# Earnings quality

Financial Statement Analysis

## 1 A story: two shops, one profit

- Shop 1: coffee sold daily, paid on the spot
- Shop 2: van sale, unpaid sales, delayed bills
- Same reported profit, very different shops
- Earnings quality = the character of profit

IN THE LESSON

- Imagine two shops that each report a profit of one hundred thousand this year.
- The first sells coffee every day, customers pay on the spot, and the profit is the same as last year.
- The second had a quiet year, but its owner sold the delivery van for a big gain, counted sales to a friend who has not paid yet, and delayed some repair bills.
- Same profit on the page.
- Very different shops.
- Earnings quality is the idea that profit has a character, not just a size.
- High quality profit is real, it repeats, and it turns into cash.
- Low quality profit is flattered by one-offs, timing and guesswork.
- Your job as an analyst is to tell them apart.

## 2 Three tests of good earnings

- 1. Recurring: will it happen again?
- 2. Backed by cash: does profit turn into cash?
- 3. Not propped up by estimates and judgement
- Fail any test and look closer

IN THE LESSON

- So what does good look like?
- Three tests.
- First, are the earnings recurring?
- Will the same activities produce a similar profit next year?
- Profit from selling a building will not.
- Second, are they backed by cash?
- Over time, profit is simply cash with the timing adjusted, so the two should travel together.
- Third, are they free from propping up by estimates?
- Many profit numbers rest on judgements: how long machines last, how many customers will fail to pay, how much to set aside for warranties.
- Change an estimate a little and profit moves, though no cash has.
- A profit that passes all three tests is higher quality.
- One that fails any of them deserves a closer look.

## 3 The cash gap, year by year

*Fenner Foods: net income less operating cash flow*

| Year | Profit minus cash |
|---|---|
| Year 1 | −5 |
| Year 2 | +20 |
| Year 3 | +52 |
| Year 4 | +90 |

IN THE LESSON

- Let us watch the first warning sign appear.
- Here is a made-up company, Fenner Foods, over four years.
- The table shows net income minus the cash the operations produced.
- Net income is the profit after every cost.
- Operating cash flow is the cash the daily business actually generated.
- In year one, profit is a little below cash, which is perfectly healthy.
- In year two, profit is twenty above cash.
- In year three, fifty two.
- In year four, ninety.
- A gap this size is accruals, meaning profit recorded before the cash arrives.
- One year of gap can be innocent, because a growing business ties up money in stock and customers.
- A gap that rises every year is a pattern.

## 4 Year four: profit against cash

*Amount (millions)*

| | |
|---|---|
| **Net income** | **150** |
| **Cash** | **60** |
| **Gap** | **90** |

*Fenner Foods, year four*

IN THE LESSON

- Now the picture for year four.
- The vertical axis is the amount, in millions.
- The first bar is net income, one hundred and fifty.
- The second bar is operating cash flow, only sixty.
- The third bar is the gap between them, ninety.
- Look at how large it is.
- More than half of the reported profit is not yet in the bank.
- That ninety has to be sitting somewhere on the balance sheet, perhaps in customers who owe money, in unsold stock, or in costs that were stored away rather than expensed.
- Each of those is an estimate.
- It will either turn into cash later, or be written off.
- The question to ask is which one, and the answer decides how good the profit really is.

## 5 Warning signs in the results

- Growth driven by non-recurring gains
- Large, rising gap: net income vs operating cash
- Restructuring called a one-off, year after year
- Always just meeting or beating the forecast

IN THE LESSON

- Let us collect the main warning signs.
- One: profit growth that comes from non-recurring gains, such as selling an asset or a tax credit, rather than from selling more.
- Two: a large and rising gap between net income and operating cash flow, as we just saw.
- Three: restructuring charges that are called one-offs but turn up again and again.
- If it happens every year, it is a cost of doing business.
- Four: a pattern of just meeting or narrowly beating analysts' forecasts, quarter after quarter.
- Real businesses are bumpy.
- A record that lands a penny above the forecast every time suggests that someone is steering the number with estimates.

