

# EQUITY VALUATION PROJECT

## FI 412

### INVESTMENTS

**OBJECTIVE:** The goal of this assignment is to apply the fundamental analysis tools that we have studied in Chapter 13. We will use these tools to analyze a firm's fundamentals and then come up with a trading strategy. Using a version of the Dividend Discount Model, the Free Cash Flow Model, the P/E ratio, the P/CF ratio, and the P/S ratio, you will perform valuations on or predictions of the firm's stock price.

#### **PART I: DIVIDEND DISCOUNT MODEL**

Using a financial news website such as the following, look up the financial statements of that company. (There are other places to look; it's your choice.)

[www.finance.yahoo.com](http://www.finance.yahoo.com)

<https://www.sec.gov/edgar/searchedgar/companysearch.html>

For the Dividend Discount Model, find current dividends per share,  $D(0)$ , from the income statement. Examine the dividends of the last 20 quarters and read analysts reports regarding predictions of growth in the future (specifically dividend growth). Then estimate the dividend growth rate,  $g$ , using the previous 20 quarters of dividends using the arithmetic and geometric method, also find it on the ratios/statements pages, and calculate the sustainable growth rate using the method from class. Provide an evaluation of these growth rates and choose the growth rate you are going to utilize. (i.e. an average of the methods, the stated growth rate because you do not believe your arithmetic or geometric average is accurate due to the dividend pattern, etc.). You estimate the discount rate,  $k$ , using the CAPM. Clearly state what you are employing to estimate the CAPM and be sure you are using proper proxies. Next determine which version of the DDM you should use (no growth, constant growth, multistage, etc.) Then estimate the stock price. (*Note: Some stocks don't pay dividends. However you must choose a stock that does pay dividends.*)

#### **PART II: PRICE RATIO ANALYSIS**

- a. **P/E ratio:** Find or estimate the EPS growth rate. (You can use the same EPS growth rate from part b.) Predict next year's EPS. Then predict next year's stock price using the average P/E ratio. (Use the average P/E of the last few years.)
- b. **P/CF ratio:** Find or estimate the CFPS growth rate. Predict next year's CFPS. (You can use Cash From Operations on the Cash Flow Statement to approximate operating cash flow.) Then predict next year's stock price using the average P/CF ratio. (Use the average P/CF of the last few years.)
- c. **P/S ratio:** Find or estimate the SPS growth rate. Predict next year's SPS. Then predict next year's stock price using the average P/S ratio. (Use the average P/S of the last few years.)

#### **PART III: FCF MODEL**

Utilize the firm's financial statements to estimate the growth rate of free cash flow using the last 4 years (3 rates), estimate the proper discount rate, and employ the most recent free cash flow (FCF). Use this information to estimate the firm's value and share price.

**WRITTEN REPORT** You now have five different estimates for the stock value based on part I-III. Compare your estimates of stock value to the current actual stock price (on Yahoo Finance or other). Make a prediction about whether the stock is underpriced or overpriced (i.e. whether you should buy it or short it).

In the report, include your conclusions on whether the stock is overvalued or undervalued. Do the results of your calculations agree with other current information that you may know about the company? Your report should include all information that you gather and the source where you gathered the information. Excel sheets/tables are fine to illustrate the information, but should be accompanied with written work summarizing your findings for each part I-IV and conclusions. Remember to provide your results in a professional well written report. Clearly label each part of the report.

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