Year]) + Depreciation [Income Statement] + (Other Long-term Operating Assets [Current Year] – Other Long-term Operating Assets [Prior Year])

#### [519] Annual Data: Sales

Pulls the value from [445] Annual Data: Sales

### [520] Annual Data: COGS

Pulls the value from [446] Annual Data: Cost of Goods Sold

### [521] Annual Data: Purchases

IF: [Annual Index Cell] – Number of Periods per Year < 0 (i.e. no data for prior year)

THEN: "NA"

ELSE: Inventory [Current Year] – Inventory [Prior Year] + Cost of Goods Sold

#### **Toggles**



To the right of the account names you will fix a column of cells that each contain a dropdown list with the option to select a value of 1 or 2. These are the toggles that you can use to specify whether you would like that particular account to be driven as a percentage of Sales (1) or as a percentage of the Cost of Goods Sold (2). The account names themselves are also dependent on which value is selected from the toggle. Please note for simplicity in this report we will assume each is driven by Sales and therefore the account title will match according, just remember that this will change if you adjust the toggle to 2 (Cost of Goods Sold). For example, "Inventory as % of Sales" vs. "Inventory as % of COGS".

## [522] Annual Data: Inventory as % of Sales

Inventory / [CHOOSE (Toggle  $\{1 \text{ or } 2\}$ ]:

[1] = Sales

[2] = Cost of Goods Sold

#### [523] Annual Data: Accounts Receivable as % of Sales

Accounts Receivable / [CHOOSE (Toggle {1 or 2}]:

[1] = Sales

[2] = Cost of Goods Sold

## [524] Annual Data: Other Short-term Operating Assets as % of Sales

Other Short-term Operating Assets / [CHOOSE (Toggle {1 or 2}]:

[1] = Sales

[2] = Cost of Goods Sold

## [525] Annual Data: Accounts Payable as % of Sales

Accounts Payable / [CHOOSE (Toggle {1 or 2}]:

[1] = Sales

[2] = Cost of Goods Sold

## [526] Annual Data: Accruals as % of Sales

Accruals / [CHOOSE (Toggle {1 or 2}]:

- [1] = Sales
- [2] = Cost of Goods Sold

## [527] Annual Data: Other Operating Current Liabilities as % of Sales

Other Operating Current Liabilities / [CHOOSE (Toggle {1 or 2}]:

- [1] = Sales
- [2] = Cost of Goods Sold

## [528] Annual Data: Accounts Receivable Days

IF: [Annual Index Cell] – Number of Periods per Year < 0 (i.e. no data for prior year)

THEN: "NA"

ELSE: (0.5 \* (Accounts Receivable [Prior Year] + Accounts Receivable [Current Year]) \* (365) / Sales

## [529] Annual Data: Accounts Payable Days

IF: [Annual Index Cell] – Number of Periods per Year < 0 (i.e. no data for prior year)

THEN: "NA"

ELSE: (0.5 \* (Accounts Payable [Prior Year] + Accounts Payable [Current Year]) \* (365) / Purchases

# [530] Annual Data: Inventory Days

 $IF: [Annual\ Index\ Cell] - Number\ of\ Periods\ per\ Year < 0\ (i.e.\ no\ data\ for\ prior\ year)$ 

THEN: "NA"

ELSE: (0.5 \* (Inventory [Prior Year] + Inventory [Current Year]) \* (365) / Cost of Goods Sold

#### [531] Annual Data: Inventory Turnover

IF: [Annual Index Cell] – Number of Periods per Year < 0 (i.e. no data for prior year)

THEN: "NA"

ELSE: Cost of Goods Sold / (0.5 \* (Inventory [Prior Year] + Inventory [Current Year])

## RATIOS TO CALCULATE BALANCE SHEET

## [532] Annual Data: Cash as % of Sales

[/] Annual Data: Cash / [519] Annual Data: Sales

#### [533] Annual Data: Net Property, Plant & Equipment (PPE) as % of Sales

[/] Annual Data: Net PPE / [519] Annual Data: Sales

#### APPLE | HISTORICAL AND FORWARD LOOKING FACTORS

## [534] Annual Data: Other Long-term Operating Assets as % of Sales

[/] Annual Data: Other Long-term Operating Assets / [519] Annual Data: Sales

## [535] Annual Data: Long-term Investments as % of Sales

[/] Annual Data: Other Long-term Investments / [519] Annual Data: Sales

## [536] Annual Data: Other Long-term Liabilities as % of Sales

[/] Annual Data: Other Long-term Liabilities / [519] Annual Data: Sales

## [537] Annual Data: Number of Shares Outstanding

Pull the value from Annual Data: Number of Shares Outstanding

#### **DIVIDEND AND DEBT RATIOS**

## [539] Annual Data: Dividend Policy: Growth Rate

IF: Sum of the Prior Year of Dividends = 0

THEN: 0

ELSE: Sum of Current Year of Dividends / Sum of Prior Year of Dividends – 1

# [540] Annual Data: Long-term Debt / Value of Operations

IF: Historical THEN: "NA"

ELSE: Long-term Debt / Value of Operations Adjusted for Half-Period Convention

## [541] Annual Data: Preferred Stock / Value of Operations

IF: Historical THEN: "NA"

ELSE: Long-term Debt / Value of Operations Adjusted for Half-Period Convention

## [542] Annual Data: Coupon Rate on Preferred Stock

This formula uses the PRODUCT function to find the product of the array of coupon rates. First, 1 is added to each coupon rate, then the product of the array is found, next 1 is deducted to return the annual coupon rate on preferred stock.

## [543] Annual Data: Short-term Debt / Value of Operations

IF: Historical THEN: "NA"

ELSE: Short-term Debt / Value of Operations Adjusted for Half-Period Convention

#### **INTEREST RATES**

### [544] Annual Data: Interest Rate on Cash

IF: Historical THEN: "NA"

ELSE: IF: [/] Annual Data: Cash = 0

THEN: 0

ELSE: [548] Annual Data: Interest Income on Cash / [/] Annual Data: Cash

## [545] Annual Data: Interest Rate on Short-term Investments

IF: Historical THEN: "NA"

ELSE: IF: [/] Annual Data: Short-term Investments = 0

THEN: 0

ELSE: [549] Annual Data: Interest Income on Short-term Investments / [/] Annual Data:

Short-term Investments

## [546] Annual Data: Interest Rate on all Current Debt

IF: Historical THEN: "NA"

ELSE: IF: [/] Annual Data: Short-term Debt = 0

THEN: 0

ELSE: [551] Annual Data: Interest Expense on all Current Debt / [/] Annual Data: Short-term