## 6 Serious signals and aggressive accounting

- Restatements, enforcement actions, auditor changes
- Bill and hold: sale booked, goods still in store
- Gross rather than net revenue inflates sales
- Costs capitalised so they miss this year's profit

**IN THE LESSON**

- Some signs are more serious.
- A restatement means the company had to correct figures it already published.
- An enforcement action means a regulator has taken action over the accounts.
- A change of auditor, especially after a disagreement, is a red flag.
- Then there are aggressive choices.
- Bill and hold means the company records a sale but keeps the goods in its own warehouse.
- Reporting revenue gross rather than net means a company that is only an agent shows the whole sale as revenue, instead of just its commission, which inflates sales.
- And capitalising costs means recording a cost as an asset, so it skips the income statement now.
- Each pushes profit upwards today at the expense of tomorrow.

## 7 Example 1: finding Fenner's core earnings

*Year 5: net income 152 incl. a gain of 20; restructuring of 15 added back*

| | | |
|---|---|---|
| **Management's figure** | 152 + 15 | **167** |
| **Restructuring** | four years running: stays in | **recurring** |
| **Gain on division** | will not repeat: out | **−20** |
| **Core earnings** | 152 − 20 | **132** |
| **Gap to management** | 167 − 132 = 21% of 167 | **35** |

*The recurring charge stays in; the one-off gain comes out*

**IN THE LESSON**

- Example one, in year five.
- Fenner reports net income of one hundred and fifty two.
- That includes a gain of twenty from selling a division.
- Management also took a restructuring charge of fifteen, and adds it back to show adjusted profit of one hundred and sixty seven.
- Restructuring charges have appeared in each of the last four years.
- Step one, management's figure is one hundred and fifty two plus fifteen, which is one hundred and sixty seven.
- Step two, the restructuring happens every year, so it is recurring and stays in.
- Step three, the gain on the division will not repeat, so it comes out.
- Core earnings are one hundred and fifty two minus twenty, which is one hundred and thirty two.
- The gap to management's figure is thirty five, about twenty one per cent of it.

## 8 From weaker to stronger profit

- Core profit backed by cash
- Recurring core profit
- Accrual-heavy profit
- Reserve releases
- Disposal gains

IN THE LESSON

- Here is a way to rank profit by quality.
- The line runs from higher quality on the left to lower quality on the right.
- At the far left, the best kind: core profit that is also backed by cash.
- Next, recurring core profit from the main activities.
- In the middle is accrual-heavy profit, which depends on estimates and timing.
- Further right are reserve releases, where a company simply sets less aside than before and profit rises.
- And at the far right sit disposal gains: they happen once and have nothing to do with the business.
- When you read a set of accounts, try placing each slice of profit on this line.
- The more sits to the left, the more you can rely on it.

## 9 The trap: smooth is not safe

- Smooth profit can come from managed reserves
- Good year: stash extra in the reserve
- Poor year: release some back into profit
- Smoothness is a prompt to check the cash

IN THE LESSON

- Here is the trap on this outcome.
- Many learners reason that a company whose profit rises gently every year, never a bump, must be high quality.
- It feels stable.
- But real businesses are lumpy.
- Sales wobble, costs surprise.
- A perfectly smooth line can mean management is using estimates to even things out.
- In a good year they set aside extra for bad debts and warranties.
- In a poor year they release some of it back into profit.
- The reserve acts like a cookie jar.
- Smoothing is itself a form of managing earnings.
- So smooth earnings are not a reason to relax.
- They are a reason to ask where the reserves are going and whether the cash tells the same calm story.

## 10 Sustainable means likely to continue

- Sustainable = likely to continue
- Kiosk: steady. Heatwave sales: one-off
- Value is a bet on future profit
- Measure persistence with a regression

IN THE LESSON

- Now to the second idea, sustainable earnings, also called persistent earnings.
- Picture two ice cream sellers.
- One has a kiosk by a station, with steady customers all year.
- The other had a freak heatwave and sold three times the usual.
- Both beat last year.
- Which result would you expect to see again?
- The kiosk.
- The heatwave is a gift of the weather.
- Sustainable earnings are the ones likely to continue into the future, and that matters because a share price is a bet on future profit.
- If you pay a high multiple for earnings that will not last, you lose.
- The aim is to measure persistence with a number, not just a feeling.
- The tool for that is a simple regression.

