CHARTA LEARNING · LESSON NOTES

The balance sheet

Financial Statement Analysis

1 A story: a photograph of your money

- A photograph of the company on one day
- Shows what it owns and what it owes
- The gap is what belongs to the owners
- Income and cash flow statements cover a period

IN THE LESSON

- Picture taking a photograph of your finances on the last day of the month.
- In the picture you would see what you own, say some cash and a car.
- You would see what you owe, say a car loan and a credit card bill.
- And the gap between the two is what you could call your own wealth.
- A company's balance sheet is exactly that photograph.
- It is dated a single day, such as the thirty first of December, and it says nothing about what happened during the year.
- The income statement and the cash flow statement cover a stretch of time instead.

2 The three elements

- Assets: resources it controls, expected to bring benefit
- Liabilities: present obligations to others
- Equity: what is left for the owners
- Equity = share capital + retained earnings

IN THE LESSON

- The balance sheet has three elements, and each has a precise meaning.
- Assets are resources the company controls, as a result of past events, that are expected to bring it future benefit.
- Cash, stock and money customers owe are assets.
- Liabilities are present obligations, arising from past events, that the company expects to settle by giving up resources.
- Bank loans and bills owed to suppliers are liabilities.
- Equity is what is left for the owners once the liabilities are taken away.
- It has two main parts: share capital, which is money the owners paid in, and retained earnings, which is profit the company has kept instead of paying out.

3 The accounting equation

Assets = Liabilities + Equity

Assets	Everything the firm controls
Liabilities	What it owes to others
Equity	What is left for the owners

IN THE LESSON

- Here is the equation that everything rests on.
- Assets equal liabilities plus equity.
- Why must it balance?
- Every single thing a company owns was paid for in one of two ways.
- Either someone lent the money, which creates a liability, or the owners put it in or let the company keep profit, which creates equity.
- So the left side, what the firm owns, must equal the right side, who has a claim on it.
- Rearrange it and you see why equity is a leftover.
- Equity equals assets minus liabilities.
- It is simply whatever remains.

4 Meet Kestrel Outdoor Gear

Kestrel Outdoor Gear, year end, $ millions (made-up figures)

Kestrel, year end	$ millions
Current assets	400
Non-current assets	600
Total liabilities	600
Equity	400

IN THE LESSON

- To make this concrete we follow one company through the whole lesson, a retailer called Kestrel Outdoor Gear.
- All the figures are made-up round numbers for teaching, in millions of dollars.
- On the asset side, current assets are four hundred: cash eighty, marketable securities sixty, receivables one hundred and twenty and inventory one hundred and forty.
- Non-current assets are six hundred: property, plant and equipment four hundred and eighty, goodwill one hundred and other items twenty.
- Total assets are one thousand.
- On the other side, current liabilities are two hundred and non-current liabilities are four hundred, so total liabilities are six hundred.
- Equity is four hundred.
- It balances.

5 Example 1: every deal keeps it balanced

Assets = Liabilities + Equity, $ millions

Start of the day	**1,000 = 600 + 400**
Borrow $50m cash from a bank	**1,050 = 650 + 400**
Buy $30m of stock on credit	**1,080 = 680 + 400**
Earn and keep $20m profit in cash	**1,100 = 680 + 420**

IN THE LESSON

- Example one.
- Watch the equation hold through three deals.
- We start with assets of one thousand, liabilities of six hundred and equity of four hundred.
- First, Kestrel borrows fifty million dollars from a bank.
- Cash rises by fifty and the loan rises by fifty, so assets are one thousand and fifty and liabilities are six hundred and fifty.
- Second, it buys thirty million dollars of stock on credit.
- Inventory rises by thirty and so does the amount owed to the supplier, so assets are one thousand and eighty.
- Third, it earns twenty million dollars of profit and keeps it as cash.
- Assets rise by twenty, and so does equity, to four hundred and twenty.

6 Example 2: book value is not market value

50 million shares at $18. Made-up figures.