Debt

## [547] Annual Data: Interest Rate on Long-term Debt

IF: Historical THEN: "NA"

ELSE: IF: [/] Annual Data: Long-term Debt = 0

THEN: 0

ELSE: [552] Annual Data: Interest Expense on Long-term Debt / [/] Annual Data: Long-term

Debt

#### INTEREST (INCOME) / EXPENSE / PREFERRED DIVIDENDS

### [548] Annual Data: Interest Income on Cash

IF: Historical THEN: "NA"

ELSE: Sum of Interest Income on Cash for all periods of the Current Year

#### APPLE | HISTORICAL AND FORWARD LOOKING FACTORS

### [549] Annual Data: Interest Income on Short-term Investments

IF: Historical THEN: "NA"

ELSE: Sum of Interest Income on Short-term Investments for all periods of the Current Year

## [550] Annual Data: Total Interest Income

IF: Historical

THEN: Pulls Total Interest Income for Year-end Period

ELSE: Calculate the SUM of Total Interest Income for all periods of the Current Year

### [551] Annual Data: Interest Expense on all Current Debt

IF: Historical THEN: "NA"

ELSE: Sum of Interest Expense on all Current Debt for all periods of the Current Year

## [552] Annual Data: Interest Expense on Long-term Debt

IF: Historical THEN: "NA"

ELSE: Sum of Interest Expense on Long-term Debt for all periods of the Current Year

# [553] Annual Data: Total Interest Expense

IF: Historical

THEN: Pulls Total Interest Expense for Year-end Period

ELSE: Calculate the SUM of Total Interest Expense for all periods of the Current Year

#### [554] Annual Data: Preferred Dividends

Calculates the SUM of Preferred Dividends for all periods of the Current Year from the "Historical and Projected" section.

## STATEMENT OF CASH FLOWS

# **OPERATING ACTIVITIES**

| [555] Annual Data: Net Income                                  |
|--|
| [556] Annual Data: Depreciation                                |
| [557] Annual Data: Change in Deferred Tax                      |
| [558] Annual Data: Change in Inventory                         |
| [559] Annual Data: Change in Accounts Receivable               |
| [560] Annual Data: Change in Other Short-term Operating Assets |

| [561] Annual Data: Change in Accounts Payable          |
|--|
| [562] Annual Data: Change in Accruals                  |
| [563] Annual Data: Change in Other Current Liabilities |
| [564] Annual Data: Net Cash from Operating Activities  |

#### **INVESTING ACTIVITIES**

| [565] Annual Data: Investment in PPE                              |  |
|---|--|
| [566] Annual Data: Investment in Other Long-term Operating Assets |  |
| [567] Annual Data: Net Cash from Investing Activities             |  |

#### FINANCING ACTIVITIES

| [568] Annual Data: Change in Short-term Investments      |
|--|
| [569] Annual Data: Change in Long-term Investments       |
| [570] Annual Data: Change in Short-term Debt             |
| [571] Annual Data: Change in Long-term Debt              |
| [572] Annual Data: Preferred Dividends                   |
| [573] Annual Data: Change in Preferred Stock             |
| [574] Annual Data: Change in Other Long-term Liabilities |
| [575] Annual Data: Change in Common Stock (Par + PIC)    |
| [576] Annual Data: Common Dividends                      |
| [577] Annual Data: Net Cash from Financing Activities    |
| [579] Annual Data: Net Cash Flow                         |
| [580] Annual Data: Starting Cash                         |
| [581] Annual Data: Ending Cash                           |

#### General Formula:

All of the accounts included in the tables above for Operating, Investing and Financing activities all have the same general formula. This formula utilizes the corresponding Index Cell which contains the period position number of the fiscal year-end. The OFFSET function uses the value from the Index cell to find the ending balance of each of the above balance sheet items and returns the value here for the corresponding year of annual data.

# [582] Check for Consistency with Cash Shown in Balance Sheet

IF: [Absolute Value of (Ending Cash – Cash (from Balance Sheet) < [User-defined Error Margin]

THEN: Balance ELSE: Error

## APPLE | HISTORICAL AND FORWARD LOOKING FACTORS

[583] Dividends-Preferred

SUM [All Preferred Dividends for the Year]

[584] Dividends-Common

SUM [All Common Dividends for the Year]

[585] Additions to RE

SUM [All Additions to Retained Earnings for the Year]

"UNCAPITALIZING" CAPITALIZED INTEREST

[586] Annual Data: Capitalized Interest

SUM [All Capitalized Interest for the Year]

[587] Annual Data: Reduction in Depreciation (Assuming Straight-line)

End of Year Balance

[588] Annual Data: Addition to Interest Expense

SUM [All Additions to Interest Expense for the Year]

[589] Annual Data: Reduction in Tax Expense

End of Year Balance

[590] Annual Data: Reduction in RE

End of Year Balance

[591] Annual Data: Cumulative Reduction in Gross PPE

End of Year Balance

[592] Annual Data: Cumulative Depreciation of Capitalized Interest

End of Year Balance

[593] Annual Data: Cumulative Reduction in Net PPE

End of Year Balance

[594] Annual Data: Cumulative Reduction in RE

End of Year Balance

[595] Annual Data: Cumulative Reduction in Book Equity as though Company had Issued a Special

Dividend due to Extra Cash Available from Tax Savings

End of Year Balance

## ANALYSIS OF HISTORICAL AND PROJECTED FINANCIAL STATEMENTS

#### FREE CASH FLOW

[596] Annual Data: Assumed Marginal Tax Rate

Pulls the value from [/] Marginal Tax Rate above

[597] Annual Data: Reported Income Tax Expense

SUM [All Periods for the Year]

[598] Annual Data: Taxes Reported But Not Paid

SUM [All Periods for the Year]

[599] Annual Data: Actual Taxes Paid

SUM [All Periods for the Year]

[600] Annual Data: Plus Tax Saved Due to Net Income Expenses

[596] Annual Data: Assumed Marginal Tax Rate \* (Annual Data: Interest Expense – Annual Data: Interest Income)

[601] Annual Data: Minus Tax Paid on Non-Operating Income

[596] Annual Data: Assumed Marginal Tax Rate \* Annual Data: Non-Operating Income (Expense)

[602] Annual Data: Tax on Operating Income

(Annual Data: Operating Profit \* Annual Data: Marginal Tax Rate) – Annual Data: Taxes Reported But Not Paid

#### APPLE | HISTORICAL AND FORWARD LOOKING FACTORS

[603] Annual Data: Net Operating Profit After Taxes (NOPAT)

