Intercorporate investments

Financial Statement Analysis

1 A story: a slice of a bakery

- A few shares: you are a spectator
- A big slice: you have a real say
- The whole bakery: you run the place
- More say, more of it shows in the accounts

IN THE LESSON

- Picture a bakery on your street.
- Buy one share in it and you are a spectator.
- You hope it does well, but nobody asks your opinion.
- Buy a big slice and the owner starts phoning you before changing the menu.
- Buy the whole bakery and you decide everything, from prices to who does the baking.
- A company that owns shares in other companies faces the same ladder.
- The accountants ask one question: how much say does the owner really have?
- The answer picks the method, and the method decides which lines appear in the owner's accounts.
- That is the idea behind this whole lesson, and everything else is detail.

2 The ladder of influence

- Financial asset
- Significant influence
- Joint control
- Control

IN THE LESSON

- Here is the ladder drawn on one line.
- At the left end the owner has almost no say, and the investment is simply a financial asset, which I F R S nine tells us how to measure.
- Further along comes significant influence, usually a stake of twenty to fifty percent, where the investee is called an associate.
- Next is joint control, where two or more owners must agree on the big decisions, and the arrangement is a joint venture.
- At the far right is control, where the owner can steer the company's policies, and the investee is a subsidiary.
- Each step to the right brings more of the investee into the owner's accounts.

3 The method follows the influence

What Tern Holdings does with each stake

What Tern has	Method
A passive stake	IFRS 9
Significant influence	Equity method
A joint venture	Equity method
Control	Consolidate

IN THE LESSON

- Let's name the method that goes with each rung, using our running company, Tern Holdings.
- A passive stake follows I F R S nine, which we meet in a moment.
- Significant influence uses the equity method, which gives one line on the balance sheet and one line in the income statement.
- A joint venture, where Tern shares control, also uses the equity method.
- And control means consolidation under the acquisition method.
- Tern adds every asset, debt, sale and cost of the subsidiary to its own, and shows any slice it does not own as a non controlling interest.
- Keep this table in your head, because the rest of the lesson fills in each row.

4 Influence is evidence, not a percentage

- 20% to 50% is only a presumption
- Board seats can mean influence below 20%
- Policy role, shared managers, key supply deals
- Joint venture: equity method. Joint operation: own share

IN THE LESSON

- Now the trap that examiners love.
- Students learn that twenty to fifty percent means influence, and stop thinking.
- But the percentage is only a presumption.
- What matters is evidence of real say: a seat on the board, a part in setting policy, big deals between the two companies, managers who move across, or know how that only the owner can supply.
- So a fifteen percent holder with two of seven board seats can still have significant influence.
- Joint control is a different test.
- If the owners share control and have rights to the net assets, it is a joint venture, and the equity method applies.
- If they have rights to the assets and duties for the debts themselves, it is a joint operation, and each owner records its own share line by line.

5 IFRS 9: how a passive holding is measured

Debt: test the cash flows, then the plan. Equity: default or elect

Holding and plan	Measured at
Debt, hold to collect	Amortised cost
Debt, collect and sell	FV via OCI
Any other plan; default for shares	FV via profit
Shares, elected once	FV via OCI

IN THE LESSON

- Now the first rung, a passive holding, under I F R S nine.
- Two questions sort a debt investment.
- Do its cash flows pay only principal and interest?
- And what is the company's plan?
- If the plan is to hold it and collect the cash, measure it at amortised cost.
- If the plan is to collect and also sell, measure it at fair value, with the changes going through other comprehensive income.
- Any other plan means fair value through profit.
- Shares are different, because they have no promised cash flows.
- The default for shares is fair value through profit.
- But the company may elect, once and for all, share by share, to send the changes to other comprehensive income instead.

6 Four details that decide the numbers

- Debt must pass the principal-and-interest test
- Debt in OCI: gains recycled to profit on sale
- Elected shares in OCI: never recycled; dividends are income
- Expected credit losses on debt go through profit

IN THE LESSON

- Four details settle the numbers.
- First, a debt holding must pass the cash flow test, only principal and interest, or it goes to fair value through profit whatever the plan.
- Second, for debt at fair value through other comprehensive income, the gains and losses wait in equity and are recycled into profit when the bond is sold.
- Third, for shares with the election, nothing is ever recycled.
- Dividends still count as income, but the price gains stay in equity for good.
- Fourth, debt at amortised cost, or at fair value through other comprehensive income, carries a provision for expected credit losses, and that charge goes through profit.
- Let's watch these at work.

