

Exercise 5C: DCF Cross-Check with Red-Teaming

MGMT 675: Generative AI for Finance

Take the DCF model you built in Exercise 2B. Start a **new** Claude conversation (do not continue the original) and upload the workbook. Ask Claude to critique the valuation:

1. **Identify at least 3 questionable assumptions** — are the growth rates, margins, or discount rate reasonable?
2. **Check formula consistency** — does FCF match the pro forma income statement and balance sheet?
3. **Evaluate the terminal value** — is the implied terminal growth rate reasonable relative to GDP growth? What fraction of enterprise value comes from the terminal value?
4. **Suggest specific revisions** with justification

Then apply **red-teaming protocols** from Module 8:

5. Set revenue growth to 0% — does the model break or produce nonsense?
6. Use a WACC below the risk-free rate — does the model flag this as unreasonable?
7. Feed a scenario with negative free cash flow in all projection years — what happens to the valuation?

Revise the model based on the critique and red-teaming results. Compare the original and revised valuations.

Deliverables.

- Original DCF model (5C-Original.xlsx)
- Revised DCF model (5C-Revised.xlsx)
- Summary of critique, red-teaming findings, and revisions (5C-Summary.pdf, 1 page)
- Screenshots of both Claude conversations (5C-Screenshot1.png, 5C-Screenshot2.png)