Book equity	1,000 − 600	**$400m**
Market value	50m shares × $18	**$900m**
Market value ÷ book value	900 ÷ 400	**2.25**
Not on the balance sheet	900 − 400	**$500m**

IN THE LESSON

- Example two, and a warning.
- Kestrel's equity on the balance sheet is four hundred million dollars.
- This is called book value, because it is what the books say.
- Now suppose Kestrel has fifty million shares and the market prices each at eighteen dollars.
- The market value of the company is fifty million times eighteen, which is nine hundred million dollars.
- Dividing market value by book value gives two point two five.
- Why the gap?
- Many assets sit on the sheet at what was paid long ago, and brands, designs and customer loyalty that the company built itself are largely not recorded at all, because the money spent building them was charged as an expense.
- The sheet is a record of cost, not a valuation.

7 A story: what is due this week?

- Milk: used up this week
- Tinned food: lasts a year
- Oven: lasts twenty years
- Soon versus later = current versus non-current

IN THE LESSON

- Think about your kitchen.
- Milk in the fridge will be gone within days.
- The tinned food in the cupboard might last a year.
- The oven will be there for twenty years.
- When you plan the week's shopping you care mostly about the first group, because that is what you are about to use up.
- A banker looking at a company asks the same question in two directions.
- Which of its assets will turn into cash soon?
- And which of its debts must it pay soon?
- Drawing that line is the current and non-current split.

8 The rule for current

- Current = realised or settled within the longer of:
- the operating cycle, or twelve months
- Operating cycle: buy stock, sell it, collect cash
- Banks often list by liquidity instead

IN THE LESSON

- Here is the rule.
- An asset is current if the company expects to realise it, meaning sell it, use it or collect it, within its operating cycle or twelve months after the balance sheet date, whichever is longer.
- A liability is current on the same basis, if it is due to be settled within that period.
- The operating cycle is the time from buying stock to collecting the cash from selling it.
- For a shop it is a few months, so twelve months applies.
- For a whisky maker, whose stock ages for years, the operating cycle is longer, so that stock is still current.
- Everything else is non-current.
- Banks often skip the split and list items from most to least liquid instead.

9 Two measures the split feeds

Current ratio = CA ÷ CL
Working capital = CA − CL

Current assets	Cash within the cycle or year
Current liabilities	Bills due within the cycle or year
Working capital	An amount: the cushion

IN THE LESSON

- Why does the line matter so much?
- Because two simple measures of short-term safety are built from it.
- Working capital is current assets minus current liabilities.
- It is an amount of money: the cushion left if every short-term bill were paid from short-term assets.
- The current ratio is current assets divided by current liabilities.
- It is a multiple, not an amount.
- It asks, for every dollar due within a year, how many dollars of assets will turn to cash within a year.
- A ratio above one means the cushion is positive.
- Both depend on what sits on each side of the line.

10 Example 3: sorting Kestrel's items

Is it settled or realised within the cycle or twelve months?

Receivables, paid in 40 days	**Current**
Stock, sold in about 100 days	**Current**
Loan repayable in 11 months	**Current**
Warehouse, used for 20 years	**Non-current**
Bond repayable in 6 years	**Non-current**

IN THE LESSON

- Example three.
- Let us sort some of Kestrel's items.
- Receivables are collected in about forty days.
- That is inside twelve months, so current.
- The boots in the warehouse sell in about one hundred days, also current.
- A bank loan that must be repaid in eleven months is a current liability, even though it started life as a longer loan.
- The warehouse will be used for twenty years, so it is non-current.
- A bond that is repayable in six years is a non-current liability.