7 Example 1: Tern's passive holdings, year one

Four holdings under IFRS 9 (€m)

Loan notes, hold to collect	6% × 100	**6 to profit**
Bonds, collect and sell	5% × 200	**10 to profit**
Bonds: fair value 208	208 − 200	**8 to OCI**
Delta shares, elected	92 − 80; dividend 3	**12 OCI, 3 profit**
Epsilon shares, default	56 − 50; dividend 2	**8 to profit**

Profit 6 + 10 + 3 + 8 = 27. OCI 8 + 12 = 20

IN THE LESSON

- Example one.
- Tern holds four passive investments, and we follow them for a year, in millions of euros.
- The loan notes cost one hundred, are held to collect, and pay six percent, so interest of six goes to profit.
- The bonds cost two hundred, are held to collect and sell, and pay five percent, which is ten of interest in profit.
- Their fair value ends the year at two hundred and eight, so the gain of eight goes to other comprehensive income.
- The Delta shares cost eighty, carry the election, and rise to ninety two.
- The gain of twelve goes to other comprehensive income, and the dividend of three goes to profit.
- The Epsilon shares cost fifty, rise to fifty six, and pay two, so eight reaches profit.
- Profit totals twenty seven, and other comprehensive income twenty.

8 Example 1: the sales in year two

Bonds sold for 205; Delta shares sold for 95 (€m)

Bonds: sale less carrying	205 − 208	**−3**
Recycled out of OCI	gain held since year one	**+8**
Profit on the bonds	−3 + 8	**5**
Delta: gain since year one	95 − 92, stays in OCI	**3 in OCI**
Delta: profit on sale	never recycled	**0**

IN THE LESSON

- Now year two, when Tern sells.
- First the bonds, which go for two hundred and five.
- Their carrying amount was two hundred and eight, so the sale itself shows a loss of three.
- But the eight of gain waiting in other comprehensive income is now recycled into profit.
- Three lost, eight released, and the profit on the bonds is five.
- That matches the whole story: bought at two hundred, sold at two hundred and five, five of gain.
- Next the Delta shares sell for ninety five, up three more.
- That extra three goes to other comprehensive income, and nothing ever reaches profit, even on sale.
- This is the sharpest difference between the two kinds of fair value through other comprehensive income.

9 The equity method: ride along

- Start at the price paid
- Add your share of its profit, into income
- Deduct dividends: cash, not profit
- Charge extra depreciation on the price premium

IN THE LESSON

- Now significant influence.
- Imagine you and a friend co own a food truck, and you hold thirty percent.
- You do not run the truck's accounts line by line, but you care about your share.
- Each year the truck earns a profit, and thirty percent of it is yours, whether or not anyone takes cash out.
- That is the equity method.
- You start with the price paid.
- You add your share of the investee's profit to your own income.
- When the investee pays a dividend, that is just cash moving from the investment into your pocket, so it reduces the investment instead of adding to income.
- And if you paid more than your share of book value, the extra needs careful handling.

10 The equity method roll forward

Ending = Beginning + Share of profit − Dividends − Excess depreciation

Beginning carrying amount	Cost, then last year-end
Share of profit	Your % × investee profit
Dividends received	Your % × its dividends
Excess depreciation	Premium on assets used up
Ending carrying amount	Carrying amount at year-end

IN THE LESSON

- Here is the roll forward in one line.
- The ending carrying amount equals the beginning amount, plus your share of the investee's profit, minus the dividends you received, minus any extra depreciation.
- Your share of profit is your percentage times the investee's net income.
- Dividends received are your percentage times the dividends it paid.
- The extra depreciation comes from the price you paid above book value.
- When you buy, you may pay more than your share of book equity.
- Part of that premium exists because some assets are worth more than their book values.
- Those assets wear out, so the premium on them is charged against your income over their lives.
- Whatever is left is goodwill, which is not amortised.

