Finance Fundamentals 2026/27
Session Two:
Valuation And Modelling

Private Equity Society

Produced by Tejjas Kumar

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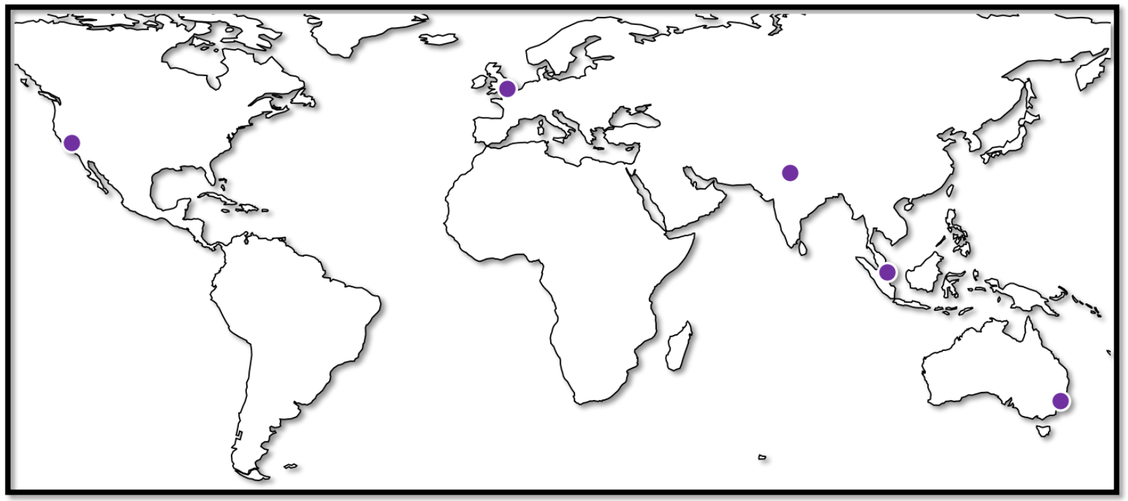
VII. Q&A And Feedback

I. Introduction

Private Equity Society

Introduction: About Me!

- Final-Year BSc Accounting & Finance Student
- Lived In: India, US, Singapore, Australia and the UK
- Interests
  - Cricket
  - Coffee
  - Chess
  - F1
  - Pub



	2024/25		*2025/26*		*2026/27*
LSE Mergers and Acquisitions Group	ANALYST	›	CO-HEAD	›	CO-CHAIR
Private Equity Society	RESEARCH ANALYST	›	HEAD OF RESEARCH	›	CO-CHAIR
Evercore	SPRING INTERN	›	SUMMER INTERN	›	INCOMING FULL-TIME ANALYST

Introduction: LSESU Private Equity Society

PES Research

$55bn Acquisition of Electronic Arts by the Consortium of PIF, Silver Lake, Affinity Partners

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Comprehensive Deal Reports

KKR

KKR's £4.8bn Buyout of Spectris

spectris

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Research Showcases



LBO Workshop Series



LBO And M&A Competitions

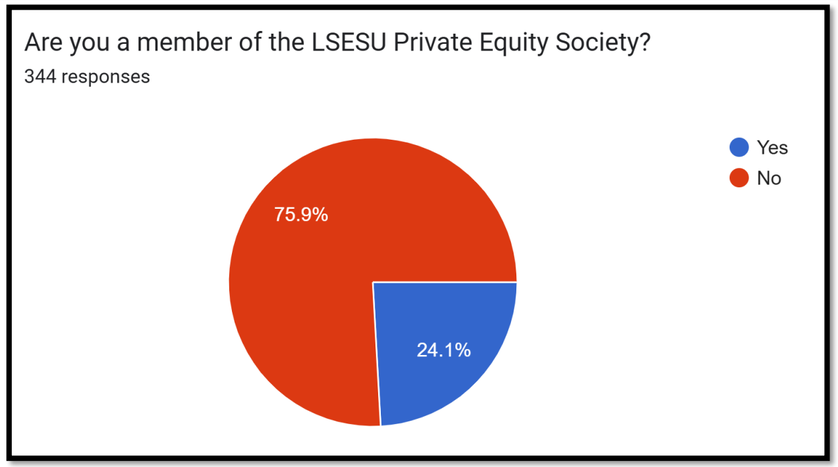
Upcoming Events





Among our upcoming events:

