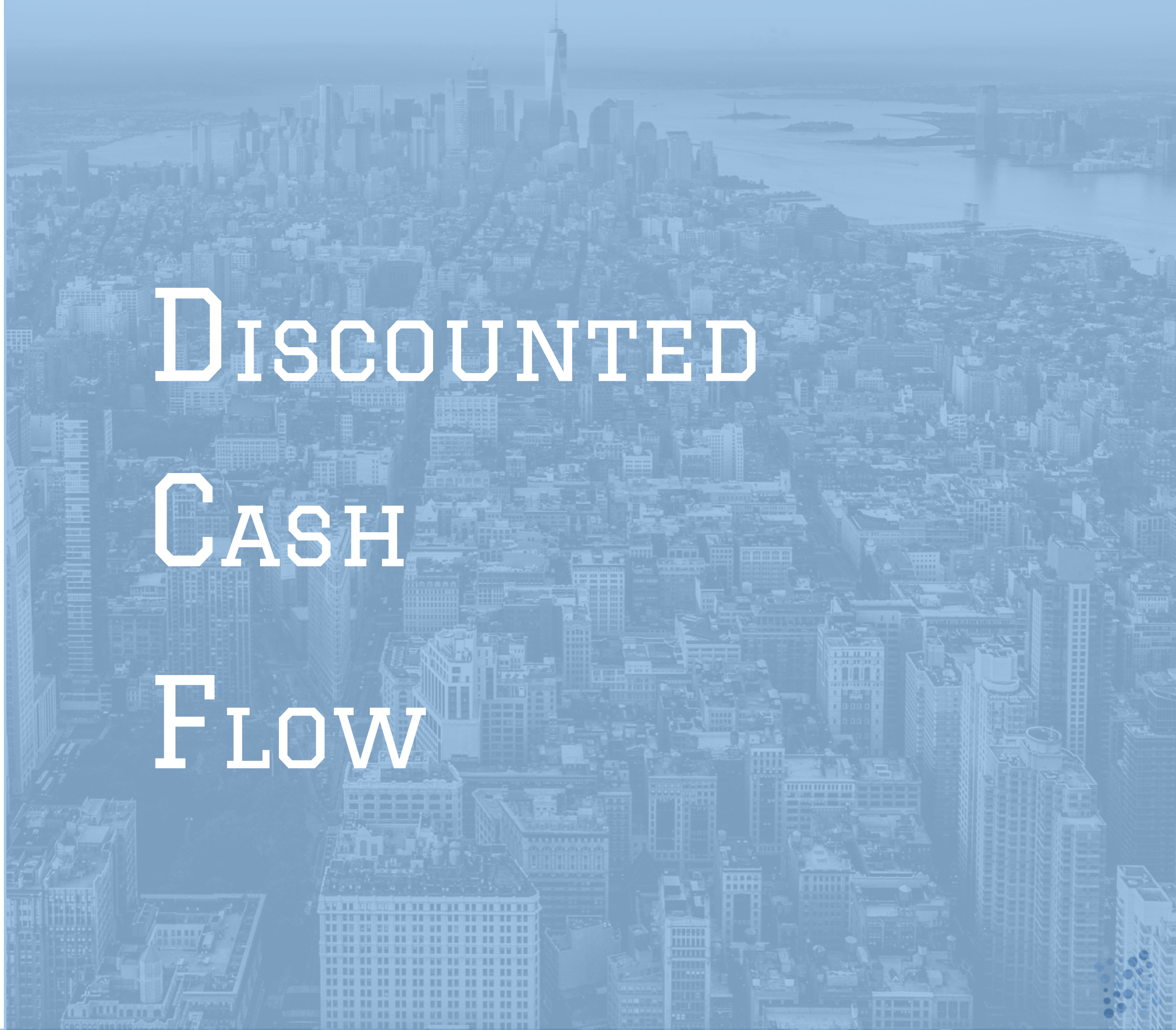
DCF

Diversity on the Street
November 15, 2020

Discounted Cash Flow

A method used to estimate the **value** of a company based on its **future free cash flows**



Resources

Historical Financial Data ◀ CapIQ

To Guide Your Projections

Equity Research Reports

Company 10K or 10Q ◀ MD&A

Recap:

What is Intrinsic Value of Company?

The intrinsic value of a company is the cash flows it can generate in perpetuity discounted to the present value.

Cash Flow = FCF

The intrinsic value of a company is the cash flows it can generate in perpetuity discounted to the present value.

The Steps

Project Free Cash Flow

FCF = EBIT*(1-t)+ D&A — Capex — Change in NWC

- Why are you subtracting/adding random things?
- Non-cash expenses!!!
- FCF looks at how much real $ you have on hand to improve company
- So why is Net Income (income statement) not as reliable?

