eVal User's Guide[1]

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1.1 GETTING STARTED

This User's Guide summarizes operational aspects of the _eVal_, equity valuation and analysis software. This includes how to enter financial statement data, forecasting assumptions, and valuation parameters and where to find the corresponding analyses and valuations. To learn more about how to provide sensible inputs and how to interpret the resulting analyses and valuations, refer to our accompanying textbook, Equity Valuation and Analysis. All chapter references in the guide below refer to this textbook.

If you haven't already downloaded a copy of _eVal_, you can do so by clicking here. *eVal*, is basically an Excel workbook with a series of sheets that guide you through the equity analysis and valuation process. Throughout the remainder of this guide, we will assume that you have a basic level of proficiency with Excel. When you first open *eVal*, it should open on the **Intro** worksheet, which is basically a cover sheet. If you look at the tabs at the bottom of the workbook, you will see the following sheets:

Intro: This is the introductory cover sheet.

Financial Statements: This sheet contains the financial statements for the company that is being analyzed. The default company is Kohl's in fiscal 2009. This sheet contains income statements, balance sheets, and statements of retained earnings for the past 5 years and also forecasts of these statements for the next 12 years.

Ratio Analysis: This sheet provides a comprehensive financial ratio analysis of the financial statements in the **Financial Statements** sheet.

Cash Flow Analysis: This sheet provides a comprehensive cash flow analysis of the financial statements in the **Financial Statements** sheet.

Credit Analysis: This sheet provides a comprehensive credit analysis of the financial statements in the **Financial Statements** sheet.

Forecasting Assumptions: This sheet contains the forecasting assumptions that are used to build the forecast financial statements in the **Financial Statements** sheet.

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Valuation Parameters: This sheet contains the valuation parameters that are used to compute the valuations in subsequent sheets.

Residual Income Valuations: This sheet contains both equity and entity level valuations for the company using the residual income valuation method.

DCF Valuations: This sheet contains both equity and entity level valuations for the company using discounted cash flow (DCF) method.

EPS Forecaster: This sheet provides earnings-per-share (EPS) forecasts using the forecasts in the **Financial Statements** sheet.

Model Summary: This sheet summarizes the key aspects of the forecasting and valuation model contained in the previous sheets.

Case Data: This sheet contains financial statement data for many of the cases accompanying the textbook that can be accessed here. We explain how to load the data in the financial statements sheet in the next section.

Feel free to click through these sheets. Cells that are shaded yellow require you to provide inputs. The workbook is supplied with a default set of inputs for Kohl's Corporation in fiscal 2009. In the following sections, we will walk you through the process of entering you own inputs.   Many of the remaining cells contain values that are derived from these inputs. You can see the underlying formulae by clicking on a cell and viewing the formula in Excel's formula bar.

The Workbook is completely unprotected, and so you are free to change anything in the workbook and customize it to you own needs and desires. But be warned that the default model has been carefully constructed to be internally consistent and user friendly. Once you start changing things in the white cells, you are on your own! But don't fear. If you mess up beyond repair, you can always download a fresh version of *eVal* and start over.

1.2 INPUTTING MODEL DATA
Inputs are required for financial statement data, forecasting assumptions, and valuation parameters. Be warned that *eVal* supplies defaults, so if you fail to update any input, you will inherit the *eVal* default value. So change the 10% cost of equity capital, or you will own it.

Financial Statement Data
Financial statement data should be input in the yellow cells of the **Financial Statements** worksheet. The top of the sheet requires you to input some basic company information along with the number of shares outstanding at the most recent fiscal year end (you can get this from the most recent balance sheet). Be

sure to update information in all yellow cells through row number 64, or your model will inherit the default input for Kohl's.

There are two options for entering this financial statement data. First, you can do it manually. Grab a copy of the most recent Form 10-K (there is a link at the top of the sheet if you don't already have a copy) and start plugging away. Note that you will have to conform the company's 'as-reported' financial statements to *eVal*'s 'standardized' financial statement format. For a discussion of how to do this, along with warnings on the pitfalls of standardized data, see Chapter 2 in the textbook. Space is provided to enter up to five years of historical financial statement data. You don't have to enter all five years, but if you enter less than two years, *eVal* won't be able to compute some of the default forecasting assumptions.