- **27th October:** Fireside Chat with Aysel Sharifova, Director at Bridgepoint
- **29th October:** Fireside Chat with Pontus Pettersson, Partner at Cinven
- **9th November:** Annual Technology Panel
- **17th November:** ISQ Recruitment Event
- **24th November:** Annual Industrials Panel



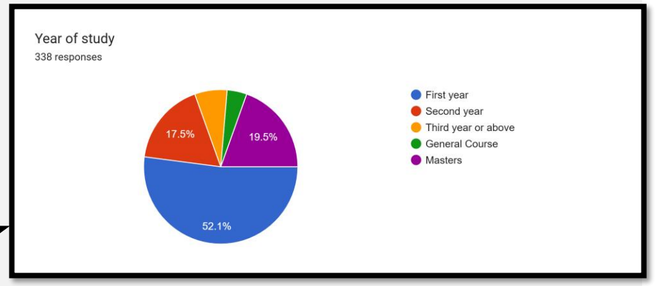
II. Learning Objectives And Roadmap

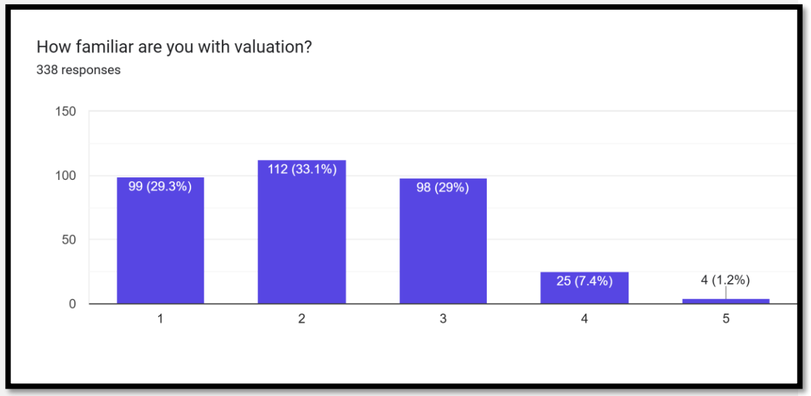
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Learning Objectives And Roadmap – Session Two

Session One: Building Blocks

- **Read the three financial statements and explain how they link together** ★
- **Understand accrual accounting versus cash, and the role of D&A, NWC, capex and EBITDA** ★
- Apply time value of money through NPV
- Compare debt and equity financing
- **Explain Enterprise Value (EV) vs. Equity Value and the EV bridge** ★
- Distinguish intrinsic from relative valuation, introducing DCF, comps and precedents





Session Two: Valuation & Modelling

- **Build a DCF model, from forecasting through to equity value per share** ★
- Justify key assumptions and stress test them with sensitivity and scenario analysis
- Complete a comparable companies analysis using EV/EBITDA, EV/Revenue and P/E
- Complete a precedent transactions analysis and explain the control premium
- Reconcile all three methods on a football field