11 Example 4: a broken promise to a lender

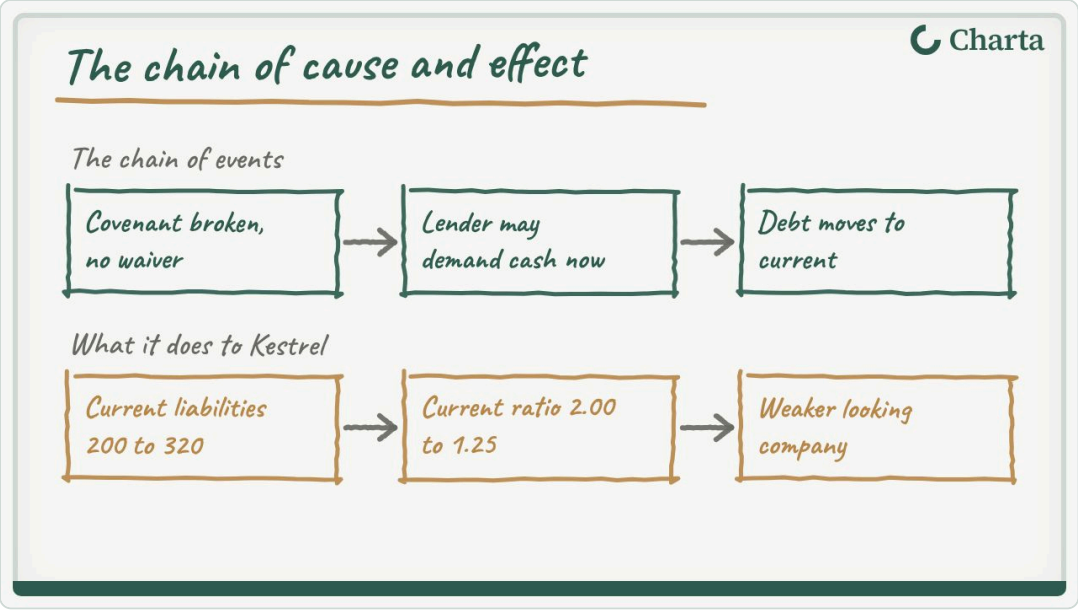
$120m of long-term debt becomes callable. $ millions.

Current ratio today	400 ÷ 200	**2.00**
Covenant broken, loan callable	no waiver	**$120m**
New current liabilities	200 + 120	**$320m**
New current ratio	400 ÷ 320	**1.25**
New working capital	400 − 320	**$80m**

IN THE LESSON

- Example four, the boundary case that catches people out.
- Kestrel's current assets are four hundred and current liabilities two hundred, so its current ratio is two.
- Now suppose Kestrel borrowed one hundred and twenty million dollars of its long-term debt under a loan with a covenant, a promise to the lender, such as keeping debt below a limit.
- On the balance sheet date Kestrel breaks the promise and has no waiver.
- The lender now has the right to demand the money straight away.
- The debt must be shown as current, even though it was due in years.
- Current liabilities become three hundred and twenty, the ratio falls to one point two five, and working capital shrinks from two hundred to eighty.

12 The chain of cause and effect



IN THE LESSON

- The top row is the chain of events.
- First, a covenant is broken, and no waiver is in place at the balance sheet date.
- Second, because of that, the lender is entitled to ask for its money now.
- Third, the debt therefore moves from non-current to current liabilities.
- The bottom row is what that does to Kestrel.
- Current liabilities jump from two hundred to three hundred and twenty.
- The current ratio falls from two to one point two five.
- One more point.
- Under I F R S, only a right to delay payment for twelve months, in place at the balance sheet date, keeps debt non-current.
- A hope or plan to refinance is not a right.

13 A story: three prices for the same car

- Historical cost: what you paid, with the receipt
- Amortised cost: cost adjusted for wear or time
- Fair value: the price you would get today
- One balance sheet mixes all three

IN THE LESSON

- Suppose you bought a car five years ago for twenty thousand dollars.
- If someone asks what your car is worth, you could give three honest answers.
- You could say twenty thousand, because that is what you paid.
- That is historical cost: simple, and easy to prove with the receipt.
- You could say twelve thousand, because you paid twenty and it has worn out a little each year.
- That is cost adjusted over time, and accountants call it amortised cost.
- Or you could look at what similar cars sell for today and say fourteen thousand.
- That is fair value, the price you would get in an orderly sale now.
- A balance sheet uses all three, on different lines, side by side.

14 Example 5: equipment at cost less wear

Machine: cost $80m, life 8 years, salvage $8m, straight line

Annual depreciation	(80 − 8) ÷ 8	**$9m**
Wear charged after 3 years	3 × 9	**$27m**
Carrying amount	80 − 27	**$53m**
Fair value today	dealer's price	**$62m**
Gap the sheet does not show	62 − 53	**$9m**

IN THE LESSON

- Example five.
- Kestrel buys a machine for eighty million dollars.
- It expects to use it for eight years and then sell it for eight million, its salvage value.
- Under the cost model, the cost less the salvage value is spread evenly over the life.
- Eighty minus eight is seventy-two, divided by eight, is nine million dollars of depreciation each year.
- After three years the accumulated depreciation is twenty-seven million, so the carrying amount on the balance sheet is eighty minus twenty-seven, which is fifty-three.
- Now suppose a dealer says similar machines sell for sixty-two million today.
- The balance sheet still shows fifty-three.
- The nine million gap is invisible on the sheet.

