Key terms: companies, the economy and ethics

Key terminology

1 How to use these terms

- Thirty terms in six groups, each in plain words
- Industries, then the economy
- Company finance, then pensions
- Portfolio rules, then responsible investing and ethics
- Each group stands alone: jump to the one you need

IN THE LESSON

- Think of a travel phrasebook.
- You do not read it cover to cover.
- You learn the phrases you need before the trip, and you look up the rest on the way.
- These thirty terms are in six groups.
- First, industries and competition.
- Then the economy as a whole.
- Then how companies pay for themselves, followed by pensions.
- After that, the rules for running a portfolio, and last, responsible investing and ethics.
- Each group stands alone, so jump to the one your topic needs.
- Every term ends on ordinary words, and every example uses invented companies and round numbers, never real data.

2 Concentration ratio

Town bread sales 1,000: Norvik 300, Pelham 250, Rastor 150

Norvik's share	300 ÷ 1,000	**30%**
Pelham's share	250 ÷ 1,000	**25%**
Rastor's share	150 ÷ 1,000	**15%**
CR3 (top three)	30 + 25 + 15	**70%**
Same CR3, other split	25 + 23 + 22	**70%**

IN THE LESSON

- Picture a town with many bakeries.
- To see how much power the big ones hold, we add up their shares of the bread sold.
- That is the concentration ratio: the combined market share of an industry's largest firms.
- A firm's share is its sales divided by total sales.
- Total sales are one thousand.
- Norvik sells three hundred, so its share is thirty per cent.
- Pelham has twenty five and Rastor fifteen.
- Add the top three and the three firm ratio is seventy per cent.
- Its weakness: shares of twenty five, twenty three and twenty two also give seventy, and it ignores how easily newcomers can enter.
- You will meet it in Economics and Equity Investments.

3 Barriers to entry

- Anything that stops new firms entering a market
- Scale, patents, licences, control of distribution
- High barriers protect incumbents' profits
- Few big firms plus easy entry is still a fragile position

IN THE LESSON

- Think of a lemonade stand and a railway.
- If lemonade is profitable, a neighbour can open a rival stand by lunchtime.
- If a railway is profitable, no neighbour can lay hundreds of kilometres of track.
- Barriers to entry are anything that stops new firms entering a profitable market.
- They include scale, patents and licences, and control of distribution, such as owning the best shelf space.
- A market can have a few big firms and still be easy to enter, and then they cannot keep prices high for long.
- High barriers protect profits.
- You will meet them in Economics, Equity Investments and Fixed Income.

4 Pricing power

Wexley: price 100, cost 80, margin 20%

Cost rises 5%	80 × 1.05	**84**
Price with power	100 × 1.05	**105**
Margin with power	(105 − 84) ÷ 105	**20%**
Price without power	unchanged	**100**
Margin without power	(100 − 84) ÷ 100	**16%**

IN THE LESSON

- Two shops find flour dearer.
- The first raises its prices and customers keep coming.
- The second dares not.
- The first has pricing power: the ability to raise prices without losing much volume.
- It comes from concentration, a product that stands out, or customers who dislike switching.
- The proof is in the margin.
- Wexley Foods sells a unit at one hundred, with a cost of eighty, a margin of twenty per cent.
- Costs rise five per cent, to eighty four.
- With pricing power Wexley lifts its price five per cent, to one hundred and five, and the margin holds at twenty per cent.
- Without it, the price stays at one hundred and the margin shrinks to sixteen.
- You will meet it in Economics, Financial Statement Analysis and Equity Investments.

5 Bargaining power

Who wins the haggle?

Situation	Who has the power
One supplier, many buyers	Supplier
One buyer, many suppliers	Buyer
Buyer can switch easily	Buyer
Customers cannot switch away	Supplier

IN THE LESSON

- Pricing power is about a seller raising prices.
- Bargaining power is about who wins the haggle, and it has two sides: suppliers, who sell to the firm, and buyers, who buy from it.
- Picture a farmer selling milk.
- If one giant supermarket buys it all, it sets the price.
- If many shops compete, the farmer does.
- Power is greater when a side is concentrated, meaning there are few of them, or when it can switch easily and the other side cannot.
- The table shows four cases: one supplier and many buyers, one buyer and many suppliers, a buyer who can switch easily, and customers who cannot switch away.
- You will meet it in Financial Statement Analysis and Equity Investments.