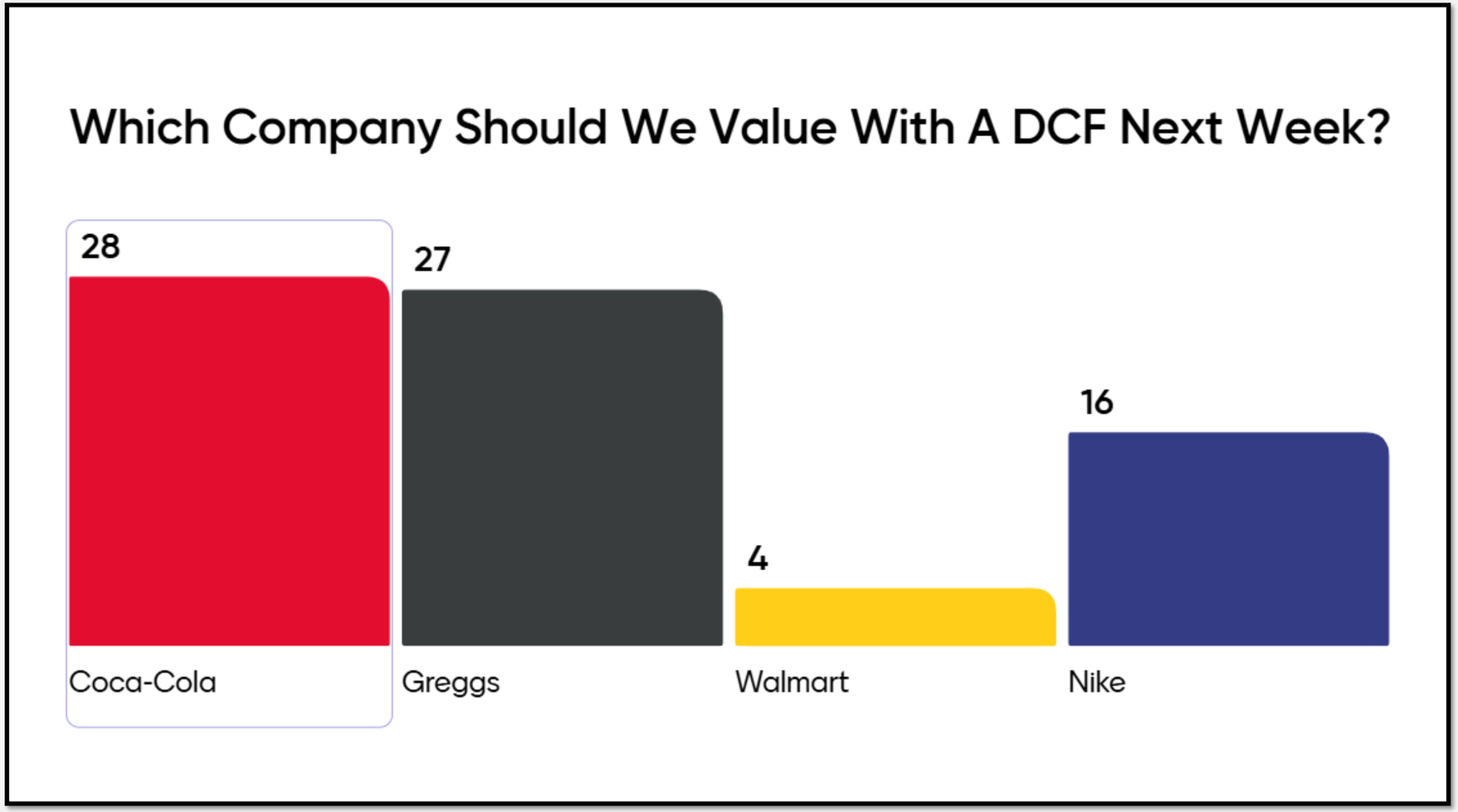
III. Session One Recap Quiz

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IV. DCF Overview

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Poll Results: Coca-Cola



How To Do A DCF In 5 steps

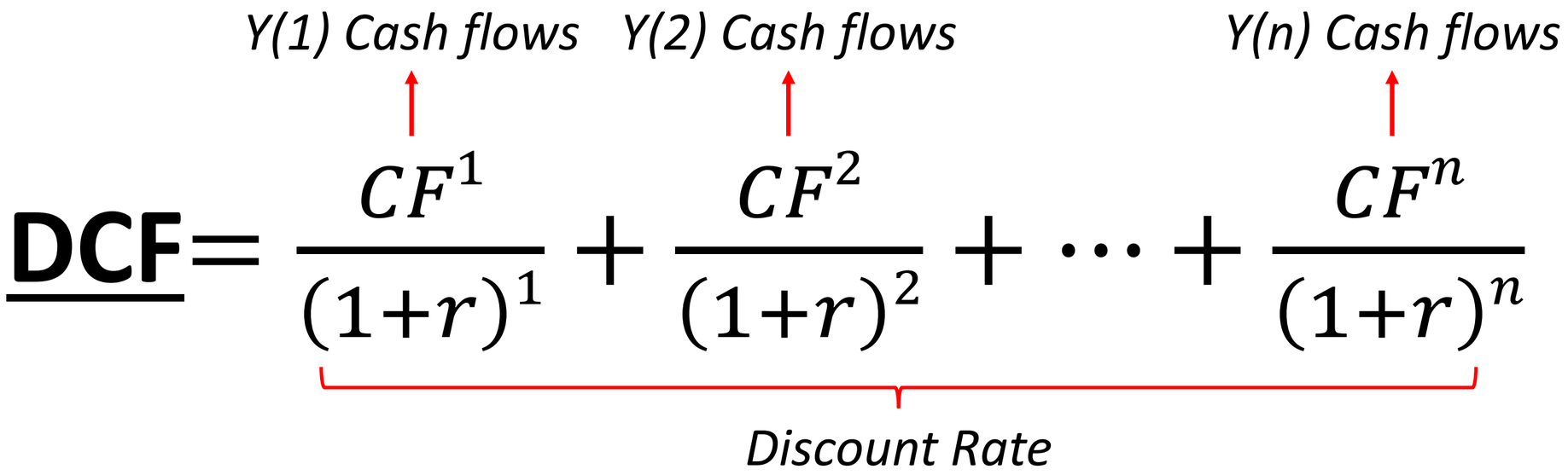
1. Forecasting Free Cashflows
2. Calculate the WACC
3. Determine Terminal Value
4. Enterprise Value to Equity Value
5. Bringing it all Together

Pros And Cons Of DCF Valuation

PROS	CONS
Values the business on what it produces, rather than on what similar companies happen to be worth.	*Predicting five years of cash flow is not always easy, and the answer is only as good as the assumptions behind it.*
Relies less on market sentiment than multiples, so it still works when the market is in a bubble or a panic. That makes it a useful check on the share price.	*Small changes in discount rate or growth produce large changes in value. Half a point on WACC alone can move the answer 10-15%.*
