



3

The Consolidated
Statement of Financial
Position

The Consolidated Statement of Financial Position

3

LEARNING OUTCOMES

After studying this chapter students should be able to:

- ▶ prepare a consolidated statement of financial position;
- ▶ account for non-controlling interests;
- ▶ account for the effects of intra-group balances and transactions in the consolidated statement of financial position;
- ▶ apply the concepts of fair value at the date of acquisition.

3.1 Introduction

This chapter builds upon the foundations established in Chapter 2, and applies the principles of full consolidation in Section 3.2 and prepares a consolidated statement of financial position, firstly for a simple group scenario, including:

- Elimination of the investment on consolidation
- Recognition goodwill on acquisition.

The chapter continues with the preparation of the consolidated statement of financial position, incorporating the more common complexities in group accounting, including:

- Accounting for partly owned subsidiaries (Section 3.3)
- Accounting for the effects of transactions between group entities Sections (3.4 and 3.5)
- Accounting for adjustments to fair values at the date of acquisition (Section 3.7).

Adjustments may be required to achieve uniform accounting policies between parent and subsidiary, and this is covered in Section 3.6.

3.2 Applying the principles of consolidation: the consolidated statement of financial position

Consolidated financial statements represent the performance and position of the combined group entities as if they were a single economic entity. All the results and the assets and

liabilities that are under the control of the parent are combined together to show single totals for each item in the financial statements. This means that the revenue and expenses, assets and liabilities of the entities in the group are added together, line by line. So, if a parent's revenue for the year is \$2m and its only subsidiary has revenue for the year of \$1m, group revenue is reported on a single line in the consolidated income statement at \$3m.

Of course, the process involved is not quite as simple as this implies, and various complexities will be gradually explained in the next few chapters of the *Learning System*. For the moment, however, we will concentrate on only one of the financial statements: the consolidated statement of financial position, and the figures and facts in the example below will be kept very simple so that the basic principles can be demonstrated.

Example 3.A

On 31 December 20X0 A purchased all of the shares of B for \$25,000. The statements of financial positions of the individual entities at that date were:

	A \$	B \$
Non-current assets		
Property, plant and equipment	60,000	20,000
Investment	<u>25,000</u>	–
	85,000	<u>20,000</u>
Net current assets	<u>15,000</u>	5,000
	<u>100,000</u>	<u>25,000</u>
Equity		
Share capital	50,000	10,000
Retained earnings	<u>50,000</u>	<u>15,000</u>
	<u>100,000</u>	<u>25,000</u>

Solution

In this introductory example A has paid \$25,000 for the investment in 100% of B. B's equity has a book value of \$25,000. The objective is to prepare a consolidated statement of financial position that recognises the assets and liabilities over which A now has control. This means combining the asset and liability figures. For example, the consolidated figure for property, plant and equipment is calculated by adding across that line: \$60,000 + \$20,000 = \$80,000.

However, it is important to ensure that assets and liabilities are not double counted. It would be incorrect to include both A's investment in B and the assets and liabilities represented by that investment, and so the investment in B is eliminated. The net asset side of the statement of financial position therefore is as follows:

A Group: consolidated statement of financial position at 31 December 20X0

	\$	Comment
Non-current assets		
Property, plant and equipment	80,000	A + B
Investment in B	–	Eliminated – B's net assets recognised instead
Net current assets	<u>20,000</u>	A + B
	<u>100,000</u>	

The equity side of the consolidated statement of financial position shows the share capital of the parent only. Consolidated retained earnings consist of the total of:

- The retained earnings of the parent
- The post-acquisition retained earnings of the subsidiary

	\$	Comment
Equity		
Share capital	50,000	A only
Retained earnings	<u>50,000</u>	A + post-acquisition retained earnings of B: \$50,000 + \$0
	<u>100,000</u>	

Because the investment was bought on the last day of the financial year, post-acquisition earnings in the subsidiary are \$0. This will, of course, not usually be the case.

This consolidated statement of financial position shows the effect of a single consolidation adjustment: the investment in B shown in A's statement of financial position has been eliminated against the share capital and retained earnings of B:

DR Share capital and retained earnings of B	25,000
CR Investment in B	25,000

After the initial acquisition, earnings will be made in B. The group share of post-acquisition earnings (in this case 100%) will form part of the total of consolidated retained earnings, balanced by increases in net assets on the other side of the statement of financial position in the future.

The example below demonstrates the preparation of the consolidated statement of financial position one year after the initial acquisition.

Example 3.B

Statement of financial positions at 31 December 20X1

	A	B
	\$	\$
Non-current assets		
Property, plant and equipment	65,000	24,000
Investment	<u>25,000</u>	–
	90,000	24,000
Net current assets	<u>20,000</u>	<u>6,000</u>
	<u>110,000</u>	<u>30,000</u>
Equity		
Share capital	50,000	10,000
Retained earnings	<u>60,000</u>	<u>20,000</u>
	<u>110,000</u>	<u>30,000</u>

Solution

Note that the investment has remained exactly the same in the individual statement of financial position of A. This would normally be the case, unless impairment had taken place.

This means, however, that the elimination of the investment against the equity of B leaves a difference of \$5,000 (\$25,000 is set against a total of \$30,000). This difference is post-acquisition retained earnings which will be reflected as part of consolidated retained earnings.

The same principles as before are following in preparing the consolidated statement of financial position for the A Group:

A Group: consolidated statement of financial position at 31 December 20X1

	\$	Comment
Non-current assets		
Property, plant and equipment	89,000	A + B
Investment in B	–	Eliminated – B's net assets recognised instead
Net current assets	<u>26,000</u>	A + B
	<u>115,000</u>	
Equity		
Share capital	50,000	A only
Retained earnings	65,000	A (\$60,000 + post-acquisition reserves in B \$5,000)
	<u>110,000</u>	

3.2.1 Goodwill

In Example 3.A a subsidiary with a net asset value of \$25,000 was acquired for exactly \$25,000. This involved two simplifying assumptions:

- the investment in B could be acquired from its owners for exactly the amount of net assets in the statement of financial position; and
- the carrying value of net assets was equivalent to its fair value.

It will, in practice, hardly ever be the case that both of these conditions exist. Usually, the owners of a profitable business will expect to receive more in exchange for the investment than its net asset value. This additional amount arises for various reasons. It is quite likely that the assets recognised in the statement of financial position do not represent all the assets of the firm but intangibles such as good reputation and customer loyalty may be worth something to the purchaser. The difference between the cost of investment and the fair value of the net assets acquired is known as goodwill on acquisition. The requirements of IFRS 3 relating to the recognition of goodwill were discussed in Chapter 2.