11 Example 2: buying 30% of Ridge

Tern pays 360 for 30% of Ridge; book equity 1,000 (€m)

Share of book equity	30% × 1,000	**300**
Price paid over book	360 − 300	**60**
Plant uplift, Tern's share	30% × 100 (10-year life)	**30**
Left over: goodwill	60 − 30	**30**
Extra depreciation a year	30 ÷ 10	**3**

IN THE LESSON

- Example two.
- Tern pays three hundred and sixty for thirty percent of Ridge, whose book equity is one thousand.
- Thirty percent of book equity is three hundred, so Tern paid sixty over book.
- Why?
- Ridge's plant is worth one hundred more than its book value, and Tern's thirty percent of that is thirty.
- The plant has ten years left.
- The remaining thirty of the premium is goodwill.
- Under the equity method, goodwill sits inside the investment line and is not amortised.
- The plant part, though, is used up, so each year Tern charges thirty divided by ten, which is three, against its share of profit.

12 Example 2: one year later

Ridge earns 80 and pays dividends of 50 (€m)

Opening carrying amount	price paid	**360**
Share of profit	30% × 80	**+24**
Dividends received	30% × 50	**−15**
Extra depreciation	30 ÷ 10	**−3**
Closing carrying amount	360 + 24 − 15 − 3	**366**

Income shown: 24 − 3 = 21. Dividends are not income

IN THE LESSON

- Now a year goes by.
- Ridge earns eighty and pays dividends of fifty.
- Tern starts at three hundred and sixty.
- Its share of profit is thirty percent of eighty, so twenty four, added.
- Its share of dividends is thirty percent of fifty, so fifteen, deducted.
- And the extra depreciation of three is deducted.
- The closing carrying amount is three hundred and sixty, plus twenty four, minus fifteen, minus three, which is three hundred and sixty six.
- Notice what reaches the income statement: twenty four less three, so twenty one.
- Not eighty, and not the fifteen of dividends.
- The fifteen was cash, not profit.
- And remember the investment is tested for impairment if its value falls.

13 Control: the acquisition method

Four moves

Name the acquirer → Price paid at fair value → Fair value of net assets → Goodwill and NCI

IN THE LESSON

- Now control.
- When a company controls another, it uses the acquisition method, in four moves.
- First, name the acquirer, the company that gains control.
- Second, add up the price paid, at fair value.
- Third, value everything the target owns and owes at fair value, the identifiable net assets.
- Fourth, work out goodwill and the non controlling interest, the slice owned by outsiders.
- After that, the parent adds all of the subsidiary's assets, debts, sales and costs to its own, line by line, and shows the outsiders' share of profit and equity separately.
- The one real choice is how to measure those outside owners, and it changes goodwill.

14 Goodwill: full and partial

Full = Price + NCI at fair value − Net assets
Partial = Price + NCI at its share − Net assets

Price paid	What the parent paid
Non-controlling interest	Outsiders' slice
Identifiable net assets	At fair value, not book
Goodwill	The leftover amount

IN THE LESSON

- Here are the two goodwill formulas.
- Goodwill is the price paid, plus the non controlling interest, minus the fair value of the identifiable net assets.
- The only difference lies in the middle term.
- In full goodwill, the outside owners are measured at their fair value, the price their slice would fetch on the market.
- In partial goodwill, they are measured at their percentage of the net assets, which leaves no goodwill for them.
- So full goodwill is larger by exactly the goodwill that belongs to the outsiders.
- I F R S lets the acquirer choose, deal by deal.
- Remember that the net assets here are at fair value, not at book value.

15 Example 3: goodwill both ways

Tern pays 900 for 75% of Sable; net assets at fair value 1,000 (€m)

NCI at fair value (25%)	given	**280**
Full goodwill	900 + 280 − 1,000	**180**
NCI at share of net assets	25% × 1,000	**250**
Partial goodwill	900 + 250 − 1,000	**150**
Gap: goodwill of the NCI	280 − 250	**30**

IN THE LESSON

- Example three.
- Tern pays nine hundred for seventy five percent of Sable.
- The identifiable net assets are worth one thousand at fair value.
- The outside owners hold twenty five percent, and that slice has a fair value of two hundred and eighty.
- Full goodwill is nine hundred plus two hundred and eighty, minus one thousand, so one hundred and eighty.
- For partial goodwill, the outsiders are measured at twenty five percent of one thousand, which is two hundred and fifty.
- Goodwill is nine hundred plus two hundred and fifty, minus one thousand, so one hundred and fifty.
- The gap is thirty, and that is exactly the outsiders' own goodwill: two hundred and eighty less two hundred and fifty.