You cannot forecast revenue and margins without knowing how the company makes money. The conceptual understanding is as valuable as the output.	*60-80% of the answer sits in the terminal value, the part you can forecast least reliably.*
You can test different scenarios (bear, base and bull) and see what each is worth.	*A basic DCF holds the debt-to-equity mix constant for the whole forecast, which real companies rarely do.*

The DCF Formula

This is essentially the same as the present value analysis that we learn in courses like FM101…



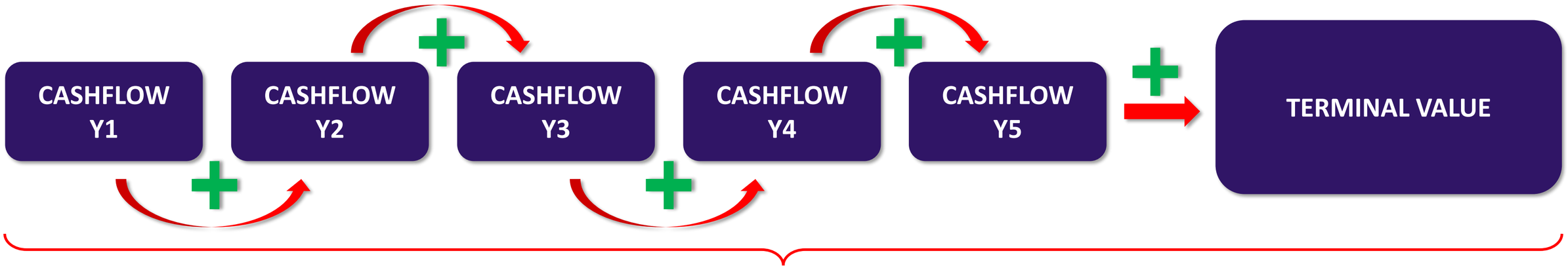
- **CASH FLOWS:** the cash the business generates each year, after tax and reinvestment, that is available to lenders and shareholders
- **DISCOUNT RATE:** the return investors require for the risk taken (the WACC), used to convert future cash into today's value