## 11 The persistence regression

**Next year's earnings = α + β × This year's earnings**

| | |
|---|---|
| **Next year's earnings** | What we want to predict |
| **This year's earnings** | What we know today |
| **α: intercept** | Starting level of the line |
| **β: slope** | Persistence: near 1 is strong |

IN THE LESSON

- Here is the regression.
- Next year's earnings equals alpha, plus beta times this year's earnings.
- Alpha is the intercept, the level where the line starts.
- Beta is the slope, and it is the part we care about.
- It tells you how much of each extra dollar of profit this year turns up again next year.
- A beta close to one means earnings are highly persistent: a strong year predicts another strong year almost one for one.
- A beta close to zero means earnings fade quickly, and this year's result tells you little about next year.
- In practice the analyst fits this line across many companies or many years, then reads the slope.

## 12 Two lines: persistent and fading

*Chart: Next year's earnings vs This year's earnings*

- Slope near one: persists
- Low slope: fades

IN THE LESSON

- Now the picture.
- The horizontal axis is this year's earnings.
- The vertical axis is next year's earnings.
- Pick a level on the horizontal axis, go up to a line, and read across to what we expect next year.
- The steep line has a slope near one.
- A strong year this year predicts a strong year next year, almost one for one.
- That is persistent earnings.
- The shallow line has a low slope.
- Whatever happened this year, next year is pulled towards the middle.
- A record year and a poor year both predict something quite ordinary.
- The flatter the line, the less each dollar of today's profit is worth, so the lower the multiple you should pay for it.

## 13 Example 2: two firms, same record year

*Persistent: α = 5, β = 0.9. Fading: α = 60, β = 0.4*

| | | |
|---|---|---|
| **Persistent, earnings 100** | 5 + 0.9 × 100 | **95** |
| **Persistent, earnings 150** | 5 + 0.9 × 150 | **140** |
| **Fading, earnings 100** | 60 + 0.4 × 100 | **100** |
| **Fading, earnings 150** | 60 + 0.4 × 150 | **120** |
| **Extra 50 carries forward** | 0.9 × 50 vs 0.4 × 50 | **45 vs 20** |

IN THE LESSON

- Example two.
- An analyst has fitted the line for two kinds of firm.
- For a firm with persistent earnings, alpha is five and beta is zero point nine.
- For a firm with fading earnings, alpha is sixty and beta is zero point four.
- First, a normal year, this year's earnings of one hundred.
- The persistent firm is expected to earn five plus zero point nine times one hundred, which is ninety five.
- The fading firm, sixty plus zero point four times one hundred, is one hundred.
- Now a better year, earnings of one hundred and fifty.
- The persistent firm gives one hundred and forty.
- The fading firm, only one hundred and twenty.
- A jump of fifty carries forward as forty five for the first, but just twenty for the second.

## 14 Splitting earnings into cash and accruals

**Next year's earnings = α + $\beta_1$ × Cash flow + $\beta_2$ × Accruals**

| | |
|---|---|
| **Next year's earnings** | What we want to predict |
| **Cash component** | Backed by money received |
| **Accrual component** | Estimates and timing |
| **$\beta_1$: cash slope** | Usually the larger |
| **$\beta_2$: accrual slope** | Usually the smaller |

IN THE LESSON

- The next step is to split earnings into two parts.
- Earnings equal cash flow plus accruals.
- Cash flow is the part backed by money received.
- Accruals are everything else, the estimates and timing.
- We can then regress next year's earnings on both parts.
- Each gets its own slope, beta one for the cash part and beta two for the accrual part.
- The key finding from research is that beta one is larger than beta two.
- Cash tends to persist.
- Accruals tend to reverse, because a receivable is either collected or written off, and a cost that was deferred must be absorbed later.
- So a dollar of cash profit is worth more next year than a dollar of accrual profit.