15 Example 6: a bond at amortised cost

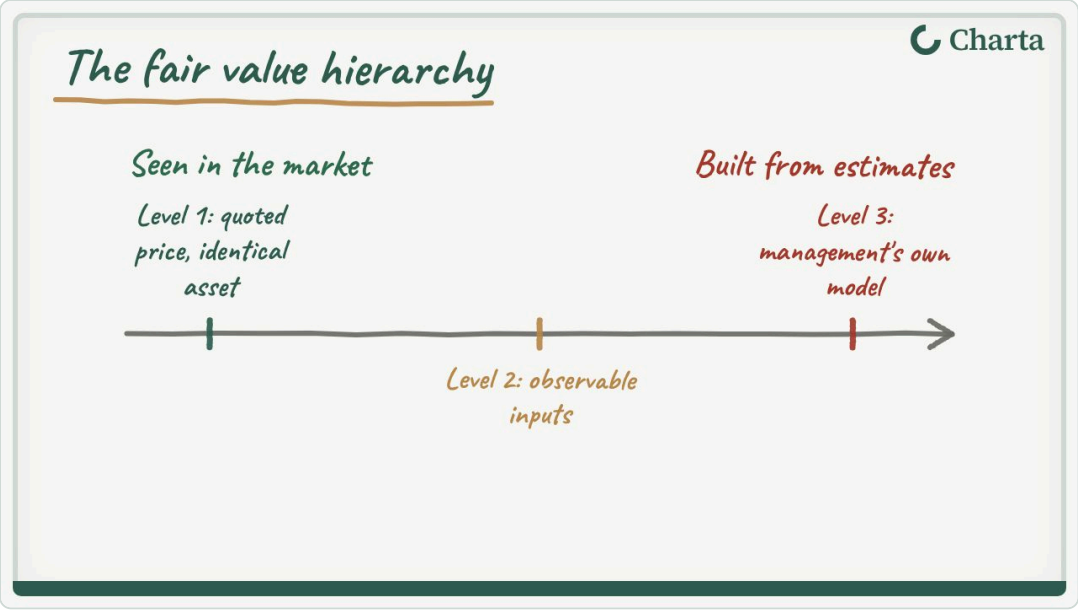
5-year bond, face $100m, coupon $4m, bought at $95.67m to yield 5%

Interest income, year 1	95.67 × 5%	**$4.78m**
Added to carrying amount	4.78 − 4.00	**$0.78m**
Carrying amount, end of year 1	95.67 + 0.78	**$96.45m**
Interest income, year 2	96.45 × 5%	**$4.82m**
Carrying amount, end of year 2	96.45 + 0.82	**$97.27m**

IN THE LESSON

- Example six, a financial asset.
- Kestrel buys a five year bond with a face value of one hundred million dollars, repaid at the end, and a coupon of four million a year.
- Investors want a return of five per cent, so Kestrel pays ninety-five point six seven million, a discount of four point three three.
- Amortised cost uses the effective interest method, which both I F R S and U S G A A P require.
- Each year, interest income is the opening carrying amount times five per cent.
- In year one that is four point seven eight.
- The coupon received is four, so the difference, zero point seven eight, is added to the carrying amount, which becomes ninety-six point four five.
- In year two, interest income is four point eight two, the carrying amount rises by zero point eight two, to ninety-seven point two seven.
- The yearly amount grows, because the carrying amount grows.
- After five years it reaches one hundred.

16 The fair value hierarchy



IN THE LESSON

- Fair values are ranked by how much they rely on the preparer's own judgement.
- Picture a line.
- On the left, seen in the market.
- Level one is a quoted price in an active market for the identical asset, such as shares listed on an exchange.
- In the middle, level two uses other inputs that can be observed, for example pricing a thinly traded bond from the yields on similar bonds.
- On the right, built from guesses.
- Level three uses unobservable inputs, such as management's own forecasts to value a stake in a private company.
- The further right, the more to question.

17 Example 7: the same land, two rule books

Land cost $20m, now worth $140m. Revenue $1,500m.