The second way to enter data is by what we call 'raw data block input'. If you scroll down to the bottom of the **Financial Statements** sheet, past row 80, you will see the raw data block for Kohl's. You simply have to past the raw data block for you company here, and all of the appropriate data will populate the financial statements worksheet. A neat option, but where do you get the raw data block? If you are doing one of the cases from our website, then you can get the appropriate raw data block from the **Case Data** sheet at the end of *eVal*. Simply locate the appropriate data block in the Case Data sheet, copy it, and paste it into the cell range B82:F116 in the **Financial Statements** sheet. If you need the raw data block for a company in the S&P 500, you can access it here. If you want data for another publicly listed U.S. company, then you will need two additional resources:

1. Access to a data provider, such as WRDS (many business schools subscribe to WRDS , in which case your friendly librarian should be able to give you a login).
2. Our Datamaker software, that converts the data provider output into the raw data block format, which is available here.

If you want to learn more about this option, read our Datamaker User's Guide.

Unless you need to enter data for many companies, we recommend manual entry. By entering data manually, you will understand all of the decisions that have been made in standardizing the data. Also, the WRDS website and Datamaker software are both pretty clunky, so if you go down this path, you may find yourself consulting your dictionary of four letter words during your first run.

Forecasting Assumptions

Forecasting assumptions should be input in the yellow cells of the Forecasting Assumptions sheet. We have framed each of the assumptions such that it should have intuitive appeal. See chapters 7 and 8 in the textbook for details. Pay particular attention to the 'Terminal Year' assumptions in column Q. These assumptions apply for the rest of eternity.

You will note that e*Val* supplies default forecasting assumptions. These are naïve assumptions that serve as a starting point. In most cases, they simply

borrow the corresponding value from the most recent fiscal year. This is called 'straightlining' and will immediately identify you as a lazy analyst. Another feature of the default assumptions is that each row contains a smoothing algorithm, which linearly trends the assumption from the previous year to the terminal year (Column Q). You may have a good idea of where you expect the forecasting assumptions to be in the first year or two, and you should make sure to enter a sensible assumption for the terminal year. Rather than forecasting all the intervening years, it may make sense to impose a linear trend between these starting and finishing points. At least it is an improvement over straightlining! Give it a try to get used to this feature. If this doesn't make sense for your company, then you can simply overwrite the linear trend formulae with custom forecasting assumptions. See Chapters 7 and 8 for guidance on providing sensible forecasting assumptions.

Valuation Parameters
Valuation parameters should be input in the yellow cells of the **Valuation Parameters** sheet. Spaces are provided for all the remaining parameters necessary to compute a valuation. These include the cost of equity (see Chapter 9), the Value of Contingent Equity Claims (see Chapter 10), the valuation date (which defaults to the current date on your computer) and a dilution factor if the company has split its stock since the most recent Form 10-K (see Chapter 10). If you want to use an entity-level valuation, you should also enter the optional costs of capital for the non-equity forms of financing. See chapter 9 for details. If you use this approach, you can also solve for the weighted-average cost of capital (WACC) by adjusting the yellow cell for the WACC until the equity and entity level valuations (immediately below the WACC) are approximately equal.

1.3 INTERPETING MODEL OUTPUT
As you input data, the remaining sheets analyze the data. Once you have input the financial statement data, the **Ratio Analysis**, **Cash Flow Analysis** and **Credit Analysis** sheets analyze this data. See Chapters 5, and 6 for details. After inputting the forecasting assumptions and valuation parameters, the **Residual Income Valuations** and **DCF Valuations** sheets provide the resulting valuation models. See chapter 10 for details.

1.4 SOME FINAL POINTERS
We think that *eVal* is a useful tool for learning how to construct a comprehensive and internally consistent equity analysis and valuation model. *eVal* is also a useful tool for comparing the different assumptions underlying different users' models. By using a common set of spreadsheets, we can quickly focus in on differences in the underlying forecasting assumptions and valuation parameters. However, a one-size-fits-all approach comes with limitations. The most significant limitation of *eVal* is that it employs standardized financial

statement data. This sacrifices much of the richness of the underlying as-reported financial statements. For example, *eVal*'s standardized line items are poorly suited to firms in the financial sector. So we encourage you to think of *eVal* as a stepping-stone to building your own bespoke valuation models.

With this quick introduction complete, we encourage you to play with *eVal*. Change yellow cells and see what happens to the forecasts and the implied valuation. With a little practice you will be knocking out internally consistent valuation models in no time. But, to knock out high quality valuations, you need to do some serious study. We recommend starting with "Equity Valuation and Analysis," although we might be a bit biased.