Where 100% of the equity of a subsidiary is acquired, goodwill on acquisition is calculated as follows:

The aggregate of: consideration, measured at fair value
 LESS
 Net assets acquired (the fair value of identifiable assets acquired less liabilities assumed)

Example 3.C

C acquired 100% of the equity share capital of D on 31 December 20X2. The statements of financial positions of the two entities at that date were as shown below:

Statement of financial position at 31 December 20X2

	C \$	D \$
Non-current assets		
Property, plant and equipment	100,000	30,000
Investment	<u>50,000</u>	<u>–</u>
	150,000	30,000
Net current assets	<u>50,000</u>	10,000
	<u>200,000</u>	<u>40,000</u>
Equity		
Share capital	50,000	10,000
Retained earnings	<u>150,000</u>	<u>30,000</u>
	<u>200,000</u>	<u>40,000</u>

Note: The fair value of D's net current assets was the same as carrying value at 31 December 20X2. The fair value of the property, plant and equipment was \$32,000.

Prepare the consolidated statement of position at 31 December 20X2.

Solution

Working

- Calculation of goodwill on acquisition

	\$	\$
Consideration		50,000
Net assets acquired, at fair value		
Property, plant and equipment	32,000	
Net current assets	<u>10,000</u>	
Total identifiable net assets		<u>42,000</u>
Goodwill		<u>8,000</u>

C Group: consolidated statement of financial position at 31 December 20X2

	\$	Comment
Non-current assets		
Goodwill	8,000	See working 1
Property, plant and equipment	132,000	100,000 + 30,000 + 2,000 (Fair value adjustment)
Investment in D	–	Eliminated – D's net assets recognised instead 50,000 + 10,000
Net current assets	<u>60,000</u>	
	<u>200,000</u>	
Equity		
Share capital	50,000	C only
Retained earnings	<u>150,000</u>	Retained earnings of C
Total assets	<u>200,000</u>	

Some points to note:

1. The revaluation of D's property, plant and equipment has been accounted for in the calculation of goodwill. No revaluation reserve is required in the consolidated financial statements. The adjustment to fair value has been recognised in the consolidated financial statements in order to comply with IFRS 3. However, it need not necessarily be recognised in D's own financial statements – recognition will depend upon D's accounting policies.
2. The retained earnings at 31 December 20X2 are those of C, the parent, only. This is because the acquisition has taken place on that day. Remember that in subsequent consolidated statements of position consolidated retained earnings will comprise the retained earnings of the parent plus its share of the post-acquisition retained earnings in the subsidiary.
3. An alternative way of calculating goodwill is to deduct the value of equity plus or minus any adjustments in respect of fair value from the consideration:

	\$	\$
Consideration		50,000
Less:		
Equity acquired	40,000	
Fair value adjustment	<u>2,000</u>	
Goodwill		<u>42,000</u> <u>8,000</u>

This method is likely to be quicker than listing all the assets and liabilities acquired.

3.2.2 Bargain purchases

Occasionally, it happens that the amount of consideration paid for an investment in a subsidiary is less than the aggregate of the fair value of net assets acquired. The difference between the two amounts, rather than giving rise to an asset, goodwill, is a credit balance. This difference is sometimes referred to as 'negative goodwill'. Where this occurs, the acquiring entity must reassess the assets and liabilities acquired to ensure that all are included, and that they are appropriately measured. If, after this exercise, there is still a credit balance, IFRS 3 requires that the acquirer should recognise the credit as a gain through profit or loss on the date of acquisition.

3.3 Non-controlling interests

The examples in this chapter so far have all involved a parent company acquiring 100% of the voting share capital of a subsidiary. However, control of a subsidiary can be acquired with a partial acquisition (which will usually involve a purchase of something in excess of 50% of the issued equity share capital). The consequence of a partial acquisition is that

a part of the shareholding in the subsidiary continues to be held by one or more parties external to the group. This part of the shareholding is designated as ‘non-controlling interests’ (NCI) by IFRS 3 (revised). (Note: Prior to the revision of IFRS 3 in January 2008 ‘non-controlling interests’ were referred to as ‘minority interests’ and this may be the term you find used in older examples and other textbooks.)

3.3.1 Accounting for non-controlling interests

Earlier in the chapter the following accounting technique for acquisitions was explained:

All the results and the assets and liabilities that are under the control of the parent are combined together to show single totals for each item in the financial statements. This means that the revenue and expenses, assets and liabilities of the entities in the group are added together, line by line.

The existence of NCI makes no difference at all to the application of the principle of control. The assets and liabilities of the subsidiary are under the control of the parent regardless of the fact that NCI exist, and therefore the revenue and expenses, assets and liabilities of the entities in the group are added together, line by line.

NCI are recognised within equity in the consolidated financial statements. IFRS (revised) permits a choice of accounting treatment for the measurement of NCI:

Either:

- (a) NCI should be measured at fair value; or
- (b) NCI should be measured at the proportionate share of the acquiree’s identifiable net assets.

A great deal of discussion preceded the issue of IFRS 3 (revised) on the issue of measurement of NCI. The IASB would have preferred to have option (a) as the only treatment, however many of its constituents objected because it would be difficult and expensive to undertake this measurement exercise. Where the equity instruments of the subsidiary are themselves quoted on an active market, the exercise of valuing NCI is straightforward. If not, it is likely to involve estimation and assumptions about (eg.) an appropriate discounting for the fact the interests are non-controlling and therefore worth less.

Because of the controversy, IFRS 3 (revised) offers a choice of accounting treatments as illustrated in the example below.

Example 3.D

The statements of financial positions of E and its subsidiary F at 31 December 20X3 were as follows:

	E \$	F \$
Non-current assets		
Property, plant and equipment	90,000	25,000
Investment	<u>32,000</u>	<u>—</u>
	122,000	25,000
Net current assets	<u>38,000</u>	<u>14,000</u>
	<u>160,000</u>	<u>39,000</u>
Equity		
Share capital (\$1 shares)	80,000	20,000
Retained earnings	<u>80,000</u>	<u>19,000</u>
	<u>160,000</u>	<u>39,000</u>

E acquired 18,000 shares in F on 31 December 20X0 when F’s retained earnings were \$10,000.

Required: prepare the consolidated statement of financial position for the E group as at 31 December 20X3, under each of the two following assumptions:

1. It is the E group's policy to value non-controlling interests at acquisition at its proportionate share of the fair value of the subsidiary's identifiable net assets.
2. It is the E group's policy to value non-controlling interests at fair value. The fair value of the NCI in F at the date of acquisition was estimated to be \$2,500.