6 Porter's five forces

Three pressures on the industry

New entrants → Substitutes → Rivalry

Two more, and the result

Supplier power → Buyer power → Weak forces, more profit

IN THE LESSON

- Why do some industries earn fat profits and others thin ones?
- Porter's five forces give a checklist.
- On the top row, the threat of new entrants, which depends on the barriers to entry, the threat of substitutes, other products that do the same job, and rivalry among the firms already there.
- On the bottom row, supplier power and buyer power, the two bargaining powers we just met.
- For each force, ask whether it is strong or weak.
- The weaker the forces, the more of the value an industry creates it keeps as profit.
- Strong forces give it away.
- You will meet it in Financial Statement Analysis, Corporate Issuers and Equity Investments.

7 Life cycle of an industry

- Embryonic
- Growth
- Shakeout
- Mature
- Declining

IN THE LESSON

- Products have lives, and so do industries.
- Follow the line from left to right.
- First comes the embryonic phase: demand is small, costs are high, and many firms lose money.
- Next, growth: demand rises and there is room for everyone.
- Then shakeout, where capacity outruns demand and the weaker firms leave.
- After that, the mature phase: the survivors are settled and returns are steady.
- And last, decline: demand shrinks and prices are cut.
- On the left sits fast growth with high risk, and on the right slow and steady, then falling.
- Treat the life cycle as a guide to what tends to happen, not a timetable.
- You will meet it in Corporate Issuers and Equity Investments.

8 Business cycle

Chart: Output (GDP) vs Time

- Expansion
- Peak
- Contraction
- Trough
- Trend

IN THE LESSON

- Now the economy as a whole.
- Follow the green line from the left.
- It is climbing: this is an expansion, with output and jobs rising.
- At the top it turns.
- That turning point is the peak.
- Then the line falls, and this stretch is a contraction.
- At the bottom it turns again.
- That is the trough, and the next expansion begins.
- The grey line is the trend, the steady long run path.
- The business cycle is the green wobble around the grey: the swing of output around its trend.
- It describes the fluctuation, not the growth underneath it.
- You will meet it in Economics, Financial Statement Analysis, Equity Investments and Alternative Investments.

9 Deflation

Debt of 1,000, fixed in money. One basket costs 100

Debt in baskets, at the start	1,000 ÷ 100	**10.00**
Prices fall 5%	100 × 0.95	**95**
Debt in baskets, after	1,000 ÷ 95	**10.53**
Rise in real burden	10.53 ÷ 10.00 − 1	**5.3%**

IN THE LESSON

- A fall in prices sounds like good news for shoppers, so why do economists worry?
- Deflation is a sustained fall in the general price level, the opposite of inflation.
- Take a debt of one thousand, fixed in money.
- While a basket of goods costs one hundred, the debt equals ten baskets.
- Now prices fall five per cent, so the basket costs ninety five.
- The debt is still one thousand, but it now equals about ten point five three baskets.
- The real burden of the debt rose by about five point three per cent.
- People may also delay spending, hoping for lower prices, and when interest rates have hit the floor, the central bank has little room to help.
- You will meet it in Economics and Financial Statement Analysis.

10 Monetary policy

Weak demand

Cut the policy rate → Borrowing is cheaper → Spending and prices rise

Inflation too high

Raise the policy rate → Borrowing costs more → Spending and prices cool

IN THE LESSON

- Monetary policy is how a central bank steers the economy by managing interest rates and the supply of money.
- Think of a thermostat.
- When demand is weak, the bank lowers its policy rate.
- Borrowing gets cheaper, so households and firms spend more, and output and prices rise.
- When inflation is too high, the bank raises the rate.
- Borrowing costs more, spending cools and price pressure eases.
- One catch.
- A country that fixes its exchange rate and lets money flow freely across its borders cannot run a monetary policy of its own, because it must follow the rate of the country it is tied to.
- You will meet it in Economics and Fixed Income.