16 Special purpose entities: who consolidates?

- A vehicle built for one narrow job
- Test: power, variable returns, link between them
- Votes are not needed: the servicer with first losses controls
- Control: consolidate. Otherwise disclose the exposure

IN THE LESSON

- One more control idea.
- Companies sometimes set up a special purpose entity, a vehicle built for a narrow job, such as holding receivables and issuing notes against them.
- It may have almost no voting shares at all.
- So who consolidates it?
- I F R S asks about control, not legal form.
- Does the company have power over the activities that matter most, such as servicing the receivables?
- Is it exposed to variable returns, for example by holding the first loss notes?
- And can it use that power to affect those returns?
- If yes, it consolidates, and the vehicle's debt comes onto its balance sheet.
- If not, it must still disclose its interests and its risk of loss.
- Associates and joint ventures also need disclosure of their key figures.

17 Four mistakes so far

- 1. Treating 20% as a rule
- 2. Recycling gains on elected shares
- 3. Adding dividends to equity-method income
- 4. Forgetting the extra depreciation

IN THE LESSON

- Pause for the common mistakes so far.
- One, treating twenty percent as a rule.
- Board seats, a policy role and big deals can show influence below it, and a large stake with no power is not influence at all.
- Two, recycling gains on shares held at fair value through other comprehensive income by election.
- They never reach profit.
- Three, adding dividends to income under the equity method.
- Dividends reduce the investment, and only the share of profit is income.
- Four, forgetting the extra depreciation on the fair value uplift, so the carrying amount and the income are both overstated.
- Keep these four in mind when we meet the exam style questions.

18 IFRS and US GAAP: financial assets

Where a fair value change on the same shares or bonds goes

Holding	Where it goes
Equity, IFRS default	Profit
Equity, IFRS election	OCI, no recycling
Equity, US GAAP	Profit
Debt, US GAAP	HTM, AFS, trading

IN THE LESSON

- Now the second outcome: set I F R S against U S GAAP.
- Think of two rulebooks written by different committees for the same shares.
- Start with shares you hold passively.
- I F R S puts fair value changes through profit by default, with the one time election to use other comprehensive income and never recycle.
- U S GAAP has no such election.
- Almost all equity securities go through profit.
- For debt, I F R S sorts by the cash flow test and the business plan: cost, other comprehensive income, or profit.
- U S GAAP uses older labels: held to maturity at cost, available for sale in other comprehensive income, and trading in profit.
- Both rulebooks use the equity method for associates and joint ventures.

19 Example 4: the same holdings under US GAAP

Year-one holdings of Example 1, now under US GAAP (€m)

Loan notes: held to maturity	interest 6	**6 profit**
Bonds: available for sale	interest 10; gain 8	**10 profit; 8 OCI**
Delta shares: no election	gain 12; dividend 3	**15 profit**
Epsilon shares	gain 6; dividend 2	**8 profit**
Totals, US GAAP vs IFRS	profit 39 vs 27	**OCI 8 vs 20**

Total comprehensive income is 47 under both

IN THE LESSON

- Example four.
- Take Tern's four holdings again, with the same prices, but report under U S GAAP.
- The loan notes are held to maturity, so interest of six goes to profit, as before.
- The bonds are available for sale, so interest of ten goes to profit and the gain of eight to other comprehensive income, as before.
- The Delta shares cannot use the election, so the gain of twelve and the dividend of three both go to profit, fifteen in all.
- The Epsilon shares give eight again.
- Profit is thirty nine against twenty seven under I F R S, and other comprehensive income is eight against twenty.
- Total comprehensive income is forty seven both ways.
- Only the place where the gain sits has moved.

20 Business combinations: where they differ

The same deal, two rulebooks

Item	Rule
NCI measured, IFRS	Fair value or share
NCI measured, US GAAP	Fair value only
Goodwill test, IFRS	Cash-generating unit
Goodwill test, US GAAP	Reporting unit

IN THE LESSON

- Business combinations are mostly alike under both rulebooks: the acquisition method, fair values, and goodwill that is never amortised.
- Three differences matter.
- First, the outside owners.
- I F R S lets the acquirer choose fair value, which gives full goodwill, or the share of net assets, which gives partial goodwill.
- U S GAAP requires fair value, so only full goodwill exists there.
- The common slip is assuming partial goodwill is available under U S GAAP.
- Second, the goodwill test is run at the cash generating unit under I F R S and at the reporting unit under U S GAAP.
- Third, the way a loss is measured, which our next example shows.
- Equity method investees are treated alike, except that I F R S wants uniform accounting policies.