Note: It can be assumed that no fair value adjustments were required to F's net assets at the date of acquisition.

Solution – assumption 1

First, the group structure must be established. E owns 18,000 of the 20,000 shares of F: a shareholding of 90%. This means that the NCI is 10% (100% – 90%).

Workings

1. *Non-controlling interests*
This is 10% of the net assets of F at 31 December 20X3: $10\% \times \$39,000 = \$3,900$.
2. *Goodwill on consolidation*

	\$	\$
Consideration		32,000
Net assets at date of acquisition:		
Share capital (\$1 shares)	20,000	
Retained earnings	<u>10,000</u>	
Group share (90%)		<u>27,000</u>
Goodwill		<u>5,000</u>

3. *Retained earnings*

	\$
Retained earnings of E	80,000
90% of post-acquisition retained earnings of F: $90\% \times (\$19,000 - \$10,000)$	<u>8,100</u>
	<u>88,100</u>

E Group: consolidated statement of financial position at 31 December 20X3

	\$	<i>Comment</i>
Non-current assets		
Goodwill	5,000	See working 2
Property, plant and equipment	<u>115,000</u>	90,000 + 25,000
	<u>120,000</u>	
Net current assets	<u>52,000</u>	38,000 + 14,000
	<u>172,000</u>	
Equity attributable to owners of the parent		
Share capital	80,000	E only
Retained earnings	88,100	See working 3
	168,100	
Non-controlling interests	<u>3,900</u>	See working 1
	<u>172,000</u>	

Solution – assumption 2

Workings

1. *Goodwill on consolidation*

	\$
Consideration transferred	32,000
NCI at fair value	<u>2,500</u>
	<u>34,500</u>
Net assets at acquisition:	
Share capital	(20,000)
Retained earnings	<u>(10,000)</u>
Goodwill on acquisition	<u>4,500</u>

2. *Non-controlling interests*

NCI at 31 December 20X3 = NCI at date of acquisition + share of post-acquisition profits:

At date of acquisition	2,500
Post-acquisition profit share:	
10% × (\$19,000 – \$10,000)	<u>900</u>
At 31 December 20X3	<u>3,400</u>

3. *Retained earnings*

	\$
Retained earnings of E	80,000
Post-acquisition retained earnings:	
(\$19,000 – \$10,000) × group share 90%	<u>8,100</u>
	<u>88,100</u>

E Group: consolidated statement of financial position at 31 December 20X3

	\$	<i>Comment</i>
Non-current assets		
Goodwill	4,500	See working 1
Property, plant and equipment	<u>115,000</u>	90,000 + 25,000
	119,500	
Net current assets	<u>52,000</u>	38,000 + 14,000
	<u>171,500</u>	
Equity attributable to owners of the parent		
Share capital	80,000	E only
Retained earnings	<u>88,100</u>	See working 3
	168,100	
Non-controlling interest	<u>3,400</u>	See working 1
	<u>171,500</u>	

It should be noted that NCI are treated as part of total equity. The other constituent part of equity is described in the statement of financial position above as 'equity attributable to owners of the parent', which is the description used in IAS 1.

Note also that the value of goodwill changes because of the valuation at fair value of NCI. This is because the fair value of NCI is lower (in this example) than the attributable share of net assets worked out on a simple percentage basis. This means that, in fair value terms, the value of net assets acquired by E is greater, and therefore goodwill on consolidation is lower.

In F2, the examination questions will state which of the permitted treatments is to be applied. Where the fair value option is to be followed, the fair value of NCI will be given.

3.4 The elimination of intra-group balances

IAS 27 requires that:

'Intragroup balances, transactions, income and expenses should be eliminated in full'.

Intragroup balances are likely to arise where the parent and subsidiary entities trade with each other. The consolidated financial statements present the results and position of the parent entity and its subsidiary (or subsidiaries) as if they were a single combined entity. Therefore, where balances appear in both a parent and subsidiary statement of financial position, they must be eliminated against each other on consolidation. If this were not done, elements such as receivables and payables would be overstated.

The balances should be cancelled out against each other as part of the consolidation process. Where there are items in transit (usually cash or inventory) the balances may not cancel entirely. Any surplus must be recognised as an in-transit item in the consolidated statement of financial position.

Example 3.E

The statements of financial positions of A and B as at 31.12.X7 are as follows:

	A		B	
	\$	\$	\$	\$
ASSETS				
Non-current assets				
Investment in B (note 1)		15,000		
Property, plant and equipment		30,000		15,000
Current assets				
Inventories	10,000		5,000	
Receivables (note 2)	<u>12,000</u>		<u>6,000</u>	
		<u>22,000</u>		<u>11,000</u>
		<u>67,000</u>		<u>26,000</u>
EQUITY + LIABILITIES				
Equity				
Issued capital		40,000		10,000
Retained earnings		<u>14,000</u>		<u>8,000</u>
Current liabilities				
Trade payables (note 2)	8,000		4,000	
Bank overdraft	<u>5,000</u>		<u>4,000</u>	
		<u>13,000</u>		<u>8,000</u>
		<u>67,000</u>		<u>26,000</u>

Notes

1. A bought 75% of the shares in B on 31.12.X4 when the retained earnings of B stood at \$4,000. Since that date, there has been no impairment of goodwill on consolidation.
2. The receivables of A include \$3,000 in respect of goods supplied to B in the last few months of the year. The payables of B include \$2,000 payable to A. You ascertain that on 30.12.X7 B sent a payment of \$1,000 to A. This payment was received and recorded by A on 3.1.X8.
3. It is the group's policy to value non-controlling interests at acquisition at its proportionate share of the fair value of the subsidiary's identifiable net assets. (i.e. not at fair value)

Prepare the consolidated statement of financial position as at 31.12.X7.

Solution

Before starting to prepare the consolidated statement of financial position it is worth noting that:

- Since B is a 75% subsidiary, the non-controlling interests is 25%.
- The intra-group balances differ by \$1,000 (\$3,000 – \$2,000). The difference is clearly caused by the cash in transit of \$1,000.

We now proceed to prepare the consolidated statement of financial position.