[/] Operating Profit - [602] Tax on Operating Income

[604] Annual Data: NOPAT / Sales

IF: Annual Data: Sales = 0

THEN: "NA"

ELSE: [603] Annual Data: Net Operating Profit After Taxes (NOPAT) / Sales

[605] Annual Data: NOPAT Adjusted for Extraordinary Income

[603] NOPAT + After-Tax Extraordinary Income (Expense)

[606] Annual Data: Operating Current Assets

End of Year Balance

[607] Annual Data: Operating Current Liabilities

End of Year Balance

[608] Annual Data: Net Operating Working Capital

End of Year Balance

[609] Annual Data: Operating Long-term Capital

End of Year Balance

[610] Annual Data: Operating Capital

End of Year Balance

[611] Annual Data: Operating Capital / Sales

[610] Annual Data: Operating Capital / [/] Annual Data: Sales

[612] Annual Data: Investment in Operating Capital

[610] Annual Data: Operating Capital [Ending Balance of Current Year] - [610] Annual Data:

Operating Capital [Ending Balance of Prior Year]

[613] Annual Data: Special Goodwill Impairment or Accounting Change

SUM [All Periods for the Year]

### [614] Annual Data: Free Cash Flow from Ongoing Operations

Annual Data: NOPAT – Annual Data: Investment in Operating Capital – Annual Data: Special Goodwill Impairment or Accounting Change

## [615] Annual Data: Free Cash Flow (Including Extraordinary Income)

Annual Data: NOPAT Adjusted for Extraordinary Income – Annual Data: Investment in Operating Capital – Annual Data: Special Goodwill Impairment or Accounting Change

## [616] Annual Data: Economic Profit

Annual Data: NOPAT Adjusted – (Annual Data: WACC \* Annual Data: Operating Capital [Prior Year Ending Balance])

#### VALUATION

#### COST OF CAPITAL AND LONG-TERM ROIC

### [617] Annual Data: Cost of Equity (ke)

This formula uses the PRODUCT function to find the product of the array of percentages. First, 1 is added to each percentage, then the product of the array is found, next 1 is deducted to return the annual cost of equity.

#### [618] Annual Data: Weighted Average Cost of Capital (WACC)

This formula uses the PRODUCT function to find the product of the array of percentages. First, 1 is added to each percentage, then the product of the array is found, next 1 is deducted to return the annual WACC.

# [619] Annual Data: Long-term Return on Invested Capital

This formula uses the PRODUCT function to find the product of the array of percentages. First, 1 is added to each percentage, then the product of the array is found, next 1 is deducted to return the annual Long-term Return on Invested Capital.

#### **CALCULATING VALUE**

## [620] Annual Data: Discount Factor

This formula checks to see if the annual period is a historical period, if so, the discount factor is not applicable and the cell will return "NA". Otherwise, the cell will return the value of:

1 / [1 + [618] Annual Data: Weighted Average Cost of Capital (WACC)]

## APPLE | HISTORICAL AND FORWARD LOOKING FACTORS

[622] Annual Data: Value of Operations

End of Year Balance

[623] Annual Data: Value of Operations Adjusted for Half-Period Convention

End of Year Balance

[624] Annual Data: Value of Investments

End of Year Balance

[625] Annual Data: Total Value of Firm

End of Year Balance

[626] Annual Data: Value of All Debt, Preferred Stock, and Other Non-Operating Liabilities

End of Year Balance

[627] Annual Data: Value of Equity

End of Year Balance

[628] Annual Data: Number of Shares

End of Year Balance

[629] Annual Data: Estimated Price per Share

End of Year Balance

SELECTED RATIOS AND OTHER DATA

[630] Annual Data: Projected Economic Profit (EP)

End of Year Balance

[631] Annual Data: Projected Market Value Added (MVA)

End of Year Balance

[632] Annual Data: Price / Earnings ratio (P/E ratio)

End of Year Balance

[633] Annual Data: Market to Book ratio

End of Year Balance

[634] Annual Data: Enterprise Value / EBITDA ratio

End of Year Balance

[635] Annual Data: Enterprise Value / Sales ratio

End of Year Balance

[636] Annual Data: Times-Interest-Earned ratio

End of Year Balance

[637] Annual Data: Long-term Debt / Value of Operations

This formula checks to see if the annual period is a historical period, if so, the discount factor is not applicable and the cell will return "NA". Otherwise, the cell will return the value of:

Annual Data: Long-term Debt / Annual Data: Value of Operations

**DIVIDEND ANALYSIS** 

[848] Annual Data: Cost of Equity (ke)

Pulls the value from [617] Annual Data: Cost of Equity (ke) above

[849] Annual Data: Dividend Paid per Period

SUM [All Periods for the Year]

[850] Annual Data: Dividend Paid per Year

End of Year Balance

[851] Annual Data: % Growth in Dividend

Pulls the value from [/] Annual Data: Dividend Policy Growth Rate

[852] Annual Data: Share Buyback

End of Year Balance

[853] Annual Data: Number of Shares

End of Year Balance

[854] Annual Data: PV of Dividends

End of Year Balance

[855] Annual Data: Implied Value per Share

End of Year Balance

[856] Annual Data: Net Income

End of Year Balance

Note: This is the cumulative Net Income for the year

[857] Annual Data: % Growth in Net Income

[856] Annual Data: Net Income / [856] Annual Data: Net Income [Prior Year-end Balance] – 1

[858] Annual Data: Net Cash Flow

End of Year Balance

[859] Annual Data: FCF

End of Year Balance

[860] Annual Data: PP&E

End of Year Balance

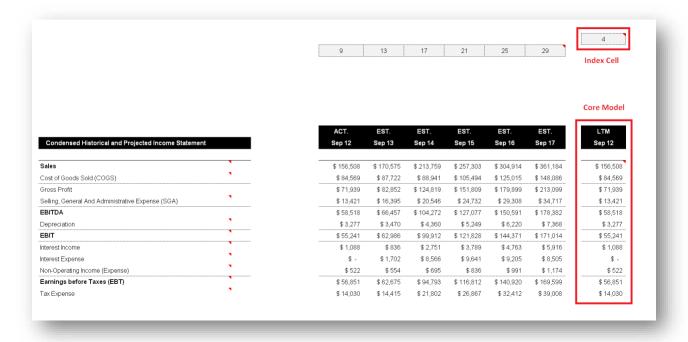
[861] Annual Data: Dividend / FCF

End of Year Balance

[862] Annual Data: Dividend / Net Income

End of Year Balance

#### LTM FINANCIAL DATA



The last twelve months (LTM) data is located immediately to the right of the annual data as seen in the picture above. It is only one column wide and contains one index cell.