21 Example 5: a goodwill impairment, two ways

Unit carrying amount 1,100 includes goodwill 180; value in use 1,040 (€m)

Fair value less costs to sell	1,030 − 20	**1,010**
Recoverable amount, IFRS	higher of 1,010 and 1,040	**1,040**
IFRS loss	1,100 − 1,040	**60**
US GAAP loss	1,100 − 1,030	**70**

Both losses are below goodwill of 180, so goodwill takes it all

IN THE LESSON

- Example five.
- A unit of Sable has a carrying amount of one thousand one hundred, which includes goodwill of one hundred and eighty.
- Its fair value is one thousand and thirty.
- Selling costs would be twenty, and its value in use, the present value of the cash it will generate, is one thousand and forty.
- Under I F R S, compare the carrying amount with the recoverable amount, the higher of fair value less costs to sell and value in use.
- Fair value less costs is one thousand and ten, so recoverable amount is the higher one, one thousand and forty, and the loss is sixty.
- Under U S GAAP, compare carrying amount with fair value: one thousand one hundred minus one thousand and thirty is seventy.
- Both losses hit goodwill first, and goodwill impairments are never reversed.

22 US GAAP: the variable interest entity model

Three questions

Is it a variable interest entity? →
Who directs it and bears the losses? →
That primary beneficiary consolidates

IN THE LESSON

- The last difference is for special purpose vehicles.
- U S GAAP has a separate model for variable interest entities, which are entities whose equity is too thin to run on its own, or whose owners lack real control.
- First, ask whether the entity is one.
- If so, ask who directs the activity that matters most and takes on the large share of losses or gains.
- That party is the primary beneficiary, and it consolidates, whatever the voting rights say.
- I F R S has a single control model for everything.
- In practice the answers are often the same, but the route is different, and exam questions test the labels.

23 The traps in the comparison

- No partial goodwill under US GAAP
- No OCI election for shares under US GAAP
- IFRS: recoverable amount; US GAAP: fair value
- VIE and primary beneficiary are US GAAP words

IN THE LESSON

- Let's collect the traps in this comparison.
- Trap one, partial goodwill under U S GAAP.
- It does not exist there.
- Trap two, the election for shares.
- If a question says U S GAAP, shares go through profit, so profit is higher and more volatile than under I F R S, while other comprehensive income is lower.
- Trap three, the impairment test.
- I F R S uses recoverable amount at the cash generating unit, and U S GAAP uses fair value at the reporting unit.
- Trap four, bringing the variable interest entity vocabulary into I F R S.
- There it is simply control.
- If you can state those four in your sleep, you have most of this outcome.

24 Same profit, different picture

- Net income to the parent: the same
- Revenue, assets and debt: they change
- So margins, returns and leverage change
- Nothing real has happened

IN THE LESSON

- Now the third outcome: how the choice of method changes the statements.
- Picture two bakers with the same bank balance.
- One counts their share of a partner's shop as a single line.
- The other counts every loaf and every loan of that shop.
- Both earned the same profit, yet the second looks as if they run a much bigger business, with far more sales and debt.
- That is exactly the effect here.
- Net income to the parent does not change with the method.
- What changes is everything above it: revenue, assets and liabilities.
- So the ratios move, even though nothing real has happened.

25 The three ratios we compare

Margin = NI ÷ Revenue ROA = NI ÷ Total assets
Liabilities to equity = Liabilities ÷ Total equity

Net income to parent	Profit attributable to parent
Revenue	Smallest under equity method
Total assets	Investment line or all assets
Total equity	Includes NCI if consolidated

IN THE LESSON

- We will compare three ratios.
- Net margin is net income divided by revenue.
- Return on assets is net income divided by total assets.
- Liabilities to equity is total liabilities divided by total equity, our measure of leverage.
- In all of them we use net income attributable to the parent.
- The top of the first two never changes.
- Only the bottoms move.
- The equity method gives the smallest revenue, assets and liabilities.
- Proportionate consolidation adds a share of each line.
- Analysts use it for comparison, because neither framework permits it for joint ventures.
- Full consolidation adds all of each line.