A Group: Consolidated statement of financial position at 31 December 20X7

	\$	\$
ASSETS		
Non-current assets		
Goodwill		4,500
Property, plant and equipment		See working 2
		<u>45,000</u>
		<u>49,500</u>
		A + B

Current assets		
Inventories	15,000	A + B
Receivables	15,000	A + B - \$3,000
Cash in transit	<u>1,000</u>	The reconciling item
	31,000	
	<u>80,500</u>	
EQUITY + LIABILITIES		
Equity		
Issued capital	40,000	A only
Retained earnings	<u>17,000</u>	See working 3
	57,000	
Non-controlling interests	<u>4,500</u>	See working 1
	<u>61,500</u>	
Current liabilities		
Trade payables	10,000	A + B - \$2,000
Bank overdraft	<u>9,000</u>	A + B
	19,000	
	<u>80,500</u>	

Workings

1. *Non-controlling interests*
 $25\% \times \$18,000 = \$4,500$
2. *Goodwill*

	\$	\$
Cost of investment		15,000
Net assets at the date of acquisition		
Issued capital	10,000	
Retained earnings	<u>4,000</u>	
	14,000	
Group share (75%)		<u>(10,500)</u>
Total goodwill		<u>4,500</u>

3. *Retained earnings*

	\$
Retained earnings of A	14,000
75% of post-acquisition retained earnings of B (\$8,000 - \$4,000)	<u>3,000</u>
	<u>17,000</u>

3.4.1 Intragroup loans and preference shares

Example 3.A deals with intragroup balances that arise in respect of trading. It is also, however, possible that intragroup balances arise because one group entity holds loans or preference shares in another group entity.

Changes brought about by IAS 32 *Financial Instruments: Presentation* regarding classifications of financial instruments resulted in the majority of preference shares being classified as loan instruments (liabilities) rather than equity instruments (this is explained in more detail in Chapter 11 of this *Learning System*). This means that loans and preference shares in practice are likely to be dealt with in the same way. The long-term receivable in one entity corresponds with the long-term payable in another and for group accounting purposes they cancel each other out. (Example 3.F in the next section of this chapter demonstrates how this is done.)

3.5 The treatment of unrealised profits on assets bought from group companies

IAS 27 explains that profits and losses arising from intra-group transactions that are recognised in assets, such as inventory and non-current assets, should be eliminated in full. These are commonly known as unrealised profits because, from a group point of view, the profit on such transactions has not yet been realised. Suppose that an entity D habitually purchases inventory from its parent, A. A makes a profit on the sale which is recognised upon despatch of the goods to D. This is fine for the purposes of entity-level financial statements for A and D. However, the A group accounts present the results and position of the group as if it were a single entity. It would be incorrect to artificially boost the profits of this single entity by including profit made on transfers of inventories or other assets between the constituent entities, and therefore they must be eliminated as part of the consolidation process. Profit on such transactions cannot be recognised until the inventories or other assets are sold outside the group, at which point the profits are realised from a group point of view.

Taking the example of A and D a little further:

Example 3.F

D sells inventories to A at a standard profit margin of 25%. At the group's year end of 31 December, the inventories of A include goods purchased from D at cost to A of \$12,500.

Assumption 1: D is a wholly owned subsidiary of A.

What is the amount of the adjustment to eliminate intra-group profits?

Solution

First, the amount of profit made by D must be established. The goods at cost to A are \$12,500. D's profit margin is 25% which means that the value in A of \$12,500 represents 125% of cost to D.

Profit made by D = $25/125 \times \$12,500 = \$2,500$

Inventories in A, from a group accounting perspective, are therefore overstated by \$2,500 as is profit in D. The consolidation adjustment required is:

DR Consolidated profits	2,500	
CR Consolidated inventories		2,500

Assumption 2: D is 80% owned by A and non-controlling interests (NCI) hold the remaining 20% of the equity share capital of D. All other facts remain the same.

Solution

The amount of profit in D arising from the intra-group transaction is as before. However, only 80% of the profits arising in the subsidiary are attributable to the group, and the NCI take credit for the remainder of 20%. IAS 27 requires that profits and losses arising from this type of transaction are eliminated in full which means that the credit to consolidated inventories must be for the full \$2,500. In this case, though, because of the existence of NCI, the debit entry is split to give the following consolidation adjustment:

DR Consolidated profits	2,000	
DR NCI	500	
CR Consolidated inventories		2,500

In this example the sale has been from the subsidiary to the parent entity, which potentially brings in the complication of non-controlling interests. Where the position is reversed and the parent sells to the subsidiary, the intra-group profit is recorded in the parent entity, and therefore the issue of non-controlling interests is irrelevant.

If the positions had been reversed in this example, with A selling to D, the consolidation adjustment would be simply:

DR Consolidated profits	2,500	
CR Consolidated inventories		2,500

The example below is a comprehensive example that includes consolidation adjustments in respect of elimination of intra-group payables and receivables, both long term and short term and the elimination of intra-group profits.

Example 3.G

The statements of financial positions of A and B as at 31.12.X7 are as follows:

	C		D	
	\$	\$	\$	\$
ASSETS				
Non-current assets				
Property, plant and equipment		145,000		50,000
Investments		<u>53,000</u>		<u>—</u>
		<u>198,000</u>		<u>50,000</u>
Current assets				
Inventories	40,000		30,000	
Trade receivables	45,000		17,600	
Intra-group receivables	—		2,500	
Cash at bank	<u>17,000</u>		<u>9,900</u>	
		<u>102,000</u>		<u>60,000</u>
		<u>300,000</u>		<u>110,000</u>
EQUITY AND LIABILITIES				
Equity				
Ordinary (\$1) shares		100,000		40,000
Retained earnings		<u>90,000</u>		<u>32,000</u>
		<u>190,000</u>		<u>72,000</u>
Non-current liabilities				
Preference shares	50,000		10,000	
5% borrowings	<u>20,000</u>		<u>10,000</u>	
		70,000		20,000
Current liabilities				
Trade payables	39,000		18,000	
Intra-group payables	<u>1,000</u>		<u>—</u>	
		<u>40,000</u>		<u>18,000</u>
		<u>300,000</u>		<u>110,000</u>

Notes

1. The investment by C in D was acquired as follows:

	\$
30,000 ordinary shares of \$1	44,000
4,000 preference shares	4,000
5,000 5% borrowings	<u>5,000</u>
	<u>53,000</u>

The ordinary shares were acquired when the retained earnings of D were \$12,000. Since acquisition there has been no impairment of goodwill.

- A remittance of \$1,500, sent by C to D on 30.12.X2, was not recorded in the books of D until 4.1.X3.
- Goods had been sold at normal selling price by D to C during the year. The total sales of such goods during the year were \$80,000. The inventory of C at 31.12.X2 contained goods purchased from D at a selling price of \$16,000. D earns 20% profit margin on its sales to H.
- At the year end there was no liability outstanding in respect of loan interest or preference share dividends payable.
- It is the group's policy to value non-controlling interests at acquisition at its proportionate share of the fair value of the subsidiary's identifiable net assets.

Requirement: prepare a consolidated statement of financial position at 31.12.X2.