#### **INDEX CELL**

This is located above the core model (as seen in the picture above). This cell calculates the number of periods in the stub period and will be used in subsequent calculations. This cell will be referred to as "LTM Index Cell" in the explanations that follow in this report.

#### DATE HEADER



# [653] Actual or Estimated

This row uses the corresponding index cell to pull the value from [205] Actual or Estimated from the "Historical and Projected" section. This indicates whether the data pulled represents historical (i.e. actual) or projected (i.e. estimated) financial data.

#### [654] Period Date

This row uses the corresponding index cell to pull the value from [206] Period Date from the "Historical and Projected" section. This represents the date of the financial data that has been pulled into this column.

#### LTM CORE MODEL

The financial data in this section is either calculated using the LTM formula or calculated from data pulled from the "Historical and Projected" section. Therefore many of the following cells will have similar formulas.

# **INCOME STATEMENT**

| [655] Annual Data: Sales                                       |
|--|
| [656] Annual Data: Cost of Goods Sold                          |
| [657] Annual Data: Gross Profit                                |
| [658] Annual Data: Selling, General And Administrative Expense |
| [659] Annual Data: EBITDA                                      |
| [660] Annual Data: Depreciation                                |
| [661] Annual Data: EBIT  |
| [662] Annual Data: Interest Income                             |
| [663] Annual Data: Interest Expense                            |
| [664] Annual Data: Non-Operating Income (Expense)              |
| [665] Annual Data: Earnings before Taxes (EBT)                 |
| [666] Annual Data: Tax Expense                                 |
| [667] Annual Data: Net Income before Extraordinary Items       |
| [668] Annual Data: After-tax Extraordinary Income (Expense)    |
| [669] Annual Data: Net Income                                  |

#### General Formula:

All of the accounts included in the table above have the same general formula. This formula is the standard last-twelve-months (LTM) calculation:

LTM = Last Fiscal Year + Most Recent Stub Period - Same Stub Period from Prior Year

This formula utilizes the OFFSET function and the LTM Index Cell to perform the LTM calculation.

# **KEY PERFORMANCE METRICS & DRIVERS**

[670] LTM: Sales Growth Rate

[655] LTM: Sales / [207] Sales [Prior Year Cumulative] – 1

[671] LTM: Earnings Growth

[669] LTM: Net Income / [/] Net Income [Prior Year Cumulative] – 1

[672] LTM: Cost of Goods Sold (COGS) % of Sales

[656] LTM: Cost of Goods Sold / [655] LTM: Sales

[673] LTM: Selling, General and Administrative Expenses as % of Sales

[658] LTM: Selling, General And Administrative Expense / [655] LTM: Sales

[674] LTM: Depreciation % of Net PPE

[660] LTM: Depreciation / [/] LTM: Net PPE

[675] LTM: Non-Operating Income (Expense) % of Sales

[664] LTM: Non-Operating Income (Expense) / [655] LTM: Sales

[676] LTM: After-tax Extraordinary Income (Expense) % of Sales

[668] LTM: After-tax Extraordinary Income (Expense) / [655] LTM: Sales

[677] LTM: Capex % of Sales

[/] LTM: Capex / [655] LTM: Sales

[678] LTM: Gross Margin

[657] LTM: Gross Profit / [655] LTM: Sales

[679] LTM: EBITDA Margin

[659] LTM: EBITDA / [655] LTM: Sales

[680] LTM: EBIT Margin

[661] LTM: EBIT / [655] LTM: Sales

[681] LTM: Earnings Margin

[669] LTM: Net Income / [655] LTM: Sales

# [682] LTM: ROIC LTM: NOPAT / CHOOSE:

[1] = (0.5 \* Operating Capital [Prior Year] + Operating Capital [Current Year])

[2] = Operating Capital [Prior Year]

[683] LTM: ROE

[669] LTM: Net Income / CHOOSE:

[1] = [0.5 \* (Total Common Equity [Prior Year] + LTM Total Common Equity [Current Year])

[2] = Total Common Equity [Prior Year]

[684] LTM: ROA

[669] LTM: Net Income / CHOOSE:

[1] = [0.5 \* (Total Assets [Prior Year] + Total Assets [Current Year])

[2] = Total Assets [Prior Year]

[685] LTM: Deferred Taxes / Net PPE

IF [/] LTM: Net PPE = 0

THEN: 0

ELSE: [/] LTM: Deferred Taxes / LTM: [/] Net PPE

[686] LTM: Average Tax Rate (Taxes / EBT)

[/] LTM: Tax Expense / [/] LTM: Earnings Before Taxes

[687] LTM: Marginal Tax Rate

IF: (-Interest Expense + Interest Income + Non-Operating Income) = 0

THEN: "NA"

Else: [Tax Expense - (Average Tax Rate \* EBIT)] / [-Interest Expense + Interest Income + Non-

Operating Income

#### **BALANCE SHEET**

#### **ASSETS**

[688] LTM: Cash [689] LTM: Inventory [690] LTM: Accounts Receivable [691] LTM: Other Short-term Operating Assets [692] LTM: Short-term Investments [693] LTM: Total Current Assets

| [694] LTM: Net Property, Plant & Equipment (PPE) |
|--|
| [695] LTM: Other Long-term Operating Assets      |
| [696] LTM: Long-term Investments                 |
| [697] LTM: Total Assets                          |

#### LIABILITIES

| [698] LTM: Accounts Payable                                   |
|---|
| [699] LTM: Accruals   |
| [700] LTM: Other Operating Current Liabilities                |
| [701] LTM: All Short-term Debt                                |
| [702] LTM: Total Current Liabilities                          |
| [703] LTM: Long-term Debt                                     |
| [704] LTM: Deferred Taxes                                     |
| [705] LTM: Preferred Stock                                    |
| [706] LTM: Other Long-term Liabilities                        |
| [707] LTM: Total Liabilities                                  |
| [708] LTM: Par plus PIC Less Treasury (and other adjustments) |
| [709] LTM: Retained Earnings (RE)                             |
| [710] LTM: Total Common Equity                                |
| [711] LTM: Total Liabilities and Equity                       |

#### General Formula:

All of the accounts included in the tables above for Assets and Liabilities have the same general formula. This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period (actual data, not projected) to find the ending balance of each of the above balance sheet items.

# [712] Check to see if sheets balance

This checks to make sure that Total Assets equals Total Liabilities and Equity. If so, it should show "Balance". If not, it will show "Error". If it says "Error", then check your Comprehensive Statements.