26 Example 6: the numbers

Tern owns 50% of the joint venture Kanto (€m)

Tern alone: revenue	net income 180	**2,000**
Tern alone: assets	liabilities 2,200	**4,000**
Kanto: revenue	net income 100	**800**
Kanto: assets	liabilities 600	**1,200**
Tern's share of Kanto profit	50% × 100	**50**

Investment: 50% × Kanto equity 600 = 300

IN THE LESSON

- Example six sets the scene.
- Tern has revenue of two thousand, net income of one hundred and eighty, assets of four thousand and debts of two thousand two hundred, before counting its holding in Kanto.
- Kanto is a joint venture, fifty percent owned by Tern.
- Kanto has revenue of eight hundred, net income of one hundred, assets of twelve hundred and liabilities of six hundred.
- Tern's share of Kanto's profit is fifty.
- Its investment sits at three hundred, which is half of Kanto's equity of six hundred.
- We will show the statements three ways.
- The third, full consolidation, is purely a thought experiment, as if Tern controlled Kanto.

27 Equity method: one line each

Tern's statements as reported (€m)

Revenue	Tern only	**2,000**
Total assets	4,000 + 300 investment	**4,300**
Liabilities	Tern only	**2,200**
Net income to Tern	180 + 50	**230**
Margin; return on assets	230 ÷ 2,000; 230 ÷ 4,300	**11.5%; 5.3%**

IN THE LESSON

- First, the equity method, which is what the standards require for a joint venture.
- Revenue stays at Tern's own two thousand.
- Total assets are four thousand plus the investment of three hundred, so four thousand three hundred.
- Liabilities remain at two thousand two hundred.
- Net income to Tern is one hundred and eighty plus fifty, so two hundred and thirty.
- Net margin is two hundred and thirty over two thousand, which is eleven point five percent.
- Return on assets is two hundred and thirty over four thousand three hundred, which is five point three percent.
- Remember these two numbers, because they will fall as we bring in more of Kanto.

28 Proportionate: half of every line

Add 50% of each Kanto line, drop the investment (€m)

Revenue	2,000 + 50% × 800	**2,400**
Total assets	4,000 + 50% × 1,200	**4,600**
Liabilities	2,200 + 50% × 600	**2,500**
Net income to Tern	unchanged	**230**
Margin; return on assets	230 ÷ 2,400; 230 ÷ 4,600	**9.6%; 5.0%**

IN THE LESSON

- Second, proportionate consolidation, half of every line of Kanto.
- Revenue is two thousand plus half of eight hundred, so two thousand four hundred.
- Assets are four thousand plus half of twelve hundred, so four thousand six hundred, and the investment line disappears.
- Liabilities are two thousand two hundred plus three hundred, so two thousand five hundred.
- Net income to Tern stays at two hundred and thirty.
- Net margin falls to nine point six percent, and return on assets to five point zero percent.
- Equity is still two thousand one hundred.
- Nothing about Tern's profit has changed, yet the business looks bigger and a little less profitable.

29 Full consolidation: every line

Add every Kanto line; 50% of equity goes to the NCI (€m)

Revenue	2,000 + 800	**2,800**
Total assets	4,000 + 1,200	**5,200**
Liabilities	2,200 + 600	**2,800**
Net income to Tern	280 less 50 to NCI	**230**
Margin; return on assets	230 ÷ 2,800; 230 ÷ 5,200	**8.2%; 4.4%**

IN THE LESSON

- Third, full consolidation, as if Tern controlled Kanto.
- Every line is added.
- Revenue is two thousand eight hundred.
- Assets are five thousand two hundred.
- Liabilities are two thousand eight hundred.
- Consolidated net income is two hundred and eighty, but fifty belongs to the outside owners, so net income attributable to Tern is still two hundred and thirty.
- Net margin is two hundred and thirty over two thousand eight hundred, eight point two percent.
- Return on assets is two hundred and thirty over five thousand two hundred, four point four percent.
- Leverage rises too, because all of Kanto's debt is now on the balance sheet, including the part Tern does not own.

30 Same profit, falling margin

Net margin (%)

Equity method	**11.5%**
Proportionate	**9.6%**
Full consolidation	**8.2%**

Profit to Tern is 230 in every bar

IN THE LESSON

- Here are the margins as bars.
- Start with the vertical axis, net margin in percent, and the three methods along the bottom.
- The first bar is the equity method, at eleven point five percent.
- The second is proportionate consolidation, at nine point six.
- The third is full consolidation, at eight point two.
- The profit behind every bar is the same two hundred and thirty.
- Only the revenue underneath changes.
- So when you compare two companies, check which method each uses before you decide which is more efficient.
- A gap in margins may be nothing more than accounting.