11 Current account

Marisol, in billions of coins a year

Exports	goods and services	**+500**
Imports	goods and services	**−560**
Net investment income	from abroad	**+20**
Net transfers	gifts sent abroad	**−10**
Current account	500 − 560 + 20 − 10	**−50**

IN THE LESSON

- The current account is the part of the balance of payments that records trade in goods and services, investment income and transfers.
- Here is Marisol, in billions of coins.
- It exports goods and services worth five hundred and imports five hundred and sixty.
- It earns twenty more in investment income from abroad than it pays out, and sends ten net in transfers, such as gifts.
- Add it up: five hundred, minus five hundred and sixty, plus twenty, minus ten, makes minus fifty.
- That is a deficit of fifty.
- Marisol spends more abroad than it earns, so it must borrow or sell assets.
- You will meet it in Economics and Corporate Issuers.

12 Capital structure

Tessel's business is funded with 1,000

Debt	borrowed from lenders	**400**
Equity	the owners' money	**600**
Total funding	400 + 600	**1,000**
Debt share	400 ÷ 1,000	**40%**
Debt to equity	400 ÷ 600	**0.67**

IN THE LESSON

- How is a company paid for?
- Think of a house bought with a mortgage plus savings.
- The mix is the capital structure: the mix of debt and equity that funds a firm.
- Tessel runs a business funded with one thousand.
- Four hundred is borrowed from lenders, and six hundred is the owners' own money, called equity.
- The debt share is four hundred over one thousand, forty per cent.
- Debt to equity is four hundred over six hundred, which is zero point six seven.
- Change the mix and you change who is owed what, and perhaps the cost of capital, without changing the business.
- You will meet it in Financial Statement Analysis, Corporate Issuers, Equity Investments and Fixed Income.

13 Preference share

Cumulative: ranks after lenders, before ordinary shares

Fixed yearly dividend	6% × 100 par	**6**
Year one: not paid	arrears build	**0**
Year two: not paid	arrears build	**0**
Owed before ordinary, year 3	6 + 6 + 6	**18**

IN THE LESSON

- A preference share ranks ahead of ordinary shares for dividends and in liquidation, which means winding the company up, but it ranks behind lenders.
- It usually pays a fixed dividend and carries no vote.
- Gannet's preference shares have a par value of one hundred and a fixed rate of six per cent, so six per share each year.
- If they are cumulative, a missed dividend is not lost.
- It piles up as arrears.
- Gannet pays nothing in years one and two.
- In year three, before ordinary shareholders see a penny, it must pay six plus six plus six, eighteen per share.
- Fixed and first in line, it behaves more like a bond.
- You will meet it in Financial Statement Analysis, Corporate Issuers and Equity Investments.

14 Line of credit

A bank facility to draw on as needed

Item	Meaning
Committed	Bank must lend
Uncommitted	Bank may refuse
Limit 500, drawn 120	Undrawn 380
Fee for the promise	Committed only

IN THE LESSON

- A line of credit is a bank facility the borrower can draw on, up to a limit, as needed.
- Think of a credit card for a company.
- Take a limit of five hundred and a draw of one hundred and twenty.
- That leaves three hundred and eighty undrawn.
- There are two kinds.
- A committed line obliges the bank to lend, and the company pays a fee for that promise.
- An uncommitted line can be withdrawn at the bank's discretion, so it may vanish just when it is needed most.
- You will meet it in Corporate Issuers and Fixed Income.

15 Net borrowing and free cash flow to equity

FCFE = CFO − capex + net borrowing

Operating cash flow	Cash the business earns
Capital spending	Spent on plant and equipment
Net borrowing	New debt raised less repaid
Free cash flow to equity	Cash left for the owners

IN THE LESSON

- Now a cash flow that belongs to the owners.
- Free cash flow to equity, F C F E, is the cash left for shareholders after the business has paid its way.
- Start with cash flow from operations, C F O, the cash the business earns.
- Subtract capital expenditure, the money spent on plant and equipment.
- Then add net borrowing: new debt raised, less debt repaid in the period.
- Why add it?
- Borrowed cash is available to shareholders, and repayments take it away.
- One warning follows.
- Because borrowing is added, a firm can flatter its F C F E simply by borrowing more.
- You will meet net borrowing in Financial Statement Analysis and Equity Investments.