Solution

The following points are important:

1. C owns 75% of the ordinary shares, 40% of the preference shares and 50% of the borrowings in D. Only the ordinary shares are relevant for determining C's interest in its subsidiary. The preference shares and borrowings are both liabilities, which will be eliminated in part. The balances left over after elimination represent the investment by investors outside of the group, and will be included in the group's long-term liabilities.
2. There is a difference on intra-group balances of \$1,500 (the receivable of D is \$2,500 while the payable of C is \$1,000). The difference is due to cash in transit between C and D).
3. The inventory of C contains goods costing C \$16,000 that were purchased from D. D made a profit of \$3,200 on these goods ($\$16,000 \times 20\%$). From the group's perspective the profit on these goods will not be realised until the goods are sold outside the group. Therefore an adjustment must be made to the closing consolidated inventory figure to ensure that it is included at cost to the group. There is no need to adjust consolidated inventory for goods that have been sold by one group company to another and that have been then sold on outside the group. As far as the group is concerned, profit on the sale of these inventories has been recognised. The unrealised profit adjustment is made in respect only of inventories sold intra-group that remain in the group at the year end.

The consolidated statement of financial position of the C group as at 31.12.X2 is as follows:

	\$	\$	Comments
ASSETS			
Non-current assets			
Goodwill		5,000	See working 1
Property, plant and equipment		<u>195,000</u>	C + D
		<u>200,000</u>	
Current assets			
Inventories	66,800		$\$40,000 + \$30,000 - \$3,200$ (see note 3 above)
Trade receivables	62,600		C + D
Cash in transit	1,500		See note 2 above
Cash at bank	<u>26,900</u>		
		<u>157,800</u>	
		<u>357,800</u>	
EQUITY AND LIABILITIES			
Equity			
Share capital		100,000	C only
Consolidated retained earnings		<u>102,600</u>	See working 2
		<u>202,600</u>	
Non-controlling interests		<u>17,200</u>	See working 3
Non-current liabilities			
Preference shares	56,000		See working 4
5% borrowings	<u>25,000</u>		See working 4
		81,000	
Current liabilities			
Trade payables		<u>57,000</u>	C + D
		<u>357,800</u>	

Workings

1. *Goodwill*

	\$	\$
Cost of investment in ordinary shares		44,000
Net assets at the date of acquisition:		
Share capital ($75\% \times \$40,000$)	30,000	
Reserves ($75\% \times \$12,000$)	<u>9,000</u>	
		<u>(39,000)</u>
Goodwill		<u>5,000</u>

2. Consolidated retained earnings

	\$
C	90,000
D ($75\% \times 32,000 - 12,000$)	15,000
75% \times unrealised profit in inventory	
($75\% \times \$3,200$)	<u>(2,400)</u>
	<u>102,600</u>

3. Non-controlling interests

	\$
25% \times net assets ($25\% \times 72,000$)	18,000
25% \times unrealised profit in inventory ($25\% \times \$3,200$)	<u>(800)</u>
	<u>17,200</u>

4. Non-current liabilities

	\$	\$
	<i>Preference Shares</i>	<i>Borrowings</i>
C	50,000	20,000
D ($\$10,000 - 4,000$)	6,000	
D ($\$10,000 - 5,000$)		<u>5,000</u>
	<u>56,000</u>	<u>25,000</u>

3.5.1 Intra-group trading in non-current assets

The same principles are followed as explained above in respect of inventory. However, inventory is usually sold quickly, and can be expected to leave the group, thus realising profit to the group, shortly after the date of the statement of financial position.

The consequences of intra-group trading are somewhat more complicated where non-current assets are involved, because they are likely to continue to be recognised within the group entity for more than one accounting period.

Where there is unrealised profit on the intra-group sale of a non-current asset item consolidation adjustments must be made over the life of the asset in order to ensure that unrealised profit is eliminated.

The example below explains the required adjustments.

Example 3.H

E owns 75% of the equity shares of F. On 31.12.X0 (the year end date) E sold an item of plant to F for \$120,000. The plant cost E \$100,000 to manufacture. F depreciated the plant over a 5-year period starting from 1.1.X1. Show the carrying value of the plant in the consolidated statement of financial position as at 31.12.X0, 31.12.X1 and 31.12.X2 and explain the relevant consolidation adjustments.

Solution

- 31.12.X0. The profit made by E is \$20,000. This is unrealised from a group perspective since the asset has merely been transferred from one group entity to another. The cost to the group of this asset is \$100,000 and this is what should appear in group property, plant and equipment. However, the property, plant and equipment of F will (quite correctly from the viewpoint of F as a separate entity) include the asset at a cost of \$120,000. Therefore, given that we start the consolidated statement of financial position by aggregating the assets and liabilities from the individual statement of financial positions of the group companies, we need to make the following consolidation adjustment:

Credit	Property, plant and equipment	\$20,000
Debit	Retained earnings	\$20,000

There is no adjustment to the non-controlling interests since since the unrealised profit is made by the parent.

- **31.12.X1.** The asset will appear in the statement of financial position of F at a carrying amount of \$96,000 $[(4/5) \times \$120,000]$. The carrying amount based on cost to the group is \$80,000 $[(4/5) \times \$100,000]$. Therefore a consolidation adjustment of \$16,000 is required at 31.12.X1. Once again the adjustment is to property, plant and equipment and consolidated retained earnings. Notice that the adjustment we are making on 31.12.X1 does not add to the adjustment made on 31.12.X0. This is the *equivalent adjustment* that is required on 31.12.X1.
- **31.12.X2.** The carrying amount of the asset in the books of F is \$72,000 $[(3/5) \times \$120,000]$ and the carrying amount based on cost to the group \$60,000 $[(3/5) \times \$100,000]$. This means that the consolidation adjustment to property, plant and equipment and retained earnings on 31.12.X2 is \$12,000. Over time the required adjustment reduces as the asset is used; the adjustment in this case reduces by \$4,000 each year. This is the difference between the depreciation that will have been charged by F $[(1/5) \times \$120,000 = \$24,000]$ each year and the required amount based on cost to the group $[(1/5) \times \$100,000 = \$20,000]$.

The additional depreciation has been charged by the partly owned subsidiary and so the NCI is affected by its share of the adjustment for depreciation.

3.6 Adjustments to achieve uniformity of accounting policy

IAS 27 requires that consolidated financial statements should be prepared using uniform accounting policies for like transactions and other events.

It is quite possible to have a group in which entities adopt different accounting policies in their own financial statements, and there is nothing to prevent them from doing so. However, where this is the case consolidation adjustments are required in order to ensure that the consolidated financial statements all reflect the accounting policies of the parent.