Cash Flow Statement

Why do we need this?

- Income statement includes non-cash revenues and expenses (A/P, A/R)
- There are real cash outflows that aren’t reported on income statement because they fall outside of the reporting period of the IS (eg: prepaid expenses, capex)
- **Because of these reasons**, income statement not good indicator of real cash the company is generating

Find WACC

Blended mix of the return expected from the company's financial instruments, based on its capital structure.

WACC=Proportion of debt * (1-t) * Kd + Proportion of equity * Ke

How to find cost of debt (Kd)?

- Weighted average yield of total debt outstanding

How to find cost of equity (Ke)?

- Capital Asset Pricing Model (CAPM)
    - Ke = Risk-free rate + beta*(market return - risk-free rate)

Find Terminal Value

Terminal Value fully captures the remaining cash flows outside the projection period

Perpetuity Growth Method

- Assumption: Value if the company grows forever at a set growth rate
- Estimated using growth rate

Exit Multiple Method

- Assumption: Value if the company is acquired or sold
- Estimated using EV/EBITDA
- Projected time=n EBITDA multiplied by EV/EBITDA multiple

Discount the Cash Flow

- Recap: why do we discount the CF to the present?
- Discounting and adding FCF and terminal value gives you Enterprise Value

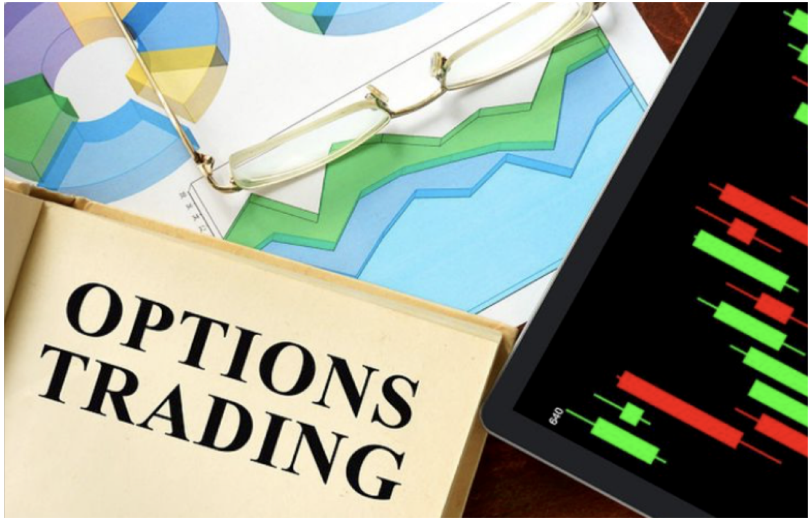
Remember these?

Equity Value (Diluted Equity Value)

Formula: Diluted s/o * Stock Price

What do diluted shares outstanding (s/o) include?

- In-the-money options
- In-the-money convertible bonds
- Restricted Stock Units (RSU)

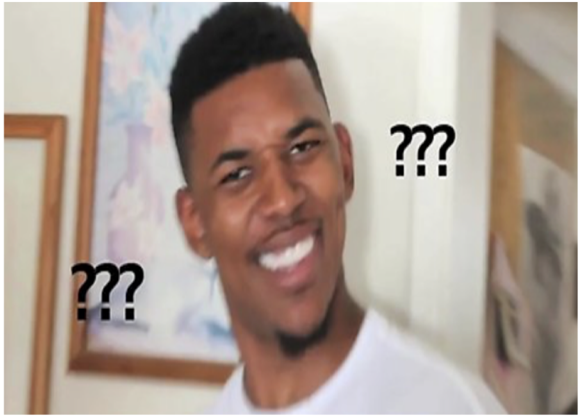


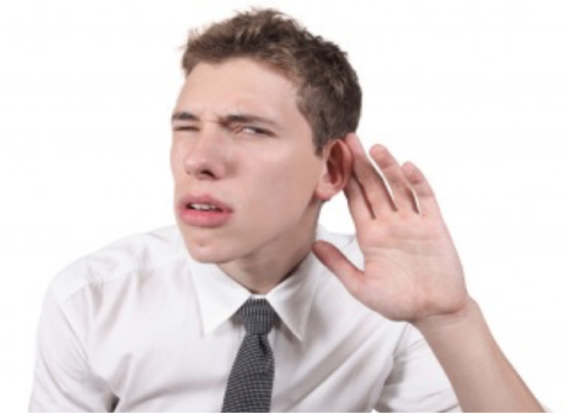
Enterprise Value (EV)

Basic Formula:

EV = Diluted Equity Value + Total Debt + Preferred Stock + NCI - Cash

- Huh???? This is more complicated than I bargained for…





Homework:

- Weekly HW to be posted
- ALL parts up until and not including DCF by next meeting
- Start working on DCF