16 Net borrowing at work

Idris: CFO 300, capex 200, new debt 150, repaid 100

Net borrowing	150 − 100	**50**
FCFE	300 − 200 + 50	**150**
FCFE with no borrowing	300 − 200	**100**
Borrow 400, repay 100	net borrowing	**300**
FCFE then	300 − 200 + 300	**400**

IN THE LESSON

- Let us try it.
- Idris Ltd earns cash flow from operations of three hundred and spends two hundred on equipment.
- It raises new debt of one hundred and fifty and repays one hundred.
- Net borrowing is one hundred and fifty minus one hundred, which is fifty.
- F C F E is three hundred minus two hundred plus fifty, one hundred and fifty.
- With no borrowing at all it would be only one hundred.
- Now see the flattery.
- Suppose Idris instead borrows four hundred and repays one hundred.
- Net borrowing is three hundred, and F C F E leaps to four hundred, though the business earned no more cash.
- Borrowing flatters the figure, and the lenders will want repaying.

17 Synergies

Ambrose Ltd considers buying Eliska Ltd

Eliska on its own	standalone value	**800**
Synergies	cost savings	**100**
Worth to Ambrose	800 + 100	**900**
Pay 850: value created	900 − 850	**+50**
Pay 950: value created	900 − 950	**−50**

IN THE LESSON

- When one company buys another, the buyer hopes that one plus one makes three.
- Synergies are cost savings or extra revenue from combining businesses that neither could achieve alone.
- Ambrose Ltd is thinking of buying Eliska Ltd.
- On its own, Eliska is worth eight hundred.
- Ambrose expects synergies of one hundred.
- So Eliska is worth nine hundred to Ambrose.
- If Ambrose pays eight hundred and fifty, it creates fifty of value.
- If it pays nine hundred and fifty, it destroys fifty, handing the synergies and more to the seller.
- The rule is simple: a buyer creates value only if the standalone value plus the synergies exceeds the price it pays.
- You will meet synergies in Financial Statement Analysis and Alternative Investments.

18 Mistakes and look-alikes so far

- Concentration ratio is not barriers to entry: check both
- Pricing power: raise prices. Bargaining: win the haggle
- Business cycle is the swing, not the growth underneath
- Deflation is falling prices, not just slower inflation
- Borrowing flatters FCFE; synergies can be overpaid for

IN THE LESSON

- Let us pause and collect the look-alikes, the pairs that learners mix up.
- One.
- The concentration ratio counts the biggest firms, but it cannot see barriers to entry, so check both.
- Two.
- Pricing power is a seller raising prices, while bargaining power is winning the haggle with a supplier or a buyer.
- Three.
- The business cycle is the swing around the trend, not the growth underneath it.
- Four.
- Deflation is falling prices, which is different from inflation that is merely slowing.
- Five.
- Net borrowing makes free cash flow to equity look better without any more cash earned, and synergies are not free, because a buyer can overpay for them.
- Keep these five pairs apart and the rest comes easily.

19 Defined benefit

Who carries the risk in a pension?

Plan and risk	Who carries it
Defined benefit: investment	Employer
Defined benefit: longevity	Employer
Defined contribution: investment	Employee
Defined contribution: longevity	Employee

IN THE LESSON

- Now pensions.
- A defined benefit plan is a promise of a fixed payout in retirement.
- The employer, called the sponsor, promises a specified payment, usually based on salary and years of service.
- If the investments do badly, the sponsor makes up the gap.
- If retirees live longer than expected, the sponsor pays for the extra years.
- That second danger is longevity risk, which has its own slide shortly.
- In a defined contribution plan the employer only pays in an agreed amount, and the employee carries both risks.
- The table shows who bears what.
- You will meet defined benefit in Financial Statement Analysis and Portfolio Management.

20 Funded status

Davin Works pension plan, in millions

Plan assets	the pool of investments	**900**
Pension obligation	present value of promises	**1,000**
Funded status	900 − 1,000	**−100**
Reported as	a deficit	**Net liability**
If assets were 1,050	1,050 − 1,000	**+50**

IN THE LESSON

- A promise is only as good as the money behind it.
- The company holds a pool of investments, the plan assets.
- It also owes workers pensions, valued today as the pension obligation, a present value of the benefits earned so far.
- Funded status is plan assets minus the obligation.
- Davin Works has plan assets of nine hundred and an obligation of one thousand, in millions.
- Nine hundred minus one thousand is minus one hundred.
- A deficit is shown as a net liability on the balance sheet.
- Had the assets been one thousand and fifty, the surplus of fifty would be a net asset, though the asset recognised may be capped.
- You will meet funded status in Financial Statement Analysis and Portfolio Management.