## 15 Example 3: Company A against Company B

*$\alpha = 0$, $\beta_1 = 0.9$ (cash), $\beta_2 = 0.5$ (accruals). Both earn 100*

| | | |
|---|---|---|
| **A: cash 90, accruals 10** | 0.9 × 90 + 0.5 × 10 | **86** |
| **B: cash 40, accruals 60** | 0.9 × 40 + 0.5 × 60 | **66** |
| **B against A** | 66 ÷ 86 − 1 | **−23.3%** |

*Same profit this year; B is mostly accruals*

**IN THE LESSON**

- Example three.
- Use alpha of zero, beta one of zero point nine on cash, and beta two of zero point five on accruals.
- These are illustrative numbers.
- Company A earns one hundred, made of ninety in cash and ten in accruals.
- Company B also earns one hundred, but only forty in cash and sixty in accruals.
- Company A next year: zero point nine times ninety, plus zero point five times ten, gives eighty one plus five, which is eighty six.
- Company B: zero point nine times forty plus zero point five times sixty gives thirty six plus thirty, which is sixty six.
- Sixty six divided by eighty six, minus one, is about minus twenty three per cent.
- Same reported profit today, nearly a quarter less expected next year.

## 16 Example 4: paying the right multiple

*Market pays 15 times earnings for Company A*

| | | |
|---|---|---|
| **Same multiple, both** | 15 × 100 | **1,500** |
| **B scaled by persistence** | 1,500 × 66 ÷ 86 | **1,151** |
| **Overpayment** | 1,500 − 1,151 | **349** |
| **As a share of the price** | 349 ÷ 1,500 | **23.3%** |

*Do not value every component of profit at the same multiple*

**IN THE LESSON**

- Example four, the lesson for valuation.
- Suppose the market pays fifteen times for Company A's earnings.
- If you apply the same multiple to Company B because it reports the same one hundred, you would value both at fifteen hundred.
- But Company B's earnings are only about three quarters as persistent as A's, in the sense of what we expect next year.
- Scale it.
- Fifteen hundred times sixty six over eighty six gives about eleven hundred and fifty one.
- By treating the two the same, you would overpay by about three hundred and forty nine, which is again about twenty three per cent of the price.
- So earnings made largely of accruals deserve a lower multiple.
- And gains on disposals deserve a lower one still than recurring operating profit.

## 17 Four mistakes to avoid

- 1. Smooth profit is not proof of quality
- 2. One multiple for every slice of profit
- 3. Extrapolating a record year built on accruals
- 4. Trusting management's adjusted profit

IN THE LESSON

- Time to pause on the mistakes that cost marks in this topic.
- One: treating a smooth earnings record as high quality.
- Smoothing can come from managed reserves.
- Two: valuing every component of profit at the same multiple.
- Recurring cash backed profit and a one-off disposal gain are not the same thing.
- Three: building a forecast on a record year that was driven by accruals.
- Accruals reverse, so the record is the part least likely to repeat.
- Four: accepting profit as management defines it.
- Adjusted figures often leave out costs that recur, such as restructuring, and then overstate what the core business earns.
- Keep these four in mind as we move on to mean reversion and then to the full judgement.

## 18 Why extreme profits drift back

- Very high profit attracts rivals and competition
- Very low profit leads to fixes, closures, exits
- Result: earnings drift back towards the norm
- Do not extrapolate extreme earnings

IN THE LESSON

- Now our third idea, mean reversion.
- Think of a restaurant that is suddenly the hottest in town and earns huge profits.
- What happens next?
- Rivals open nearby, copy the menu, and bid for the same chefs.
- The extra profit gets competed away.
- Now think of a restaurant losing money.
- The owner changes the menu, cuts costs, or closes.
- The poor results improve or disappear.
- In both directions the result is pulled back towards the norm.
- Mean reversion means that earnings far above or far below the typical level tend to move back towards it.
- For the analyst the message is plain: do not extrapolate extreme earnings.
- A record is more likely to be followed by a smaller number than a bigger one.