#### INFO FOR MAKING THE SHEETS BALANCE

#### [713] LTM: Specified Assets

#### [714] LTM: Specified Liabilities

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [715] LTM: Net Required Financing

[278] Specified Assets - [279] Specified Liabilities

#### [716] LTM: Current Debt

MAX (0 or [280] Net Required Financing)

If the Net Required Financing is positive, it means specified assets are greater than specified liabilities. In other words, we need more financing then we currently have to support our assets. Therefore we add short-term debt.

# [717] LTM: Short-term Investments

MAX (0 or -[280] Net Required Financing)

If Net Required Financing is negative, then we have fewer specified assets than financing. In other words, we have more financing than we need to support operations, so we will put the excess into short-term investments.

#### **NET WORKING CAPITAL**

| [718] LTM: Inventory                           |
|--|
| [719] LTM: Accounts Receivable                 |
| [720] LTM: Other Short-term Operating Assets   |
| [721] LTM: Non-Cash Current Assets             |
| [722] LTM: Accounts Payable                    |
| [723] LTM: Accruals                            |
| [724] LTM: Other Operating Current Liabilities |
| [725] LTM: Non-Debt Current Liabilities        |
| [726] LTM: Net Working Capital                 |

#### General Formula:

All of the accounts included in the tables above have the same general formula. This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period (actual data, not projected) to find the ending balance of each of the above balance sheet items.

# [727] LTM: ΔWC

[726] LTM: Net Working Capital [Current Year] - [726] LTM: Net Working Capital [Prior Year]

### [728] LTM: Capex

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

# [729] LTM: Sales

Pulls the value from [655] LTM: Sales

# [730] LTM: COGS

Pulls the value from [656] LTM: Cost of Goods Sold

# [731] LTM: Purchases

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period - Same Stub Period from Prior Year

# **Toggles**



To the right of the account names you will fix a column of cells that each contain a dropdown list with the option to select a value of 1 or 2. These are the toggles that you can use to specify whether you would like that particular account to be driven as a percentage of Sales (1) or as a percentage of the Cost of Goods Sold (2). The account names themselves are also dependent on which value is selected from the toggle. Please note for simplicity in this report we will assume each is driven by Sales and therefore the account title will match according, just remember that this will change if you adjust the toggle to 2 (Cost of Goods Sold). For example, "Inventory as % of Sales" vs. "Inventory as % of COGS".

# [732] LTM: Inventory as % of Sales Inventory / [CHOOSE (Toggle {1 or 2}]: [1] = Sales[2] = Cost of Goods Sold [733] LTM: Accounts Receivable as % of Sales Accounts Receivable / [CHOOSE (Toggle {1 or 2}]: [1] = Sales[2] = Cost of Goods Sold [734] LTM: Other Short-term Operating Assets as % of Sales Other Short-term Operating Assets / [CHOOSE (Toggle {1 or 2}]: [1] = Sales[2] = Cost of Goods Sold [735] LTM: Accounts Payable as % of Sales Accounts Payable / [CHOOSE (Toggle {1 or 2}]: [1] = Sales[2] = Cost of Goods Sold [736] LTM: Accruals as % of Sales Accruals / [CHOOSE (Toggle {1 or 2}]: [1] = Sales[2] = Cost of Goods Sold [737] LTM: Other Operating Current Liabilities as % of Sales Other Operating Current Liabilities / [CHOOSE (Toggle {1 or 2}]: [1] = Sales[2] = Cost of Goods Sold [738] LTM: Accounts Receivable Days (0.5 \* (Accounts Receivable [Prior Year] + Accounts Receivable [Current Year]) \* (365) / Sales [739] LTM: Accounts Payable Days (0.5 \* (Accounts Payable [Prior Year] + Accounts Payable [Current Year]) \* (365) / Purchases

[740] LTM: Inventory Days

(0.5 \* (Inventory [Prior Year] + Inventory [Current Year]) \* (365) / Cost of Goods Sold

[741] LTM: Inventory Turnover

Cost of Goods Sold / (0.5 \* (Inventory [Prior Year] + Inventory [Current Year])

# RATIOS TO CALCULATE BALANCE SHEET

[742] LTM: Cash as % of Sales

[/] LTM: Cash / [729] LTM: Sales

[743] LTM: Net Property, Plant & Equipment (PPE) as % of Sales

[/] LTM: Net PPE / [729] LTM: Sales

[744] LTM: Other Long-term Operating Assets as % of Sales

[/] LTM: Other Long-term Operating Assets / [729] LTM: Sales

[745] LTM: Long-term Investments as % of Sales

[/] LTM: Other Long-term Investments / [729] LTM: Sales

[746] LTM: Other Long-term Liabilities as % of Sales

[/] LTM: Other Long-term Liabilities / [729] LTM: Sales

[747] LTM: Number of Shares Outstanding

Pull the value from LTM: Number of Shares Outstanding

**DIVIDEND AND DEBT RATIOS** 

[749] LTM: Dividend Policy: Growth Rate

LTM: Common Dividends / Sum of Prior Year of Dividends – 1

[750] LTM: Long-term Debt / Value of Operations

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

#### [751] LTM: Preferred Stock / Value of Operations

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

# [752] LTM: Coupon Rate on Preferred Stock

This formula uses the PRODUCT function to find the product of the array of coupon rates occurring over the last twelve months. First, 1 is added to each coupon rate, then the product of the array is found, next 1 is deducted to return the LTM coupon rate on preferred stock.

# [753] LTM: Short-term Debt / Value of Operations

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

#### **INTEREST RATES**

# [754] LTM: Interest Rate on Cash

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

# [755] LTM: Interest Rate on Short-term Investments

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

THEN: 0

#### [756] LTM: Interest Rate on all Current Debt

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

#### [757] LTM: Interest Rate on Long-term Debt

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

#### INTEREST (INCOME) / EXPENSE / PREFERRED DIVIDENDS

#### [758] LTM: Interest Income on Cash

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

#### [759] LTM: Interest Income on Short-term Investments

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

# [760] LTM: Total Interest Income

Pulls the value from LTM: Interest Income located above.

#### [761] LTM: Interest Expense on all Current Debt

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

# [762] LTM: Interest Expense on Long-term Debt

This is not applicable for historical periods. Since LTM by definition is historical this will always return "NA".

# [763] LTM: Total Interest Expense

Pulls the value from LTM: Interest Expense located above.

# [764] LTM: Preferred Dividends

Calculates the SUM of Preferred Dividends for the LTM from the "Historical and Projected" section.

