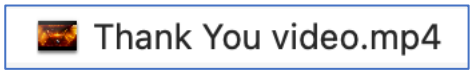
Thank You for Purchasing My Textbook!

Introduction

Please view the below video for this section.



Again, thank you for your purchase of my new advanced DCF text. I learned a ton just writing it, and I am confident you will benefit greatly from delving into all the modeling details. It is packed full of valuable content from cover to cover.

This document describes the contents of the files contained in the repository. Check back from time to time to see if anything important is noted in the Errata.

Much effort has been undertaken to address all the details. As with any new text, especially as detailed and broad reaching as this, there will naturally be items missed.

It is my genuine desire you receive great benefit from the DCF material covered - much of which is never before published material.

Enjoy!

Brian K. Lee, MBA, PRM, CMA, CFA

Text assets are available at the following link.

https://github.com/123blee/advanced_DCF_valuation_using_R.github.io.git

R Code and Summary Spreadsheet

Please disregard any reference in the videos to leewacc.com. That served as the original hosting site for these text asset files and is no longer used.

Please view the below video for this section.

 R_Code_and_Summary_Spreadsheet.mp4

Files associated with this section.

1. Unified_DCF_valuation_models.pdf
2. Unified_DCF_valuation_models.xlsx
3. DCF_R_Code__Commented_Version__5_8_2021.R (Originally published R code file on book publication date 5-8-2021)
4. DCF_R_Code__Commented_Version__5_21_2021.R (Current R code file)

Reference the 'Errata' section to note all changes to originally published R code.

R code is associated with the vast majority of numerical examples in the text. Reference associated spreadsheet and PDF files (files 1 and 2 above) that summarize all the R function names and their respective purposes (discussed in the videos). In developing the book, I found myself frequently referring to these summaries.

R code is not required to understand the text material. It is supporting material for the text. R code is not taught in the text. Professional R coders will be able to easily enhance much of the code.

I intentionally break R coding best practices to make points clearer. For instance, I intentionally make use of the letter 'T' in the code to represent the corporate tax rate. This is not best practices, as 'T' represents the logical operator 'TRUE' in R.

If you happen to locate a coding issue, feel free to contact me at blee@leewacc.com. While I naturally cannot provide any R coding advice/support, I will prioritize addressing any known issues.

Suggestions for enhancing the code are welcome.

Various R packages are used in the code that may require installation. Several of these include

1. **tidyverse**
2. **readxl**
3. **‘writexl’**
4. **'scales'**
5. '**kableExtra'**

The R and RStudio versions used in writing the code are provided below.

R

Version 4.0.4 (2021-02-15) -- "Lost Library Book"

Copyright (C) 2021 The R Foundation for Statistical Computing

RStudio

Version 1.4.1106
© 2009-2021 RStudio, PBC
"Tiger Daylily" (2389bc24, 2021-02-11) for macOS

Integrated Financials Spreadsheet

Please view the below video for this section.

File associated with this section.

1. Fully_Integrated_Financials.xlsx

This spreadsheet formats the R code output. As mentioned in the text, I prefer R for the number-crunching and Excel for the formatting of the output. This spreadsheet was used to produce the spreadsheet graphics used in the text. They are by no means recommendations. Your personal audience dictates what should and should not be included.

‘Flows Definition’ Spreadsheet

Please view the below video for this section.

Files associated with this section.

1. Flow_Definitions.xlsx
2. tnc_18_22.xls

The noted '**tnc_18_22.xls**' spreadsheet is applicable to **Chapter 14, Section 39** in the text, **'Risk-Free (Rf) Forward Rates.'**

Errata

'**assmptns_func**' R function

1. N/P (**np**) = Percentage of next period's forecasted SG&A expense (not next period's revenue as stated in text) - **No R code calculations are affected** (correctly calculated as % of sga_t+1).

2. Prepaid Expense (**pe**) = Percentage of next period's forecasted SG&A expense (not next period's revenue as stated in text) - **No R code calculations are affected** (correctly calculated as % of sga_t+1).

Note: Since SG&A Expense (**sga**) is calculated as a percentage of next period's forecasted revenue, technically speaking, both N/P (**np**) and Prepaid Expense (**pe**) are functions of forecasted next period's revenue. The percentages provided for both '**np**' and '**pe**' within the '**assmptns_func**' R function apply to next period's forecasted SG&A Expense (**sga**) in the R code.

9.4.5 Full 'Assumptions' Data Set (Comments only change in R code)

From: pe_pct = rep(0.01, n+1), # % of **REV**_t+1

To: pe_pct = rep(0.01, n+1), # % of **SGA**_t+1

From: np_pct = c(0, rep(0.05, n)), # % of **REV**_t+1

To: np_pct = c(0, rep(0.05, n)), # % of **SGA**_t+1

10.3 Current Assets in 'R'

Graphic of R code and comments for current assets is updated to reflect the above change for 'Prepaid Expense (**pe**).

10.4 Current Liabilities in ‘R’

Graphic of R code and comments for current liabilities is updated to reflect the above change for N/P (**np**).

From: As with P/E, W/P is assumed a function of SG&A**.**

To: As with P/E, W/P **and N/P are** assumed function**s** of SG&A**.**

3. **Spelling/wording** correction (**Section 9.2**)

Changed from: Since **there** are now **forecasts** based on '**parentages** of revenue,'

Changed to: Since **they** are now **forecast** based on '**percentages** of revenue,'

Items 1-3 above were corrected in the online Kindle book on 5-21-2021.

13.11 ECF - Method 2

Corrected spelling in **R output with Excel formatting'** section**. (Ater to After)**

The current online Kindle version as of 5-25-2021 incorporates this correction.

13.13 ECF-Adjusted Method 4

Some table values were incorrect. The current online Kindle version as of 5-25-2021 incorporates these corrections.

13.2 FCFF-Methods 2 & 3

From:

$$FCFF_1 = NI + BD + \Delta DTL, net - Gains + SP + (IE)(1-T) + (IE)(1-T) - (II)(1-T) - OWC - CapX$$
$$FCFF_2 = NI_{Tax} + TD - Gains_{Tax} + SP + (IE)(1-T) + (IE)(1-T) - (II)(1-T) - OWC - CapX$$

To:

$$FCFF_1 = NI + BD + \Delta DTL, net - Gains + SP + (IE)(1-T) - (II)(1-T) - \Delta OWC - CapX$$
$$FCFF_2 = NI_{Tax} + TD - Gains_{Tax} + SP + (IE)(1-T) - (II)(1-T) - \Delta OWC - CapX$$

From:

$$FCFF_2 = NI_{Tax} + TD - Gains_{Tax} + SP + (IE)(1-T) + (IE)(1-T) - (II)(1-T) - OWC - CapX$$

To:

$$FCFF_2 = NI_{Tax} + TD - Gains_{Tax} + SP + (IE)(1-T) - (II)(1-T) - \Delta OWC - CapX$$

14.6.1 Circular 'R' Solution

R output formatted in Excel. 'Ku' row was referencing the 'Ke' R output row. R code is correct. Unified_DCF_valuation_models.xlsx spreadsheet is now updated with the correct row reference. Amazon Kindle text reflects the update as of 5-28-2021.

12. Statement of Cash Flows in 'R'

R code repositioned cash flow associated with changes in M/S from CCF to CFI. No DCF models or flow definitions were impacted. Amazon Kindle text reflects these updates as of 6-7-2021. Spreadsheet Fully_Integrated_Financials.xlsx integrated the changes as well.