## 19 Both revert, but one reverts faster

*Chart: Profitability vs Years after the record year*

- Backed by cash
- Accrual-heavy
- Industry norm

**IN THE LESSON**

- Here is the picture.
- The horizontal axis is the years after a record year.
- The vertical axis is profitability.
- Look first at the flat grey line near the bottom: the industry norm.
- Now two companies start from the same record height.
- Both fall towards the norm, because competition works on both.
- The upper curve is the company whose record was backed by cash.
- It falls more gently.
- The lower curve is the company whose record was built on accruals.
- It falls faster and further, because its accruals are reversing at the same time.
- If you screened on this year's profitability alone, you could not tell them apart.
- Their make-up is what separates them, and that is why composition matters.

## 20 How accruals change the speed

- Accrual = profit booked before the cash
- Receivables get collected or written off
- Capitalised costs are expensed later
- More accruals in profit means faster reversion

**IN THE LESSON**

- Why do accruals speed up the fall?
- Remember what an accrual is: profit recorded now, before the cash.
- A sale on credit is booked today, but the customer still has to pay.
- Either they pay, and the receivable disappears, adding no further profit, or they do not, and it is written off, hurting profit.
- A cost put on the balance sheet as an asset is the same: it will be spread out as an expense later.
- And many accruals are estimates, which management can adjust, but not forever.
- A reserve cut helps one year, then it is gone.
- So earnings with a big accrual part revert faster than earnings backed by cash.
- To spot them, analysts measure accruals as a ratio, and there are two standard versions.

## 21 The balance sheet accrual ratio

**Balance sheet accrual ratio = (Net operating assets end − start) ÷ average net operating assets**

| | |
|---|---|
| **Change in net operating assets** | End minus start |
| **Average net operating assets** | (Start + end) ÷ 2 |
| **Balance sheet accrual ratio** | Higher: less persistent |

**IN THE LESSON**

- The first ratio uses the balance sheet.
- It asks how much the operating side of the business grew, compared with its average size.
- First, net operating assets: operating assets such as receivables, stock and machinery, minus operating liabilities such as payables.
- Cash, investments and debt are left out, because they are financing.
- If net operating assets rise a lot, the business has swelled with items that have not yet turned into cash.
- The ratio equals the change in net operating assets, end minus start, divided by the average of the start and end values.
- A higher ratio suggests that more of the profit is accrual, and so that earnings are less persistent.

## 22 The cash flow accrual ratio

**Cash flow accrual ratio = (Net income − operating cash flow − investing cash flow) ÷ average net operating assets**

| | |
|---|---|
| **Net income** | Reported profit |
| **Operating cash flow** | Cash from daily business |
| **Investing cash flow** | Negative if investing |
| **Average net operating assets** | Same denominator |
| **Cash flow accrual ratio** | Higher: less persistent |

IN THE LESSON

- The second ratio uses the cash flow statement.
- Take net income.
- Subtract the operating cash flow, which is the cash the business generated.
- Then also subtract investing cash flow, which is a negative number when the company spends on equipment and the like, so subtracting it adds the spending back.
- What is left is the part of profit not matched by cash from operating and investing activities.
- Divide it by the same average net operating assets.
- The two ratios look at accruals from different statements, so they land close together but not exactly.
- Again, the higher the ratio, the lower the expected persistence.