Example 3.I demonstrates the adjustments required to align accounting policies.

Example 3.I

The statements of financial positions of G and its subsidiary H as at 31 December 20X3 are as follows:

	G	H
	\$	\$
Intangible asset (note)		15,000
Property, plant and equipment	40,000	35,000
Investment in H	50,000	
Net current assets	<u>20,000</u>	<u>20,000</u>
	<u>110,000</u>	<u>70,000</u>
Ordinary share capital	60,000	50,000
Retained earnings	<u>50,000</u>	<u>20,000</u>
	<u>110,000</u>	<u>70,000</u>

Note

1. G purchased 40,000 of the \$1 shares of H on 1.1.X0 for \$50,000 when the retained earnings of H showed a balance of \$10,000. There has been no impairment of goodwill on consolidation since acquisition.
2. H has all the same accounting policies as G except as regards intangible assets. The intangible assets of H are all of a type whose recognition would not be permitted under IAS 38. IAS 38 is to be followed in preparing the consolidated financial statements. When G made its investment in H on 1.1.X0 the intangible assets of H included \$7,500 that would not qualify for recognition under IAS 38.
3. It is the group's policy to value non-controlling interests at acquisition at its proportionate share of the fair value of the subsidiary's identifiable net assets.

Prepare the consolidated statement of financial position as at 31.12.X3. No adjustments are needed for intra-group balances or unrealised profit on inventory.

Solution

Before we proceed to the consolidated statement of financial position it is worth noting that G owns 80% of the shares of H (40,000 out of a total of 50,000). The adjustment required in respect of H to reflect the accounting policy difference has the following effects:

- Closing net assets and closing retained earnings are overstated by \$15,000. This means that restated closing net assets are \$55,000 (\$70,000 – \$15,000) and restated closing retained earnings are \$5,000 (\$20,000 – \$15,000).
- Pre-acquisition retained earnings are overstated by \$7,500. This means that restated pre-acquisition retained earnings are \$2,500 (\$10,000 – \$7,500).

We now have a relatively straightforward consolidated statement of financial position.

	\$	Comments
Goodwill	8,000	See working 2
Property, plant and equipment	75,000	G + H
Net current assets	40,000	G + H
	<u>123,000</u>	
Share capital	60,000	G only
Retained earnings	52,000	See working 3
	<u>112,000</u>	
Non-controlling interests	11,000	See working 1
	<u>123,000</u>	

Workings

1. *Non-controlling interests*
20% × \$55,000 (the restated net assets of H).
2. *Goodwill*

	\$	\$
Cost of investment		50,000
Net assets at the date of acquisition:		
Share capital	50,000	
Retained earnings – as restated	2,500	
	<u>52,500</u>	
Group share (80%)		<u>(42,000)</u>
Goodwill		<u>8,000</u>

3. *Retained earnings*

	\$
G	50,000
H – based on restated figures [80% (\$5,000 – \$2,500)]	2,000
	<u>52,000</u>

3.7 Adjustments for fair value at the date of acquisition

In Chapter 2 it was noted that goodwill was calculated using fair value measurements for assets and liabilities in the subsidiary at the date of acquisition, in accordance with the requirements of IFRS 3. Chapter 2, introduced the principles of fair value measurement on acquisition of a subsidiary. For the moment, in this chapter, we will examine the implications of measurement at fair value on the financial statements subsequent to acquisition.

Sometimes the fair values of net assets at the point of acquisition are recognised in the subsidiary at the date of consolidation, where the accounting policy of the entity itself permits this. However, where the subsidiary adopts the cost model of valuation, there will

be continuing differences on consolidation arising from the fact that the net assets of the subsidiary are recognised at fair value upon acquisition. In the latter case, consolidation adjustments will be required.

The example below illustrates the adjustments required.

Example 3.J

The statements of financial positions of Star and its subsidiary entity Ark as at 31 December 20X7 were as follows:

	<i>Star</i> \$'000	<i>Ark</i> \$'000
Property, plant and equipment	120	177
Investment in Ark	134	
Inventory	10	5
Receivables	30	25
Bank	10	5
	<u>304</u>	<u>212</u>
Ordinary share capital	100	75
Retained earnings	144	120
	<u>244</u>	<u>195</u>
Current liabilities	60	17
	<u>304</u>	<u>212</u>

Additional information

- On 1 January 20X5, when the retained earnings of Ark showed a balance of \$60,000, Star purchased 60,000 ordinary shares in Ark for \$134,000.
- Star sold goods to Ark during the year for \$10,000 at a mark-up of 25% on cost. At the year-end, half of these goods were still held in inventory by Ark.
- On 1 January 20X5 the net assets of Ark had a fair value of \$155,000. The excess of fair value over the carrying value in the individual financial statements of Ark was due to plant included in property, plant and equipment. This plant had a useful economic life of 5 years from 1 January 20X5. None of the plant that was subject to a fair-value adjustment at 1 January 20X5 had been sold by 31 December 20X7. Property plant and equipment is measured in Ark's own financial statements at depreciated cost.
- Since acquisition there has been no impairment of goodwill on consolidation.
- It is the group's policy to value non-controlling interests at acquisition at its proportionate share of the fair value of the subsidiary's identifiable net assets.

Prepare the consolidated statement of financial position for the group as at 31.12.X7.

Solution

Before we prepare the consolidated statement of financial position, let us consider the implications of each of the additional pieces of information we have been given (the numbers below correspond with the numbered pieces of information):

- This tells us that Star owns 80% (60/75) of the shares of Ark. At the date of acquisition the individual financial statements of Ark showed net assets of \$135,000 (share capital \$75,000 plus retained earnings \$60,000).
- This tells us that there is unrealised profit in the closing inventory of Ark. The closing inventory of Ark that was bought from Star is \$5,000 $[(1/2) \times \$10,000]$. The profit element in this inventory is \$1,000 $[(25/125) \times \$5,000]$. We need to take care when computing this figure – the profit is expressed as a percentage of the group cost, not the intra-group selling price.
- This tells us that the fair value of the net assets of Ark was \$20,000 $(\$155,000 - \$135,000)$ greater than the carrying value in the individual statement of financial position of Ark at the date of acquisition. Since the excess is due to plant that is being depreciated over 5 years the fair-value adjustment will have an impact on closing net assets as well (the acquisition took place three years ago). The impact on closing net assets is an increase of \$8,000 $[\$20,000 \times (2/5)]$. We can summarise the effect as:
 - pre-acquisition retained earnings increased by \$20,000 to \$80,000;
 - closing property, plant and equipment increased by \$8,000 to \$185,000;
 - closing net assets increased by \$8,000 to \$203,000;
 - closing retained earnings increased by \$8,000 to \$128,000.