21 Longevity risk

One retiree, 10,000 a year, interest ignored

Planned payments	10,000 × 20 years	**200,000**
Actual payments	10,000 × 25 years	**250,000**
Extra to fund	250,000 − 200,000	**50,000**
A lifetime annuity	insurer takes the risk	**Transfer**

IN THE LESSON

- Longevity risk is the risk of living longer than planned.
- For a person, it means outliving savings.
- For a pension plan or an insurer, it means paying benefits for longer than expected.
- Take one retiree who is paid ten thousand a year.
- The plan assumed twenty years of payments, two hundred thousand in all, ignoring interest to keep things simple.
- The retiree lives twenty five years, so the plan pays two hundred and fifty thousand, which is fifty thousand more than planned.
- A lifetime annuity transfers the risk to an insurer, which pools many lives, some short and some long.
- In a defined benefit plan the sponsor carries it.
- You will meet longevity risk in Financial Statement Analysis and Portfolio Management.

22 Investment policy statement

- Written first: objectives and constraints
- Objectives: return needed and risk that can be borne
- Constraints: time, cash needs, tax, legal rules
- Its real job: to be read during a drawdown

IN THE LESSON

- Before a voyage, the captain writes the plan, including what to do in a storm.
- The investment policy statement, or I P S, is the written document that sets a portfolio's objectives and constraints before anyone manages anything.
- The objectives are the return the client needs and the risk they can bear.
- The constraints are things like time horizon, cash needs, taxes and legal rules.
- But its real job shows when markets fall.
- In a drawdown, a fall from a peak, a nervous client and a nervous manager may want to act on fear.
- The statement is written in calm weather so that it can be read in a storm, by someone who is no longer thinking clearly.
- You will meet it in Ethics and Portfolio Management.

23 Return objective

Corin has 1,000,000 and spends 40,000 a year

Spending need	40,000 ÷ 1,000,000	**4.0%**
Inflation	assumed	**2.5%**
Return needed	1.04 × 1.025 − 1	**6.6%**
Shortcut	4.0 + 2.5	**6.5%**

IN THE LESSON

- A return objective is what a portfolio must achieve, stated so that it can be checked.
- It is best tied to a need.
- Corin Halloran has one million and spends forty thousand a year.
- That is a spending need of four per cent of the portfolio.
- Corin also expects inflation of two and a half per cent, which erodes what the money buys.
- To keep spending power, the portfolio must grow by both.
- Multiply one point zero four by one point zero two five, take away one, and the answer is six point six per cent.
- Adding four and two and a half gives six point five, a close shortcut.
- And the objective must fit Corin's risk tolerance.
- You will meet it in Ethics and Portfolio Management.

24 Mandate

- Strategy, benchmark and limits the manager agreed to
- Others build their allocations on it
- A better idea outside it still breaks the agreement
- To change it, ask the client and put it in writing

IN THE LESSON

- A caterer is hired to cook a vegetarian dinner.
- Even if they are sure the guests would love steak, she may not swap the menu.
- A mandate is the stated strategy, benchmark and constraints a manager has agreed to run money to.
- Say a manager agrees to run a large company share fund against a broad index.
- Others build their allocations on that.
- If the manager drifts into small companies because it seems a better idea, the client's whole plan is quietly altered.
- Even a better idea breaks the agreement.
- The right route is to ask the client, and change the mandate in writing.
- You will meet it in Ethics and Equity Investments.

25 Rebalancing and the tolerance band

- Rebalancing: trade back to target weights
- It sells what has risen: contrarian by construction
- Tolerance band: drift allowed around the target
- A breach of the band triggers the trade

IN THE LESSON

- Imagine a hedge you trim to the same height.
- Left alone, the fast growing parts take over.
- A portfolio behaves the same way.
- Rebalancing is trading back to target weights, a portfolio's policy weights or an index's weighting scheme, after prices have pulled holdings away from them.
- Because it sells what has risen and buys what has lagged, it is contrarian by construction.
- Trimming daily wastes money, and never trimming lets risk drift.
- The compromise is the tolerance band: a range around a target weight inside which drift is allowed.
- A breach of the band triggers the trade.
- You will meet rebalancing in Ethics, Quantitative Methods, Equity Investments and Portfolio Management, and the tolerance band in Ethics and Portfolio Management.