# STATEMENT OF CASH FLOWS

#### **OPERATING ACTIVITIES**

| [765] LTM: Net Income                                  |
|--|
| [766] LTM: Depreciation                                |
| [767] LTM: Change in Deferred Tax                      |
| [768] LTM: Change in Inventory                         |
| [769] LTM: Change in Accounts Receivable               |
| [770] LTM: Change in Other Short-term Operating Assets |
| [771] LTM: Change in Accounts Payable                  |
| [772] LTM: Change in Accruals                          |
| [773] LTM: Change in Other Current Liabilities         |
| [774] LTM: Net Cash from Operating Activities          |

#### **INVESTING ACTIVITIES**

| [775] LTM: Investment in PPE                              |  |
|---|--|
| [776] LTM: Investment in Other Long-term Operating Assets |  |
| [777] LTM: Net Cash from Investing Activities             |  |

#### FINANCING ACTIVITIES

| [778] LTM: Change in Short-term Investments      |
|--|
| [779] LTM: Change in Long-term Investments       |
| [780] LTM: Change in Short-term Debt             |
| [781] LTM: Change in Long-term Debt              |
| [782] LTM: Preferred Dividends                   |
| [783] LTM: Change in Preferred Stock             |
| [784] LTM: Change in Other Long-term Liabilities |
| [785] LTM: Change in Common Stock (Par + PIC)    |
| [786] LTM: Common Dividends                      |
| [787] LTM: Net Cash from Financing Activities    |
| [789] LTM: Net Cash Flow                         |
| [790] LTM: Starting Cash                         |
| [791] LTM: Ending Cash                           |

### General Formula:

All of the accounts included in the tables above for Operating, Investing and Financing activities all have the same general formula. All of the accounts included in the tables above have the same general formula. This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period to find the ending balance of each of the above balance sheet items.

# [792] Check for Consistency with Cash Shown in Balance Sheet

IF: [Absolute Value of (Ending Cash – Cash (from Balance Sheet) < [User-defined Error Margin]

THEN: Balance ELSE: Error

# [793] Dividends-Preferred

Calculates the SUM of Preferred Dividends for the LTM from the "Historical and Projected" section.

#### [794] Dividends-Common

Calculates the SUM of Common Dividends for the LTM from the "Historical and Projected" section.

# [795] Additions to RE

Calculates the SUM of Additions to Retained Earnings for the LTM from the "Historical and Projected" section.

#### "UNCAPITALIZING" CAPITALIZED INTEREST

#### [796] LTM: Capitalized Interest

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

# [797] LTM: Reduction in Depreciation (Assuming Straight-line)

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

#### [798] LTM: Addition to Interest Expense

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year [799] LTM: Reduction in Tax Expense

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

#### [800] LTM: Reduction in RE

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period - Same Stub Period from Prior Year

[801] LTM: Cumulative Reduction in Gross PPE

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

[802] LTM: Cumulative Depreciation of Capitalized Interest

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical

Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

[803] LTM: Cumulative Reduction in Net PPE

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical

Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

[804] LTM: Cumulative Reduction in RE

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical

Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period - Same Stub Period from Prior Year

[805] LTM: Cumulative Reduction in Book Equity as though Company had Issued a Special Dividend

due to Extra Cash Available from Tax Savings

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical

Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

ANALYSIS OF HISTORICAL AND PROJECTED FINANCIAL STATEMENTS

FREE CASH FLOW

[806] LTM: Assumed Marginal Tax Rate

Pulls the value from LTM: Marginal Tax Rate above

#### [807] LTM: Reported Income Tax Expense

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

#### [808] LTM: Taxes Reported But Not Paid

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

#### [809] LTM: Actual Taxes Paid

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

#### [810] LTM: Plus Tax Saved Due to Net Income Expenses

[806] LTM: Assumed Marginal Tax Rate \* (LTM: Interest Expense – LTM: Interest Income)

#### [811] LTM: Minus Tax Paid on Non-Operating Income

[806] LTM: Assumed Marginal Tax Rate \* LTM: Non-Operating Income (Expense)

# [812] LTM: Tax on Operating Income

(LTM: Operating Profit \* LTM: Marginal Tax Rate) - LTM: Taxes Reported But Not Paid

#### [813] LTM: Net Operating Profit After Taxes (NOPAT)

[/] Operating Profit - [812] Tax on Operating Income

#### [814] LTM: NOPAT / Sales

IF: LTM: Sales = 0 THEN: "NA"

ELSE: [813] LTM: Net Operating Profit After Taxes / LTM: Sales

#### [815] LTM: NOPAT Adjusted for Extraordinary Income

[813] NOPAT + After-Tax Extraordinary Income (Expense)

# [816] LTM: Operating Current Assets

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [817] LTM: Operating Current Liabilities

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

### [818] LTM: Net Operating Working Capital

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [819] LTM: Operating Long-term Capital

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [820] LTM: Operating Capital

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

#### [821] LTM: Operating Capital / Sales

[820] LTM: Operating Capital / LTM: Sales

#### [822] LTM: Investment in Operating Capital

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

#### [823] LTM: Special Goodwill Impairment or Accounting Change

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

#### [824] LTM: Free Cash Flow from Ongoing Operations

LTM: NOPAT – LTM: Investment in Operating Capital – LTM: Special Goodwill Impairment or Accounting Change

# [825] LTM: Free Cash Flow (Including Extraordinary Income)

LTM: NOPAT Adjusted for Extraordinary Income – LTM: Investment in Operating Capital – LTM: Special Goodwill Impairment or Accounting Change

# [826] LTM: Economic Profit

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

#### VALUATION

#### COST OF CAPITAL AND LONG-TERM ROIC

# [827] LTM: Cost of Equity (ke)

This formula uses the PRODUCT function to find the product of the array of percentages occurring over the last twelve months. First, 1 is added to each percentage, then the product of the array is found, next 1 is deducted to return the LTM cost of equity.

#### [828] LTM: Weighted Average Cost of Capital (WACC)

This formula uses the PRODUCT function to find the product of the array of percentages occurring over the last twelve months. First, 1 is added to each percentage, then the product of the array is found, next 1 is deducted to return the LTM WACC.

#### [829] LTM: Long-term Return on Invested Capital

This formula uses the PRODUCT function to find the product of the array of percentages occurring over the last twelve months. First, 1 is added to each percentage, then the product of the array is found, next 1 is deducted to return the LTM Long-term Return on Invested Capital.

#### **CALCULATING VALUE**

#### [830] LTM: Discount Factor

This is not applicable.