We now prepare the consolidated statement of financial position:

	\$'000	<i>Comment</i>
Goodwill	10	See working 2
Property, plant and equipment	305	120 + 185 – using <i>adjusted</i> figure
Inventory	14	10 + 5 – 1 (unrealised profit)
Receivables	55	S + A
Bank	15	S + A
	<u>399</u>	
Share capital	100	Star only
Retained earnings	181.4	See working 3
	<u>281.4</u>	
Non-controlling interests	40.6	See working 1
Current liabilities	77	60 + 17
	<u>399</u>	

Workings

1. *Non-controlling interests*

20% × \$203,000 (the *adjusted* net assets of Ark at 31.12.X7). There is no need to charge the minority shareholders with any unrealised profit in this example because the profit is made by the *parent*.

2. *Goodwill*

	\$'000	\$'000
Cost of investment		134
Net assets at the date of acquisition:		
Share capital	75	
Retained earnings – <i>as amended</i>	<u>80</u>	
	<u>155</u>	
Group share (80%)		<u>(124)</u>
Total goodwill		<u>10</u>

3. *Retained earnings*

	\$'000
Star	144
Ark using <i>amended</i> figures:	
80% (\$128,000 – \$80,000)	38.4
Unrealised profit on inventory – made by the <i>parent</i>	<u>(1)</u>
	<u>181.4</u>

3.8 Summary

This chapter introduced the application of the rules for full consolidation. The IFRS 3 requirements for recognition of goodwill were applied and the consolidation was completed for fully owned and partially owned subsidiaries. The consolidated statement of financial position was prepared.

The chapter also covered several additional complexities involved in the preparation of the consolidated statement of financial position, including intra-group trading and balances, fair value adjustments and adjustment to achieve uniformity of accounting policy.

Students should be sure that they have completely understood the chapter and its examples, and should have worked through the revision questions that follow, before moving on to Chapter 4.

A brief note about workings: it was noted in Chapter 1 that a common mistake made by candidates was that of producing untidy and illegible workings for more complex questions. It is important to get into the habit of producing logical and neat workings for consolidation questions. The style of working used throughout this *Learning System* involves the use of a columnar approach. Some candidates use double entry consolidation workings, showing T accounts, and others use a diagrammatic method. To some extent, the style of working used depends upon that demonstrated by your tutor (where applicable). However, it is strongly recommended that students learn to use the columnar method. Completely accurate answers can be obtained by using other methods, but the problem is that using T accounts or diagrams takes longer. Columnar workings also tend to be easier for markers to follow.

The preparation of the consolidated statement of financial position could be tested in either the shorter style questions or the Long questions (i.e. for 25 marks). The long style questions are likely to contain further complications such as acquisitions or disposals, or the incorporation into consolidated statements of joint venture or associate interests. These are dealt with in subsequent chapters in this *Learning System*.

Revision Questions

3

Note: The questions that are included in the early part of the study system are not usually of exam standard. Tests of knowledge are essential early on in the study process to ensure the basics have been grasped – the exam standard questions will come in later chapters. Please ensure you complete the revision questions in this chapter as they are a fundamental test of your understanding of consolidation, which is essential before moving onto more complex consolidation.

? Question 1

On 31 December 20X4 AB acquired 100% of the ordinary share capital of its subsidiary, CD for \$50,000. The statements of financial positions of the individual entities at that date were:

	<i>AB</i>	<i>CD</i>
	\$	\$
Non-current assets		
Property, plant and equipment	70,000	30,000
Investment	<u>50,000</u>	<u>–</u>
	120,000	30,000
Net current assets	<u>30,000</u>	<u>15,000</u>
	<u>150,000</u>	<u>45,000</u>
Equity		
Share capital	50,000	20,000
Retained earnings	<u>100,000</u>	<u>25,000</u>
	<u>150,000</u>	<u>45,000</u>

Requirement

Prepare the consolidated statement of financial position for the AB Group at 31 December 20X4.

? Question 2

This question relates to AB and CD (facts of the acquisition as in Question 1) one year on from the acquisition. The statements of financial positions of the two entities at 31 December 20X5 were as follows:

	<i>AB</i>	<i>CD</i>
	\$	\$
Non-current assets		
Property, plant and equipment	75,000	32,000
Investment	<u>50,000</u>	<u>–</u>
	125,000	32,000

Net current assets	<u>37,000</u>	<u>17,000</u>
	<u>162,000</u>	<u>49,000</u>
Equity		
Share capital	50,000	20,000
Retained earnings	<u>112,000</u>	<u>29,000</u>
	<u>162,000</u>	<u>49,000</u>

Requirement

Prepare the consolidated statement of financial position for the AB Group at 31 December 20X5.

Question 3

AX acquired 30,000 of the 50,000 issued ordinary voting shares of CY on 1 April 20X7, for \$60,000. Retained earnings of CY at that date were \$25,000. The acquisition was sufficient to give it control over CY's operating and financial policies.

The statements of financial positions of the two entities were as follows on 31 March 20X8:

	<i>AX</i>	<i>CY</i>
	\$	\$
Non-current assets		
Property, plant and equipment	125,000	50,000
Investment	60,000	–
	185,000	50,000
Net current assets	<u>40,000</u>	<u>30,000</u>
	<u>225,000</u>	<u>80,000</u>
Equity		
Share capital	100,000	50,000
Retained earnings	<u>125,000</u>	<u>30,000</u>
	<u>225,000</u>	<u>80,000</u>

It is the group's policy to value non-controlling interests at its proportionate share of the fair value of the subsidiary's identifiable net assets.

Requirement

Prepare the consolidated statement of financial position for the AX Group at 31 March 20X8.

Question 4 (same detail as Q 3 but non-controlling interest at fair value)

AX acquired 30,000 of the 50,000 issued ordinary voting shares of CY on 1 April 20X7, for \$60,000. Retained earnings of CY at that date were \$25,000. The acquisition was sufficient to give it control over CY's operating and financial policies.

The statements of financial positions of the two entities were as follows on 31 March 20X8:

	<i>AX</i>	<i>CY</i>
	\$	\$
Non-current assets		
Property, plant and equipment	125,000	50,000
Investment	<u>60,000</u>	<u>–</u>
	185,000	50,000
Net current assets	<u>40,000</u>	<u>30,000</u>
	<u>225,000</u>	<u>80,000</u>
Equity		
Share capital	100,000	50,000
Retained earnings	<u>125,000</u>	<u>30,000</u>
	<u>225,000</u>	<u>80,000</u>

It is the group's policy to value non-controlling interests at fair value. The fair value of the NCI in CY at the date of acquisition was \$28,000.