Revaluation gain (IFRS)	140 − 20	**$120m**
Total assets	1,000 + 120	**$1,120m**
Equity	400 + 120	**$520m**
Turnover at cost (US GAAP)	1,500 ÷ 1,000	**1.50**
Turnover revalued (IFRS)	1,500 ÷ 1,120	**1.34**

IN THE LESSON

- Example seven, where the rule book matters.
- Years ago Kestrel bought land for twenty million dollars.
- It is worth one hundred and forty million now.
- Under U S G A A P, property is carried at cost less depreciation, so the land stays at twenty.
- Under I F R S, a company may choose the revaluation model for a class of property, and then it shows fair value, so the land is written up by one hundred and twenty.
- Assets rise to one thousand one hundred and twenty and equity rises by the same amount, to five hundred and twenty, with the gain going to other comprehensive income.
- With revenue of fifteen hundred, asset turnover falls from one point five to one point three four, with no change in the business.
- For simplicity we used year end assets here.

18 Four mistakes to avoid so far

- 1. Equity is a leftover at book value, not market value
- 2. Current = longer of 12 months and the cycle
- 3. Hoping to refinance is not a right
- 4. Total assets adds numbers on different bases

IN THE LESSON

- Before we move on, four mistakes that cost marks.
- One.
- Treating equity as something measured separately, or as the market value of the company.
- It is the leftover of assets minus liabilities, at book values.
- Two.
- Assuming current always means twelve months.
- It is the longer of twelve months and the operating cycle.
- Three.
- Believing that a loan you expect to refinance can stay non-current.
- Only a right in place at the balance sheet date counts, and a broken covenant with no waiver pushes debt into current.
- Four.
- Reading total assets as one clean number.
- It adds items measured on different bases, a bit like adding kilometres to miles, so look at the components, not just the total.

19 A story: three shoeboxes

- Box one: keep until repaid
- Box two: hold to sell soon
- Box three: might sell, no firm plan
- Intent decides the box. The box decides the effect.

IN THE LESSON

- Imagine you have three shoeboxes for your investments.
- In the first you put bonds that you fully intend to keep until they are repaid.
- You do not care what the price does in between.
- In the second you put things you are holding to sell soon for a quick gain.
- In the third you put things you might sell if you need cash, but you have no firm plan.
- Accounting treats the boxes differently, even for identical securities.
- Intent decides the box, and the box decides whether a price move reaches profit, reaches equity directly, or is ignored.

20 Debt securities under US GAAP

Where does a price change show up?

Category	Price change goes to
Held to maturity	Nowhere
Trading	Net income
Available for sale	OCI (equity)

IN THE LESSON

- Under U S G A A P, a company classifies debt securities into three categories on the day it buys them.
- Held to maturity are bonds the company intends and is able to hold until repaid.
- They are carried at amortised cost, so market price changes appear nowhere.
- Trading securities are held to be sold in the near term.
- They are carried at fair value, and every unrealised gain or loss, meaning a gain on paper before selling, goes straight into net income.
- Available for sale securities are everything in between.
- They are also carried at fair value, but the unrealised gains and losses skip net income and go to other comprehensive income, called O C I, a separate part of equity.

21 IFRS: business model, not intent

- Amortised cost: hold and collect (like held to maturity)
- FVOCI: collect and sell (like available for sale)
- FVTPL: everything else (like trading)
- Shares: fair value to income (IFRS option: OCI)

IN THE LESSON

- International standards reach the same three outcomes by a different route.
- Under I F R S nine, a debt investment is classified by the company's business model and the nature of its cash flows.
- If the business model is to hold and collect the payments, it is carried at amortised cost.
- If the model is both to collect payments and to sell, it is carried at fair value through other comprehensive income, which matches available for sale.
- Otherwise it is at fair value through profit or loss, which matches trading.
- Equity shares are different.
- Under U S G A A P they are carried at fair value with changes in net income.
- Under I F R S they are the same, except that a company may irrevocably elect O C I for shares not held for trading.

22 Example 8: one bond, three labels

Each bond: cost $100m, coupon $4m, year-end price $104m

Held to maturity	carrying 100	**Income 4**
Trading	carrying 104	**Income 8**
Available for sale	carrying 104, OCI +4	**Income 4**
Gap in reported income	8 − 4	**$4m**

IN THE LESSON

- Example eight.
- Kestrel buys three identical bonds, each costing one hundred million dollars with a coupon of four million a year.
- At the year end, market rates have fallen and each bond is worth one hundred and four.
- The label is the only difference.
- The held to maturity bond stays at one hundred, and income is just the four million coupon.
- The trading bond is marked up to one hundred and four, and the four million gain joins the coupon in net income, so income is eight.
- The available for sale bond is also shown at one hundred and four, but the four million gain goes to O C I, so net income is four and equity rises by four through O C I.
- Same bond, but reported income differs by four million dollars.