# [832] LTM: Value of Operations

#### [833] LTM: Value of Operations Adjusted for Half-Period Convention

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [834] LTM: Value of Investments

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

#### [835] LTM: Total Value of Firm

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [836] LTM: Value of All Debt, Preferred Stock, and Other Non-Operating Liabilities

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [837] LTM: Value of Equity

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [838] LTM: Number of Shares

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

#### [839] LTM: Estimated Price per Share

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

#### SELECTED RATIOS AND OTHER DATA

#### [840] LTM: Projected Economic Profit (EP)

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

#### [841] LTM: Projected Market Value Added (MVA)

#### [842] LTM: Price / Earnings ratio (P/E ratio)

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [843] LTM: Market to Book ratio

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

### [844] LTM: Enterprise Value / EBITDA ratio

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [845] LTM: Enterprise Value / Sales ratio

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [846] LTM: Times-Interest-Earned ratio

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [847] LTM: Long-term Debt / Value of Operations

This is not applicable.

#### **DIVIDEND ANALYSIS**

#### [848] LTM: Cost of Equity (ke)

Pulls the value from LTM: Cost of Equity (ke) located above

# [849] LTM: Dividend Paid per Period

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period - Same Stub Period from Prior Year

#### [850] LTM: Dividend Paid per Year

#### [851] LTM: % Growth in Dividend

Pulls the value from LTM: Dividend Policy Growth Rate

### [852] LTM: Share Buyback

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

#### [853] LTM: Number of Shares

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [854] LTM: PV of Dividends

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

# [855] LTM: Implied Value per Share

This formula utilizes [180] Number of Historical Periods to pull the value from the "Historical and Projected" section for the most recent period.

#### [856] LTM: Net Income

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

Note: This is the cumulative Net Income for the year

#### [857] LTM: % Growth in Net Income

[856] LTM: Net Income / [856] LTM: Net Income [Prior Twelve Months] – 1

#### [858] LTM: Net Cash Flow

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period - Same Stub Period from Prior Year

# [859] LTM: FCF

This formula utilizes the OFFSET function, the LTM Index Cell and [180] Number of Historical Periods to perform the LTM calculation.

LTM = Last Fiscal Year + Most Recent Stub Period – Same Stub Period from Prior Year

# [860] LTM: PP&E

Pulls the value from "LTM: PP&E" located above

# [861] LTM: Dividend / FCF

[850] LTM: Dividend Paid per Year / [859] LTM: FCF

# [862] LTM: Dividend / Net Income

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- [551] Annual Data: Interest Expense on all Current Debt
- [552] Annual Data: Interest Expense on Long-term Debt

- [553] Annual Data: Total Interest Expense [554] Annual Data: Preferred Dividends
- [555] Annual Data: Net Income [556] Annual Data: Depreciation
- [557] Annual Data: Change in Deferred Tax [558] Annual Data: Change in Inventory
- [559] Annual Data: Change in Accounts Receivable
- [560] Annual Data: Change in Other Short-term Operating Assets
- [561] Annual Data: Change in Accounts Payable
- [562] Annual Data: Change in Accruals
- [563] Annual Data: Change in Other Current Liabilities
- [564] Annual Data: Net Cash from Operating Activities
- [565] Annual Data: Investment in PPE
- [566] Annual Data: Investment in Other Long-term Operating Assets
- [567] Annual Data: Net Cash from Investing Activities
- [568] Annual Data: Change in Short-term Investments
- [569] Annual Data: Change in Long-term Investments
- [570] Annual Data: Change in Short-term Debt
- [571] Annual Data: Change in Long-term Debt
- [572] Annual Data: Preferred Dividends
- [573] Annual Data: Change in Preferred Stock
- [574] Annual Data: Change in Other Long-term Liabilities
- [575] Annual Data: Change in Common Stock (Par + PIC)
- [576] Annual Data: Common Dividends
- [577] Annual Data: Net Cash from Financing Activities
- [579] Annual Data: Net Cash Flow
- [580] Annual Data: Starting Cash
- [581] Annual Data: Ending Cash
- [582] Check for Consistency with Cash Shown in Balance Sheet
- [583] Dividends–Preferred
- [584] Dividends-Common
- [585] Additions to RE
- [586] Annual Data: Capitalized Interest
- [587] Annual Data: Reduction in Depreciation (Assuming Straight-line)
- [588] Annual Data: Addition to Interest Expense
- [589] Annual Data: Reduction in Tax Expense
- [590] Annual Data: Reduction in RE
- [591] Annual Data: Cumulative Reduction in Gross PPE
- [592] Annual Data: Cumulative Depreciation of Capitalized Interest
- [593] Annual Data: Cumulative Reduction in Net PPE
- [594] Annual Data: Cumulative Reduction in RE
- [595] Annual Data: Cumulative Reduction in Book Equity as though Company had Issued a Special
- Dividend due to Extra Cash Available from Tax Savings
- [596] Annual Data: Assumed Marginal Tax Rate

- [597] Annual Data: Reported Income Tax Expense [598] Annual Data: Taxes Reported But Not Paid
- [599] Annual Data: Actual Taxes Paid
- [600] Annual Data: Plus Tax Saved Due to Net Income Expenses
- [601] Annual Data: Minus Tax Paid on Non-Operating Income
- [602] Annual Data: Tax on Operating Income
- [603] Annual Data: Net Operating Profit After Taxes (NOPAT)
- [604] Annual Data: NOPAT / Sales
- [605] Annual Data: NOPAT Adjusted for Extraordinary Income
- [606] Annual Data: Operating Current Assets
- [607] Annual Data: Operating Current Liabilities
- [608] Annual Data: Net Operating Working Capital
- [609] Annual Data: Operating Long-term Capital
- [610] Annual Data: Operating Capital
- [611] Annual Data: Operating Capital / Sales
- [612] Annual Data: Investment in Operating Capital
- [613] Annual Data: Special Goodwill Impairment or Accounting Change
- [614] Annual Data: Free Cash Flow from Ongoing Operations
- [615] Annual Data: Free Cash Flow (Including Extraordinary Income)
- [616] Annual Data: Economic Profit
- [617] Annual Data: Cost of Equity (ke)
- [618] Annual Data: Weighted Average Cost of Capital (WACC)
- [619] Annual Data: Long-term Return on Invested Capital
- [620] Annual Data: Discount Factor
- [622] Annual Data: Value of Operations
- [623] Annual Data: Value of Operations Adjusted for Half-Period Convention
- [624] Annual Data: Value of Investments
- [625] Annual Data: Total Value of Firm
- [626] Annual Data: Value of All Debt, Preferred Stock, and Other Non-Operating Liabilities
- [627] Annual Data: Value of Equity
- [628] Annual Data: Number of Shares
- [629] Annual Data: Estimated Price per Share
- [630] Annual Data: Projected Economic Profit (EP)
- [631] Annual Data: Projected Market Value Added (MVA)
- [632] Annual Data: Price / Earnings ratio (P/E ratio)
- [633] Annual Data: Market to Book ratio
- [634] Annual Data: Enterprise Value / EBITDA ratio
- [635] Annual Data: Enterprise Value / Sales ratio
- [636] Annual Data: Times-Interest-Earned ratio
- [637] Annual Data: Long-term Debt / Value of Operations
- [848] Annual Data: Cost of Equity (ke)
- [849] Annual Data: Dividend Paid per Period
- [850] Annual Data: Dividend Paid per Year
- [851] Annual Data: % Growth in Dividend