26 A tolerance band, drawn

Chart: Equity share of portfolio (%) vs Time

- Upper band 65%
- Lower band 55%
- Target 60%
- Breach 66%

IN THE LESSON

- Here is the picture.
- The horizontal axis is time.
- The vertical axis is the share of the portfolio held in equities, in per cent.
- The grey line is the target, sixty per cent.
- The two red lines are the edges of the band, fifty five below and sixty five above.
- Now follow the green line from the left.
- It starts on the target.
- As equities rise it drifts upward, but while it stays between the red lines nothing is done.
- Then it pokes through the upper band, at about sixty six.
- That is the breach, and it triggers a trade.
- The portfolio sells some equities and buys bonds, and the line drops back to the target.

27 Example: rebalancing back to target

Target 60/40 on 1,000,000; band 55% to 65%

Equities after a 30% rise	600,000 × 1.30	**780,000**
Total with bonds at 400,000	780,000 + 400,000	**1,180,000**
Equity weight	780,000 ÷ 1,180,000	**66.1%**
Band 55% to 65%	breached	**Trade**
Sell equities, buy bonds	780,000 − 708,000	**72,000**

IN THE LESSON

- Now the numbers.
- A portfolio of one million has a target of sixty per cent equities and forty per cent bonds, so six hundred thousand and four hundred thousand.
- The band is fifty five to sixty five.
- Equities then rise thirty per cent, to seven hundred and eighty thousand, while bonds stay at four hundred thousand.
- The total is one million, one hundred and eighty thousand.
- Equities are now seven hundred and eighty over one million one hundred and eighty, which is sixty six point one per cent.
- That is outside the band, so we trade.
- Sixty per cent of the new total is seven hundred and eight thousand.
- So the portfolio sells seventy two thousand of equities, and buys bonds with the proceeds.
- It is back on target.

28 ESG and materiality

Is the ESG factor material to this business?

Business and factor	Material?
Airline: carbon emissions	High
Software: carbon emissions	Low
Clothing maker: factory labour	High
Bank: factory labour	Low

IN THE LESSON

- The letters E S G stand for environmental, social and governance.
- They are factors outside the usual financial statements, such as emissions, labour practices and board structure, that can still affect a company's risk, cash flows or cost of capital.
- Materiality asks which issues are large or relevant enough to change a decision, and in E S G analysis, which are likely to affect cash flows, risk or cost of capital in that particular industry.
- Look at the table.
- Carbon emissions are material for an airline and hardly for a software firm.
- Factory labour practices are material for a clothing maker and hardly for a bank.
- Same factor, different business.
- You will meet E S G in Corporate Issuers and Portfolio Management, and materiality in Financial Statement Analysis and Corporate Issuers.

29 Negative screening and proxy voting

- Negative screening: exclude sectors, such as tobacco
- Simplest ESG approach; says least about value
- Proxy voting: voting clients' shares at meetings
- Not voting needs a reasoned case

IN THE LESSON

- Two tools of the responsible investor.
- The first is negative screening: excluding sectors, companies or practices that fail set ethical criteria, such as tobacco or weapons.
- It is the simplest approach, but it says least about value, because an excluded company might still be a fine business.
- The second works after you own the shares.
- Proxy voting is voting the shares you hold for a client at company meetings.
- Those votes belong to the client's interests, so under the Standards it is part of the duty of loyalty.
- A manager may choose not to vote, but only with a reasoned case that the cost to the client outweighs the benefit.
- You will meet negative screening in Corporate Issuers and Portfolio Management, and proxy voting in Ethics and Portfolio Management.