23 A story: paying more than the shelves are worth

- Identifiable parts, valued one by one: 100,000
- Price paid for the whole bakery: 180,000
- Extra for reputation and team: 80,000 = goodwill
- Only bought goodwill is recorded

IN THE LESSON

- Suppose you buy a local bakery.
- You add up everything you can name and value separately: the ovens at today's price, the van, the stock of flour, the lease, the recipes you can legally own, less the bills it owes.
- Say that comes to one hundred thousand.
- But the owner asks one hundred and eighty thousand, because the shop has loyal customers, a great location and a team that knows what it is doing.
- You pay the extra eighty thousand for things you cannot list one by one.
- That extra is called goodwill.
- It appears only when one company buys another.
- A bakery that builds its own reputation records none.

24 How goodwill is measured

Goodwill = price paid − fair value of identifiable net assets

Goodwill	What cannot be separately named
Price paid	Consideration for the target
Fair value of net assets	Net assets at fair value

IN THE LESSON

- Now the formal definition.
- In a business combination where the buyer takes one hundred per cent of the target, goodwill equals the price paid, called the consideration, minus the fair value of the identifiable net assets acquired.
- Identifiable net assets are the target's assets, including intangibles that can be named and valued, such as brands and customer lists, less its liabilities, all measured at fair value on the purchase date, not at the target's old book values.
- A minority stake or earlier holding is added to the consideration.
- Goodwill is the remainder: expected synergies, an assembled workforce, anything that cannot be separately identified.
- Internally generated goodwill is never recognised.

25 Example 9: buying Trailhead

Kestrel buys 100% of Trailhead. $ millions, made-up figures.

Fair value of assets acquired		**$300m**
Less liabilities taken on		**− $120m**
Identifiable net assets	300 − 120	**$180m**
Price paid for 100%		**$260m**
Goodwill	260 − 180	**$80m**

IN THE LESSON

- Example nine.
- Kestrel buys all the shares of a smaller firm, Trailhead, for two hundred and sixty million dollars in cash.
- On the purchase date Kestrel values Trailhead's identifiable assets at fair value: three hundred million dollars, including a brand and some customer relationships.
- Trailhead's liabilities at fair value are one hundred and twenty.
- So the identifiable net assets are three hundred minus one hundred and twenty, which is one hundred and eighty.
- Kestrel paid two hundred and sixty.
- The difference of eighty million dollars is goodwill.
- It goes onto Kestrel's balance sheet as a non-current asset.
- Goodwill is whatever is left.

26 Example 10: the impairment test under IFRS

IFRS: Trailhead one year later. $ millions.

Carrying amount incl. goodwill	180 + 80	**$260m**
Recoverable amount	higher of 140 and 150	**$150m**
Impairment loss	260 − 150	**$110m**
Charged first to goodwill	all of it	**$80m**
Spread over other assets	110 − 80	**$30m**

IN THE LESSON

- Goodwill is not amortised, under I F R S or, for public companies, U S G A A P.
- It is tested for impairment at least once a year.
- A year later, Trailhead has done badly.
- Under I F R S the test is done on a cash generating unit, here Trailhead, and compares its carrying amount, one hundred and eighty plus eighty goodwill, so two hundred and sixty, with its recoverable amount.
- That is the higher of fair value less costs of disposal, one hundred and forty, and value in use, the present value of its future cash flows, one hundred and fifty.
- So recoverable is one hundred and fifty.
- The loss is one hundred and ten.
- It hits goodwill first, all eighty.
- The remaining thirty is spread across the unit's other assets.

27 Example 11: the same test under US GAAP

US GAAP: same unit, fair value $150m. $ millions.