## 23 Example 5: Calder Plastics, a record year

*Net operating assets 800 to 1,000; net income 150; CFO 60; CFI −120*

| | | |
|---|---|---|
| **Average net operating assets** | (800 + 1,000) ÷ 2 | **900** |
| **Balance sheet ratio** | (1,000 − 800) ÷ 900 | **22.2%** |
| **Cash flow ratio** | (150 − 60 + 120) ÷ 900 | **23.3%** |
| **Peer, both ratios** | comparable company | **3%** |

*About seven times the peer: expect this record to fade*

IN THE LESSON

- Example five.
- Calder Plastics has just reported a record net income of one hundred and fifty.
- Net operating assets rose from eight hundred to one thousand.
- Operating cash flow was sixty, investing cash flow minus one hundred and twenty.
- A comparable peer has accrual ratios of three per cent.
- Step one, the average net operating assets are eight hundred plus a thousand, over two, which is nine hundred.
- Step two, the balance sheet ratio is two hundred over nine hundred, which is twenty two point two per cent.
- Step three, the cash flow ratio: one hundred and fifty minus sixty plus one hundred and twenty is two hundred and ten, over nine hundred, which is twenty three point three per cent.
- Both are about seven times the peer's three per cent.

## 24 Example 6: forecasting with reversion

*Record 150, norm 90, so the excess is 60. Illustrative speeds*

| | | |
|---|---|---|
| **Excess over the norm** | 150 − 90 | **60** |
| **Cash backed: keeps 60%** | 90 + 0.6 × 60 | **126** |
| **Accrual heavy: keeps 30%** | 90 + 0.3 × 60 | **108** |
| **Overshoot if extrapolated** | 150 − 108 | **42** |

*Calder is accrual heavy, so 108 is the better forecast*

IN THE LESSON

- Example six: put reversion into a forecast.
- Calder's record net income is one hundred and fifty, and the normal level for a company like it is ninety.
- So the excess is sixty.
- Say a cash backed record keeps sixty per cent of its excess next year, while an accrual heavy record keeps only thirty per cent.
- These speeds are illustrative.
- For the cash backed case, next year is ninety plus zero point six times sixty, which is one hundred and twenty six.
- For an accrual heavy record like Calder's, it is ninety plus zero point three times sixty, which is one hundred and eight.
- Extrapolating the record at one hundred and fifty would have overshot by forty two.
- That is the trap, building a forecast on a record year driven by accruals.

## 25 A checklist for judging quality

*Test the numbers*

Profit vs cash → Accrual ratios → Sales vs receivables → Margins, reserves

*Then judge*

Gains and releases → Consensus pattern → Incentives and verdict

**IN THE LESSON**

- Now the final skill, judging earnings quality.
- Think of a doctor who does not trust one test but runs a series.
- Here are the steps in order.
- First, test profit against cash, through the gap and the accrual ratios on both bases.
- Second, track those ratios over time, since a jump matters more than a level.
- Third, compare revenue growth with receivables and deferred revenue.
- Then look at margins: did gross margin rise because of lower reserves or capitalised costs?
- Next, check how much profit rests on gains or reserve releases, and how results compare with consensus.
- Finally, tie it all to management's incentives, and then adjust to core earnings and reach a verdict.

## 26 Example 7: Ashby Tools, the accrual ratios

*Net income 150; CFO 60; CFI −90; net operating assets 800 to 1,000*

| | | |
|---|---|---|
| **Balance sheet ratio** | (1,000 − 800) ÷ 900 | **22.2%** |
| **Last year** | same ratio | **4%** |
| **Cash flow ratio** | (150 − 60 + 90) ÷ 900 | **20.0%** |
| **Reading** | two measures agree | **jumped** |

*Profit well ahead of cash: accruals are doing the work*

**IN THE LESSON**

- Example seven, our full case.
- Ashby Tools reports net income of one hundred and fifty, operating cash flow of sixty, and investing cash flow of minus ninety.
- Net operating assets rose from eight hundred to a thousand.
- Last year its balance sheet accrual ratio was four per cent.
- The average is nine hundred.
- The balance sheet ratio is two hundred over nine hundred, which is twenty two point two per cent, up from four per cent last year.
- The cash flow ratio is one hundred and fifty minus sixty plus ninety, which is one hundred and eighty, over nine hundred, which is twenty point zero per cent.
- Two separate measures agree, and both have jumped.
- Profit is running well ahead of cash, so the accruals are doing the work.