How To Do A DCF In 5 steps

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Forecasting Free Cashflows

For a typical DCF, cash flows are projected for 5-10 years, then added to a terminal value…



Discounted to Valuation Date = Company Value

- **How many years do we project cashflows for?** *Five years as standard, up to ten for very stable businesses like utilities or fast growers that need longer to settle. Five covers a business cycle and lets management's plans play out. Beyond that you are assuming rather than forecasting, which is what terminal value is for.*
- **What is a Terminal Year?** *The last year we forecast in detail. Everything after it is valued off this one year, so it needs to be a normal year with no one-offs, because whatever is in it is assumed to continue forever.*
- **Why does the Terminal Value constitute most of the value?** *Because the company does not shut down in year five: five forecast years sit against the whole rest of its life. Cash that far out is worth less in today's money, but not nothing, and a long stream of it still adds up to a lot. So terminal value is usually 60-80% of the answer, which is why it is always tested across a range of assumptions.*

Forecasting Free Cashflows

In a typical DCF, cashflows often refer to unlevered free cashflows (UFCF) which we project as discussed earlier…

UFCF= $EBIT \times (1 - tax\ rate) + D\&A - Capex - \Delta NWC$

	EBIT	*Operating profit before interest and tax: what the core business earns, regardless of how it is financed.*
×	**(1- tax rate)**	*Removes the tax due on operating profit as if the company had no debt; the tax saving from interest is captured in the WACC instead.*
+	**D&A**	*A non-cash expense spreading the cost of physical and intangible assets over their lives, added back because no cash leaves the business.*
−	**Capex**	*Cash spent on long-term assets, both to maintain the business and to grow it.*
−	**Δ NWC**	*The change in operating working capital (receivables plus inventory less payables); an increase ties up cash, so it is subtracted.*

Unlevered Free Cash Flow: *The cash the business generates after tax and reinvestment, before any payments to lenders or shareholders, so it is unaffected by how the company is financed.*

UFCF vs. LFCF

	Unlevered Free Cashflow	Levered Free Cashflow*
WHAT IS IT	Cash before paying lenders	Cash after paying lenders
FOR WHOM	Lenders and shareholders	Shareholders
DISCOUNT BY	WACC	Cost of Equity
WHAT YOU GET	Enterprise Value	Equity Value
USE	Standard DCF	Levered DCF (banks, insurers), LBOs

**LFCF = Net Income + D&A – Capex – Increase in NWC + Net Borrowing*

Forecasting Free Cashflows

Cash flow forecasts are built from historical performance and forward-looking assumptions, then stress-tested across scenarios…

Considerations for Projecting FCF:

- **Historical performance** provides valuable insight for developing assumptions to project FCF.
  - Past **growth rates**, **profit margins**, and other ratios are a useful starting point for future performance.
- Typically, a **5-year period** is suitable for projecting financial performance.
  - This depends on the sector, stage of development, and the predictability of its financial performance.
  - The 5-year horizon typically spans at least one business cycle and allows sufficient time for the successful realisation of in-process or planned initiatives.
  - The rest of the cash flows are calculated in the **Terminal Value** because they are **harder** to predict accurately.

- Whether advising on the buy-side or the sell-side, the banker typically receives 5 years of financial projections for the target, labelled “Management Case” (prepared by the company’s management)
  - The banker then adjusts the management case assumptions to create a more probable “base case”, an optimistic “upside case”, and a very conservative “downside case”

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Calculate The WACC

A business is funded by shareholders and lenders, each of whom expects a return; the discount rate blends those expectations…

WHAT THE SHAREHOLDERS DEMAND (CAPM): COST OF EQUITY

Risk-Free Rate — *Market Return*

$$Rf + \beta \times (Rm - Rf)$$

Beta — *Equity Risk Premium*

COST OF EQUITY

$$(re)$$

- **Risk-Free Rate:** The yield on a long-dated government bond in the same currency as the cash flows (e.g. the 10-year US Treasury)
- **Beta:** How sensitive a company's share price is to market moves (1 = moves with the market, above 1 = amplifies it)
- **Equity Risk Premium:** The extra return investors expect for owning shares instead of risk-free bonds