- [852] Annual Data: Share Buyback
- [853] Annual Data: Number of Shares
- [854] Annual Data: PV of Dividends
- [855] Annual Data: Implied Value per Share
- [856] Annual Data: Net Income
- [857] Annual Data: % Growth in Net Income
- [858] Annual Data: Net Cash Flow
- [859] Annual Data: FCF
- [860] Annual Data: PP&E
- [861] Annual Data: Dividend / FCF
- [862] Annual Data: Dividend / Net Income
- [653] Actual or Estimated
- [654] Period Date
- [655] Annual Data: Sales
- [656] Annual Data: Cost of Goods Sold
- [657] Annual Data: Gross Profit
- [658] Annual Data: Selling, General And Administrative Expense
- [659] Annual Data: EBITDA
- [660] Annual Data: Depreciation
- [661] Annual Data: EBIT
- [662] Annual Data: Interest Income
- [663] Annual Data: Interest Expense
- [664] Annual Data: Non-Operating Income (Expense)
- [665] Annual Data: Earnings before Taxes (EBT)
- [666] Annual Data: Tax Expense
- [667] Annual Data: Net Income before Extraordinary Items
- [668] Annual Data: After-tax Extraordinary Income (Expense)
- [669] Annual Data: Net Income
- [670] LTM: Sales Growth Rate
- [671] LTM: Earnings Growth
- [672] LTM: Cost of Goods Sold (COGS) % of Sales
- [673] LTM: Selling, General and Administrative Expenses as % of Sales
- [675] LTM: Non-Operating Income (Expense) % of Sales
- [676] LTM: After-tax Extraordinary Income (Expense) % of Sales
- [677] LTM: Capex % of Sales
- [678] LTM: Gross Margin
- [679] LTM: EBITDA Margin
- [680] LTM: EBIT Margin
- [681] LTM: Earnings Margin
- [682] LTM: ROIC
- [683] LTM: ROE
- [684] LTM: ROA
- [685] LTM: Deferred Taxes / Net PPE
- [686] LTM: Average Tax Rate (Taxes / EBT)

- [687] LTM: Marginal Tax Rate
- [688] LTM: Cash
- [689] LTM: Inventory
- [690] LTM: Accounts Receivable
- [691] LTM: Other Short-term Operating Assets
- [692] LTM: Short-term Investments
- [693] LTM: Total Current Assets
- [694] LTM: Net Property, Plant & Equipment (PPE)
- [695] LTM: Other Long-term Operating Assets
- [696] LTM: Long-term Investments
- [697] LTM: Total Assets
- [698] LTM: Accounts Payable
- [699] LTM: Accruals
- [700] LTM: Other Operating Current Liabilities
- [701] LTM: All Short-term Debt
- [702] LTM: Total Current Liabilities
- [703] LTM: Long-term Debt
- [704] LTM: Deferred Taxes
- [705] LTM: Preferred Stock
- [706] LTM: Other Long-term Liabilities
- [707] LTM: Total Liabilities
- [708] LTM: Par plus PIC Less Treasury (and other adjustments)
- [709] LTM: Retained Earnings (RE)
- [710] LTM: Total Common Equity
- [711] LTM: Total Liabilities and Equity
- [712] Check to see if sheets balance
- [713] LTM: Specified Assets
- [714] LTM: Specified Liabilities
- [715] LTM: Net Required Financing
- [716] LTM: Current Debt
- [717] LTM: Short-term Investments
- [718] LTM: Inventory
- [719] LTM: Accounts Receivable
- [720] LTM: Other Short-term Operating Assets
- [721] LTM: Non-Cash Current Assets
- [722] LTM: Accounts Payable
- [723] LTM: Accruals
- [724] LTM: Other Operating Current Liabilities
- [725] LTM: Non-Debt Current Liabilities
- [726] LTM: Net Working Capital
- [727] LTM: ΔWC
- [728] LTM: Capex
- [729] LTM: Sales
- [730] LTM: COGS

- [731] LTM: Purchases
- [732] LTM: Inventory as % of Sales
- [733] LTM: Accounts Receivable as % of Sales
- [734] LTM: Other Short-term Operating Assets as % of Sales
- [735] LTM: Accounts Payable as % of Sales
- [736] LTM: Accruals as % of Sales
- [737] LTM: Other Operating Current Liabilities as % of Sales
- [738] LTM: Accounts Receivable Days
- [739] LTM: Accounts Payable Days
- [740] LTM: Inventory Days
- [741] LTM: Inventory Turnover
- [742] LTM: Cash as % of Sales
- [743] LTM: Net Property, Plant & Equipment (PPE) as % of Sales
- [744] LTM: Other Long-term Operating Assets as % of Sales
- [745] LTM: Long-term Investments as % of Sales
- [746] LTM: Other Long-term Liabilities as % of Sales
- [747] LTM: Number of Shares Outstanding
- [749] LTM: Dividend Policy: Growth Rate
- [750] LTM: Long-term Debt / Value of Operations
- [751] LTM: Preferred Stock / Value of Operations
- [752] LTM: Coupon Rate on Preferred Stock
- [753] LTM: Short-term Debt / Value of Operations
- [754] LTM: Interest Rate on Cash
- [755] LTM: Interest Rate on Short-term Investments
- [756] LTM: Interest Rate on all Current Debt
- [757] LTM: Interest Rate on Long-term Debt
- [758] LTM: Interest Income on Cash
- [759] LTM: Interest Income on Short-term Investments
- [760] LTM: Total Interest Income
- [761] LTM: Interest Expense on all Current Debt
- [762] LTM: Interest Expense on Long-term Debt
- [763] LTM: Total Interest Expense
- [764] LTM: Preferred Dividends
- [765] LTM: Net Income
- [766] LTM: Depreciation
- [767] LTM: Change in Deferred Tax
- [768] LTM: Change in Inventory
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- [779] LTM: Change in Long-term Investments
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