30 Conflict of interest

- An interest that could impair independence or duties
- Harm need not have happened: could reasonably is enough
- Avoid it, or disclose it fully and fairly
- Avoiding is preferred where reasonably possible

IN THE LESSON

- Think of a referee whose cousin plays for one of the teams.
- They may be fair, but nobody can be sure.
- A conflict of interest is an interest or relationship that could reasonably be expected to impair independence or interfere with duties to clients or employer.
- Actual harm is not needed.
- An analyst who owns shares in a company they rate is a classic example.
- The rule is to avoid the conflict, or to disclose it fully and fairly, so that the people relying on you can judge.
- Avoiding is preferred where reasonably possible.
- You will meet it in Ethics, Corporate Issuers, Equity Investments and Fixed Income.

31 Overconfidence

- Rating your own judgement above the evidence
- Forecast ranges too narrow; too much trading
- In ethics: thinking yourself more principled than peers
- Remedy: write reasons down, widen ranges, follow rules

IN THE LESSON

- Ask a room of drivers whether they drive better than average, and far too many hands go up.
- That is overconfidence: rating your own knowledge, judgement or virtue higher than the evidence supports.
- In forecasting it shows up as ranges that are too narrow, because you feel too sure of the middle.
- In trading it means too much activity.
- In ethics it is subtler: people think themselves more principled than their peers, so they feel no need for safeguards.
- The remedies are humble habits.
- Write down your reasons, widen your ranges, and follow the rules even when you feel certain.
- You will meet it in Ethics, Financial Statement Analysis and Portfolio Management.

32 Target price

Rastor Mills: target for twelve months ahead

Forecast earnings per share	next year	**5.00**
Chosen multiple	price ÷ earnings	**14**
Target price	5.00 × 14	**70.00**
Multiple of 12 instead	5.00 × 12	**60.00**
Earnings of 4.50 instead	4.50 × 14	**63.00**

IN THE LESSON

- Analysts like to end a report with a number.
- A target price is the price an analyst expects a share to reach, usually within twelve months.
- It is typically forecast earnings per share times a chosen multiple, so it inherits the uncertainty of both.
- Rastor Mills is forecast to earn five per share.
- The analyst chooses a multiple of fourteen, meaning a share is worth fourteen times its earnings.
- The target price is five times fourteen, seventy.
- Now wobble the inputs.
- A multiple of twelve gives sixty.
- Earnings of four and a half instead of five give sixty three.
- A target is a considered estimate, never a promise.
- You will meet it in Ethics, Equity Investments and Alternative Investments.

33 Recap: the key relationships

CR3 = share 1 + share 2 + share 3
FCFE = CFO − capex + net borrowing
Funded status = assets − obligation

Concentration ratio	Add the top firms' shares
Net borrowing	New debt less repaid
Funded status	Assets less obligation
Target price	Earnings times multiple
Tolerance band	Trade when breached

IN THE LESSON

- Let us pull the lesson together.
- Industries: the concentration ratio adds the top firms' shares, and barriers to entry, pricing power and bargaining power decide who keeps the profit.
- Company finance: free cash flow to equity is operating cash flow minus capital spending plus net borrowing, and a buyer creates value only if standalone value plus synergies exceeds the price.
- Pensions: funded status is plan assets minus the obligation.
- Portfolios: the target price is earnings times a multiple, and a tolerance band tells you when to rebalance.
- Behind all of it sit the economy, with its cycle, prices and policy, and the ethics of avoiding conflicts, voting for clients, and doubting your own confidence.
- Keep these relationships in mind.

34 Try three quick questions

1. Prices up 5% as costs rise 5%, margin holds. Which term?
   Answer: Pricing power.
2. Plan assets 850, obligation 1,000. Funded status?
   Answer: 850 − 1,000 = −150, a net liability.
3. CFO 120, capex 80, new debt 60, repaid 40. FCFE?
   Answer: 120 − 80 + (60 − 40) = 60.

IN THE LESSON

- Now try three quick questions yourself.
- Pause after each one.
- Question one.
- A firm raises its prices five per cent when its costs rise five per cent, and its margin holds.
- Which term describes that?
- Pricing power.
- Question two.
- A pension plan has assets of eight hundred and fifty and an obligation of one thousand.
- What is the funded status?
- Eight hundred and fifty minus one thousand is minus one hundred and fifty, a net liability.
- Question three.
- Cash flow from operations is one hundred and twenty, capital spending is eighty, new debt is sixty and debt repaid is forty.
- What is free cash flow to equity?
- One hundred and twenty minus eighty, plus sixty minus forty, is sixty.
- Well done, and keep practising.