31 What moves and what stays

- Net income to the parent: same in all three
- Revenue, assets, debt: equity < proportionate < full
- Margin and ROA: highest under the equity method
- Leverage: 1.05, 1.19, 1.17

IN THE LESSON

- Let's list what moves and what stays.
- Net income attributable to the parent stays the same, and so does return on the parent's equity, which is two hundred and thirty over two thousand one hundred, about eleven percent.
- Revenue, assets and liabilities rise as you go from equity to proportionate to full.
- Margin and return on assets fall.
- Leverage, liabilities over total equity, is one point oh five under the equity method, one point one nine under proportionate, and one point one seven under full.
- Full is a touch lower than proportionate because the non controlling interest of three hundred joins equity.
- The trap is thinking the method choice changes profit.
- It changes ratios.

32 Example 7: full goodwill against partial

Sable: assets 4,000 / 4,030; liabilities 1,850; net income 300 (€m)

Total equity: partial	includes NCI 250	**2,150**
Total equity: full	includes NCI 280	**2,180**
Return on assets: partial	300 ÷ 4,000	**7.50%**
Return on assets: full	300 ÷ 4,030	**7.44%**
Return on equity: partial; full	300 ÷ 2,150; 300 ÷ 2,180	**13.95%; 13.76%**

IN THE LESSON

- One last example, back to Sable.
- Suppose Tern's consolidated statements show assets of four thousand under partial goodwill, liabilities of one thousand eight hundred and fifty, and consolidated net income of three hundred.
- Full goodwill adds thirty to goodwill, so assets are four thousand and thirty, and the same thirty joins the non controlling interest, so equity rises from two thousand one hundred and fifty to two thousand one hundred and eighty.
- Income is unchanged, since goodwill is not amortised.
- Return on assets slips from seven point five zero percent to seven point four four.
- Return on equity slips from thirteen point nine five percent to thirteen point seven six.
- A bigger base, the same profit, lower returns.

33 Recap: the whole lesson in five lines

Passive: IFRS 9 boxes
Influence or joint control: equity method
Control: consolidate

Passive holding	Cost, FV via OCI or via profit
Equity method	Cost + share − dividends
Consolidation	Goodwill and NCI
Full goodwill	US GAAP: always full
Ratios, not profit	Margin, ROA, leverage move

IN THE LESSON

- Let's pull it together.
- Influence decides the method.
- A passive holding follows I F R S nine: amortised cost, or fair value through other comprehensive income with recycling for debt, fair value through profit otherwise, and an election for shares with no recycling.
- Significant influence and joint ventures use the equity method: cost, plus share of profit, minus dividends, minus extra depreciation.
- Control means consolidation, with goodwill and a non controlling interest, full or partial under I F R S, full only under U S GAAP.
- U S GAAP also puts shares through profit and has its own variable interest entity model.
- And the method never changes profit to the parent, only the ratios.

34 Try three quick questions

1. 15% stake, 2 of 7 board seats, joint product planning. IFRS method?
   Answer: Equity method: board seats show significant influence.
2. Pay 600 for 80%; net assets 700; NCI fair value 160. US GAAP goodwill?
   Answer: 600 + 160 − 700 = 60 (full goodwill only).
3. Equity method margin 120 ÷ 1,000 = 12%. Full consolidation, revenue 1,600?
   Answer: 120 ÷ 1,600 = 7.5%: profit same, margin lower.

IN THE LESSON

- Now try three quick questions yourself, and pause after each one.
- Question one.
- Tern holds fifteen percent of a supplier, has two of seven board seats and plans products with it.
- Which method under I F R S?
- The answer is the equity method, because the board seats and joint planning show significant influence.
- Question two.
- Tern pays six hundred for eighty percent of a target with identifiable net assets of seven hundred.
- The outsiders' slice has a fair value of one hundred and sixty.
- What is goodwill under U S GAAP?
- Six hundred plus one sixty minus seven hundred is sixty, and it must be full.
- Question three.
- Revenue is one thousand six hundred with net income of one hundred and twenty.
- Margin is seven point five percent, not twelve.