Carrying amount of the unit	180 + 80	**$260m**
Fair value of the unit		**$150m**
Excess of carrying over fair	260 − 150	**$110m**
Cap: no more than goodwill	smaller of 110 and 80	**$80m**
Goodwill left	80 − 80	**$0**

IN THE LESSON

- Now the same unit under U S G A A P.
- The test is run on a reporting unit, and the carrying amount is the same, two hundred and sixty.
- It is compared with the fair value of the reporting unit, which we take as one hundred and fifty.
- The excess of carrying amount over fair value is one hundred and ten.
- But under U S G A A P the loss is capped at the amount of goodwill, which is eighty.
- So the loss is eighty, goodwill falls to zero, and the other thirty is not written off.
- The two rule books therefore give a different answer: a loss of one hundred and ten under I F R S and eighty under U S G A A P.
- Under both, an impairment is never reversed, even if the business recovers.

28 What analysts do with goodwill

- Read the reconciliation and the test assumptions
- Impairment: non-cash charge, never reversed
- Goodwill 100 = 10% of assets, 25% of equity
- Many analysts strip it out: equity 400 becomes 300

IN THE LESSON

- So what should an investor take from this?
- First, read the disclosures.
- Companies must show a reconciliation of the goodwill balance from one year to the next, how it is allocated to units, and the key assumptions behind the impairment test, such as growth rates and discount rates.
- Second, an impairment is a non-cash charge that reduces net income, and it often signals that an acquisition was overpriced.
- Third, many analysts strip goodwill out to compare firms fairly.
- Kestrel's goodwill is one hundred, which is ten per cent of assets and a quarter of equity.
- Without it, equity is three hundred.
- A company that grew organically and one that bought its growth will otherwise look very different.

29 A story: comparing a slice, not the pie

- Raw dollars hide the shape of the company
- Divide every line by total assets
- Each line becomes a slice of the whole
- Compare peers, and the same firm over years

IN THE LESSON

- Imagine two pizza restaurants.
- One sells pizza from a small shop, the other from a huge chain.
- You want to know which one keeps more of its money in stock.
- Comparing the raw dollars tells you nothing, because the chain is far bigger.
- But if you ask what share of each company's total assets is sitting in stock, you can compare them fairly.
- This is the idea behind a common-size balance sheet.
- You divide every line by one base figure, so each line becomes a slice of the whole.
- For the balance sheet, the base is total assets.
- Firms of any size can then be compared.

30 The common-size formula

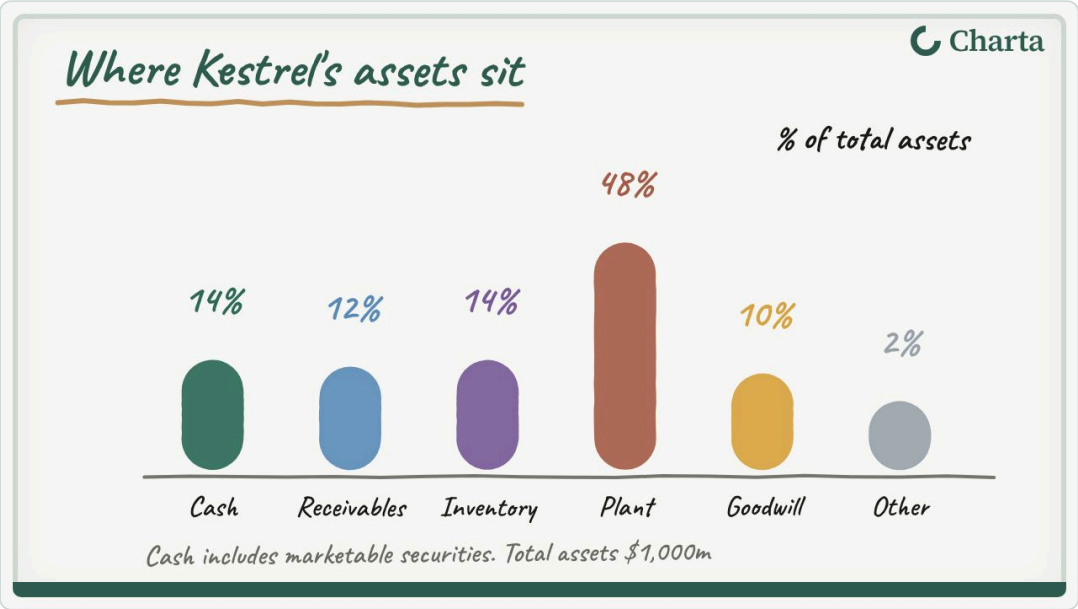
Common-size % = line item ÷ total assets × 100

Line item	Any balance sheet line
Total assets	The base, the whole pie
Common-size %	The slice, as a percentage

IN THE LESSON

- The recipe is one line.
- Take any item on the balance sheet, divide it by total assets, and multiply by one hundred to make a percentage.
- Do this for every asset and the slices add up to one hundred per cent.
- Do it for liabilities and equity as well, and because total liabilities plus equity equal total assets, those slices add up to one hundred too.
- Remember that every item on a balance sheet is a stock, an amount on one date.
- The result is a ratio of stocks, so it describes the structure of the company: what it owns and how it is financed.
- Speed is measured by activity ratios.