## 27 Example 8: where the accruals sit

*Ashby Tools: revenue 1,000 to 1,080; receivables 200 to 260*

| | | |
|---|---|---|
| **Revenue growth** | 1,080 ÷ 1,000 − 1 | **+8%** |
| **Receivables growth** | 260 ÷ 200 − 1 | **+30%** |
| **Days sales outstanding, last year** | 200 ÷ 1,000 × 365 | **73.0** |
| **Days sales outstanding, now** | 260 ÷ 1,080 × 365 | **87.9** |

*Sales booked, cash not collected: about 15 days slower*

IN THE LESSON

- Example eight asks where the accruals are hiding.
- Ashby's revenue grew eight per cent, from one thousand to one thousand and eighty.
- But its receivables, the money customers owe, grew thirty per cent, from two hundred to two hundred and sixty.
- Receivables grew almost four times as fast as sales.
- Turn that into days sales outstanding, receivables over revenue times three hundred and sixty five.
- Last year it was seventy three days.
- This year it is about eighty eight.
- Customers are taking nearly fifteen days longer to pay, or sales are being booked earlier, or both.
- Either way, profit has been recorded that the cash has not yet confirmed.
- Now the question moves from what happened to who benefits.

## 28 Consensus, adjusted profit and incentives

- Tiny beats of consensus, again and again
- Adjusted profit may omit recurring costs
- Bonus, covenant or share sale: motive
- Incentives show where to look hardest

IN THE LESSON

- Two more checks.
- First, compare results with consensus, the average analyst forecast.
- Occasionally beating it is normal.
- But beating it by a tiny amount, again and again, can indicate management of estimates, since real results are noisy.
- Second, look at the definition of profit.
- Management often presents adjusted or non G A A P figures, such as adjusted E B I T D A, that leave out costs.
- If the excluded costs recur, as restructuring did at Fenner, the figure overstates core earnings.
- Finally, ask who gains.
- If a bonus, a loan covenant or a planned share sale depends on this year's profit, management has a motive to push it up.
- Incentives do not prove wrongdoing, but they tell you where to look hardest.

## 29 Recap

- Quality: recurring, backed by cash, not estimates
- Persistence: slope near one; cash beats accruals
- Extremes revert; accruals make it faster
- Judge: ratios, receivables, core earnings, incentives

**IN THE LESSON**

- Let us recap.
- Earnings quality asks whether profit is recurring, backed by cash, and free from propping up by estimates.
- Warning signs are one-off gains, a widening gap between profit and cash, repeated restructuring, constant narrow beats, restatements and aggressive accounting.
- Sustainable earnings can be measured with a regression of next year's earnings on this year's, where a slope near one means strong persistence, and splitting into cash and accruals shows that cash persists more.
- Extreme earnings revert towards the norm, faster when accruals are large, and the two accrual ratios flag that.
- To judge quality, test profit against cash, track the ratios, check receivables, strip out one-offs, mind incentives, and use core earnings.

## 30 Try three quick questions

1. NOA rise from 500 to 700. Balance sheet accrual ratio?
   **Answer:** 200 ÷ 600 = 33.3%
2. $E_1 = 10 + 0.5 \times E_0$ and $E_0 = 80$. Forecast?
   **Answer:** 10 + 40 = 50; only half persists.
3. Restructuring in each of five years, added back by management. Treatment?
   **Answer:** Recurring: keep it in core earnings.

**IN THE LESSON**

- Time for three quick questions.
- Question one: net operating assets rise from five hundred to seven hundred.
- What is the balance sheet accrual ratio?
- Answer: the change is two hundred, the average is six hundred, and two hundred over six hundred is thirty three point three per cent.
- Question two: the fitted line is next year's earnings equals ten plus zero point five times this year's, and this year's earnings are eighty.
- What is the forecast?
- Answer: ten plus forty is fifty, and the slope of one half says earnings are only half persistent.
- Question three: restructuring has been charged in each of five years, and management adds it back.
- How should the analyst treat it?
- Answer: it is recurring, so leave it in core earnings.