

Full DCF Valuation

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Overview

Problem Definition

The purpose of this exercise is to complete a full discounted cash flow valuation of a stock from end to end, complete with all of the additional analyses you learned throughout the course. You can pick any publicly traded stock for your valuation. You must find the data on your own and research the company's operations. Ultimately the main output is your valuation of the stock, but you must also provide a written justification of why you believe this value to be correct. You must discuss and show how variable this estimate is, as well as what could have large effects on the valuation. You should also consider several realistic scenarios based on states of the economy, and how these scenarios affect the valuation.

Some of the components of your project should include:

- WACC estimation
- FCF estimation and forecasting (must forecast financial statements, not only FCFs directly, though that can be an extra check)
- A written justification for why statements were forecasted as they were
- Terminal value estimation using both perpetuity growth and various exit multiples
- Monte carlo simulation
- Sensitivity analysis
- Scenario analysis
- Visualization

Notes

Unlike the prior exercises, there is no solution key, as everyone will be working on a different company. Further, there is considerable flexibility in forecasting so solutions wouldn't make sense even with the same company.

Readability is a higher portion of the grade as these will be large models and it's very important to stay organized with a large model.

Bonus

Since this exercise is a lot less structured than prior projects, so too is the bonus. The bonus will be based on doing parts of the model especially well. If your model stands out for having great visualization, that will earn some bonus points. If it has a great write up, is organized very well, is especially thorough, etc. then you can earn bonus points. Basically any part of the project, if you are doing it especially well you could earn bonus points for that. The maximum on the bonus is 5%.

Submission & Grading

Submission

Please submit your model, a write up of the results, and any data you used. The write up can be included in the model if desired.

Grading

| Grading Breakdown | |
|-------------------|------------|
| Category | Percentage |
| Model Accuracy | 60% |
| Model Readability | 30% |
| Model Formatting | 10% |
| Bonus | 5% |
| Total Possible | 105% |