31 Where Kestrel's assets sit



IN THE LESSON

- Here is Kestrel's asset side as bars, each a share of total assets of one thousand.
- Cash and marketable securities together are one hundred and forty, so fourteen per cent.
- Receivables are one hundred and twenty, twelve per cent.
- Inventory is one hundred and forty, fourteen per cent.
- Property, plant and equipment is four hundred and eighty, forty-eight per cent, the biggest slice.
- Goodwill is one hundred, ten per cent, and other items are twenty, two per cent.
- Together they make one hundred.
- On the other side, equity is forty per cent of the total, so Kestrel is financed forty per cent by owners and sixty per cent by debt and other liabilities.
- A peer with a much bigger plant slice would raise the question of why.

32 Example 12: the same firm, a year apart

Common size = item ÷ total assets. Assets $800m, then $1,000m.

Inventory last year	80 ÷ 800	**10.0%**
Inventory this year	140 ÷ 1,000	**14.0%**
Change in inventory share	14.0 − 10.0	**+4.0 pts**
Receivables share	10.0% to 12.0%	**+2.0 pts**
Growth: inventory vs assets	75% vs 25%	**Flag**

IN THE LESSON

- Example twelve, the use that examiners love.
- Last year Kestrel's total assets were eight hundred, with inventory of eighty and receivables of eighty.
- Last year inventory was eighty over eight hundred, ten per cent.
- This year it is one hundred and forty over one thousand, fourteen per cent.
- The share rose by four percentage points.
- Receivables went from ten to twelve per cent, up two points.
- Inventory grew by seventy-five per cent, while total assets grew only twenty-five per cent.
- So stock is building faster than the business.
- That is a question to investigate, perhaps unsold goods, perhaps slower customer payments.
- The common-size sheet raises the flag.
- The activity ratios, such as days of inventory, then tell you how serious it is.

33 Recap: what to remember

- Assets = liabilities + equity. Equity is a leftover
- Current = longer of the cycle and 12 months
- Cost, amortised cost or fair value. Levels 1 to 3
- Securities: nowhere, income or OCI. Goodwill: test only
- Common size: each line ÷ total assets

IN THE LESSON

- Let us pull the lesson together.
- The balance sheet is a snapshot on one date, and assets equal liabilities plus equity, with equity as the leftover at book values.
- Items are current if realised or settled within the longer of the operating cycle and twelve months, and the line feeds the current ratio and working capital.
- Items are measured at historical cost, amortised cost or fair value, with fair value ranked in three levels, so total assets mixes bases.
- Securities held to maturity show no price changes, trading securities send them to income, and available for sale sends them to O C I.
- Goodwill is price paid minus fair value of identifiable net assets, tested for impairment and never reversed.
- Common size divides each line by total assets.

34 Try three quick questions

1. Assets 750, liabilities 480. What is equity?
   Answer: 750 − 480 = 270.
2. Price paid 500, fair value of identifiable net assets 430. Goodwill?
   Answer: 500 − 430 = 70.
3. Inventory 90, total assets 600. Common-size inventory?
   Answer: 90 ÷ 600 = 15%.

IN THE LESSON

- Now try three quick questions yourself.
- Pause after each one.
- Question one.
- A company has assets of seven hundred and fifty and liabilities of four hundred and eighty.
- What is equity?
- Equity is assets minus liabilities, which is two hundred and seventy.
- Question two.
- A firm pays five hundred for a target whose identifiable net assets have a fair value of four hundred and thirty.
- What is the goodwill?
- Five hundred minus four hundred and thirty is seventy.
- Question three.
- Inventory is ninety and total assets are six hundred.
- What is the common-size inventory figure?
- Ninety divided by six hundred is fifteen per cent.
- Well done.