WHAT DEBT COSTS THE COMPANY: COST OF DEBT

$$\text{Pre-Tax Cost Of Debt} \times (1 - \text{tax\%})$$

Tax Shield

COST OF DEBT

$$(rd)$$

- **Pre-Tax Cost Of Debt:** What the company would pay to borrow today, i.e. the cost of long-term borrowing at present
- **Tax Rate:** The rate at which interest expense reduces the company's tax bill
- **Tax Shield:** The tax saved because interest is deducted before tax is calculated, which makes debt cheaper than its headline rate

DISCOUNT RATE = WACC (Weighted Average Cost of Capital)

Market Value of Firm's Equity — *Cost of Equity* — *Market Value of Firm's Debt* — *Cost of Debt*

$$\frac{E}{D+E}(re) + \frac{D}{D+E}(rd)$$

Total Capital (D + E)

SIMPLIFIED EXAMPLE CALCULATION OF WACC

Equity proportion of total	**62.50%**
Debt proportion of total	**37.50%**
Cost of Equity (CAPM)	8.00%
Pre-Tax Cost of Debt	5.00%
Corporate Tax Rate	25.00%
After-Tax Cost of Debt	*3.75%*
WACC	***6.41%***

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Determine The Terminal Value

A business is a going concern: it doesn't stop at the end of the forecast, and the terminal value captures everything after it…

PERPETUAL GROWTH METHOD

Free Cash Flow in Year n *Perpetual Growth Rate*

$$\mathbf{TV} = \frac{FCF_n \times (1+g)}{(r-g)}$$

Discount Rate (WACC)

- **Perpetual Growth Rate:** *The rate at which free cash flow grows forever after year n. It is anchored on long-run inflation and GDP, typically 1.5-3%, because no business can outgrow the economy forever.*
- **Discount Rate/WACC:** *The blended return lenders and shareholders require. It turns the perpetuity into a value at year n, which is then discounted back to today, and caps g, which must sit below it or the formula breaks.*

EXIT MULTIPLE METHOD

$$\mathbf{TV} = EBITDA_n \times Exit\ Multiple$$

- **Terminal Year EBITDA:** *EBITDA in the final forecast year. It must be a normalised, steady-state year, because the multiple capitalises whatever is in it, one-offs included.*
- **Exit Multiple***: The EV/EBITDA multiple the business is assumed to be worth at the end of the forecast. It is based on where comparable companies trade, at a normalised level rather than a peak or trough.*

Bankers often lead with the exit multiple, but best practice is to calculate both and use each to sanity-check the other through the implied multiple and implied growth rate.

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Enterprise Value To Equity Value

ENTERPRISE VALUE	*What the whole business is worth, however it happens to be funded. The sum of the discounted forecast and the discounted terminal value.*	**£500M**
(-) NET DEBT	*Debt outstanding less cash held in the business. Subtracted because a buyer inherits the debt but also gets the cash.*	**(£100M)**
(-) PREFERRED STOCK	*A type of share that gets paid before ordinary shareholders.*	**(£30M)**
(-) MINORITY INTERESTS	*The part of a subsidiary the company does not own.*	**(£20M)**
EQUITY VALUE	*What is left for ordinary shareholders once every prior claim has been paid. Enterprise value less all the above.*	**£350M**
FULLY DILUTED SHARES OUTSTANDING	*All shares in issue, plus options and convertibles that would turn into shares.*	**80M Shares**
IMPLIED SHARE PRICE	*Equity value divided by fully diluted shares. The number you compare against where the share trades.*	$\frac{£350M}{80M} = £4.38/share$

The final price of £4.38/share is what the DCF arrived at, and we compare it to the current share price to judge whether the company is undervalued or overvalued.

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V. Live DCF Walkthrough

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VI. Quick Comps

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VII. Q&A And Feedback

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Thank you for attending!

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