Requirement

Prepare the consolidated statement of financial position for the AX Group at 31 March 20X8.

Question 5

The statements of financial positions as at 30 June 20X4 of A and its subsidiary entity B is summarised below.

	<i>A</i>		<i>B</i>	
	\$	\$	\$	\$
ASSETS				
Non-current assets				
Property, plant and equipment		9,000		4,800
Investment in subsidiary		<u>10,000</u>		<u>–</u>
		19,000		4,800
Current assets				
Inventories	12,000		18,000	
Trade receivables	25,000		21,000	
Current account with B	4,000		–	
Bank balance	<u>20,000</u>		<u>–</u>	
		<u>61,000</u>		<u>39,000</u>
		<u>80,000</u>		<u>43,800</u>
EQUITY + LIABILITIES				
Equity				
Issued capital (\$1 each)		40,000		8,000
Retained earnings		<u>24,000</u>		<u>9,800</u>
		64,000		17,800
Current liabilities				
Trade payables	16,000		18,000	
Current account with A	–		2,000	
Bank overdraft	<u>–</u>		<u>6,000</u>	
		<u>16,000</u>		<u>26,000</u>
		<u>80,000</u>		<u>43,800</u>

Notes

1. A acquired 6,400 ordinary shares in B many years ago. The balance on B's retained earnings at the date of acquisition by A was \$1,000. Goodwill on consolidation had been written off following an impairment review before the start of the current financial year.
2. On 30 June 20X4 there was cash in transit from B to A of \$2,000.
3. It is the group's policy to value non-controlling interests at its proportionate share of the fair value of the subsidiary's identifiable net assets.

Requirement

Prepare a consolidated balance sheet for the A group as at 30 June 20X4.

? Question 6

The statements of financial positions as at 31 December 20X4 of X and its subsidiary entity Y are summarised below:

	\$	X	\$	Y	\$
ASSETS					
Non-current assets					
Intangible assets					2,000
Property, plant and equipment		29,000			24,800
Investment in Y		<u>21,000</u>			
			50,000		<u>26,800</u>
Current assets					
Inventories	12,000			18,000	
Trade receivables	24,750			<u>21,000</u>	
Trading account with Y	4,000				
Interest receivable from Y	250				
Bank balance	<u>20,000</u>				
			<u>61,000</u>		<u>39,000</u>
			<u>111,000</u>		<u>65,800</u>
EQUITY + LIABILITIES					
Equity					
Ordinary shares of \$1 each		40,000			8,000
Retained earnings		<u>21,000</u>			<u>11,000</u>
			61,000		19,000
Non-current liabilities					
Interest bearing borrowings		30,000			20,000
Current liabilities					
Trade payables		20,000		18,300	
Interest payable				500	
Current account with X				2,000	
Bank overdraft				<u>6,000</u>	
					<u>26,800</u>
			<u>111,000</u>		<u>65,800</u>

Notes

1. X acquired 6,000 ordinary shares in Y on 1 January 20X1. The price paid was \$11,000. The balance on Y's retained earnings at the date of acquisition by X was \$5,000. This included an intangible asset of \$1,000 (see note 4 below). Goodwill on consolidation is retained at cost in the group statement of financial position. There has been no

evidence of impairment since acquisition. X made a long-term loan of \$10,000 to Y on the same date.

2. On 31 December 20X4 there was cash in transit from Y to X of \$2,000.
3. On 31 December 20X4 the inventory of Y included \$4,800 of goods purchased from X. X had invoiced these goods at cost plus 25%.
4. The intangible asset of Y does not satisfy the recognition criteria laid down in IAS 38. IAS 38 is to be followed in preparing the consolidated accounts.
5. It is the group's policy to value non-controlling interests at its proportionate share of the fair value of the subsidiary's identifiable net assets.

Requirement

Prepare a consolidated statement of financial position for the X group as at 31 December 20X4.



Question 7

STV owns 75% of the ordinary share capital of its subsidiary TUW. At the group's year end, 28 February 20X7, STV's payables include \$3,600 in respect of inventories sold to it by TUW.

TUW's receivables include \$6,700 in respect of inventories sold to STV. Two days before the year end STV sent a payment of \$3,100 to TUW that was not recorded by the latter until two days after the year end.

Explain, briefly, how the in-transit item should be dealt with as follows in the consolidated statement of financial position at 28 February 20X7.



Question 8

LPD buys goods from its 75% owned subsidiary QPR. QPR earns a mark-up of 25% on such transactions. At the group's year end, 30 June 20X7. LPD had not yet taken delivery of goods, at a sales value of \$100,000, which were despatched by QPR on 29 June 20X7.

Calculate the value of the goods in transit that would appear in the consolidated statement of financial position of the LPD group at 30 June 20X7?

Solutions to Revision Questions

3

Solution 1

Working 1: Goodwill

	\$
Consideration	50,000
Net assets acquired:	
100% × \$45,000	<u>(45,000)</u>
Goodwill	<u>5,000</u>

AB Group: consolidated statement of financial position at 31 December 20X4

	\$	<i>Comment</i>
Non-current assets		
Goodwill	5,000	See working 1
Property, plant and equipment	100,000	70,000 + 30,000
Net current assets	<u>45,000</u>	30,000 + 15,000
	<u>150,000</u>	
Equity		
Share capital	50,000	AB only
Retained earnings	<u>100,000</u>	Retained earnings of AB
	<u>150,000</u>	

Solution 2

Working 1: Retained earnings

Retained earnings for the group = retained earnings of the parent + post-acquisition retained earnings in the subsidiary:

Retained earnings of the parent	112,000
Post-acquisition retained earnings in the subsidiary (29,000 – 25,000)	4,000
	<u>116,000</u>

Tutorial note: goodwill on acquisition is calculated once – upon acquisition.

AB Group: Consolidated statement of financial position at 31 December 20X5

	\$	<i>Comment</i>
Non-current assets		
Goodwill	5,000	As in solution 1
Property, plant and equipment	107,000	75,000 + 32,000
Net current assets	<u>54,000</u>	37,000 + 17,000
	<u>166,000</u>	
Equity		
Share capital	50,000	AB only
Retained earnings	<u>116,000</u>	See working 1
	<u>166,000</u>	

**Solution 3**

First, the group structure must be established. AX owns 30,000 of the 50,000 shares of F: a shareholding of 60%. This means that the NCI is 40% (100% – 60%).

Workings1. *Non-controlling interests*

This is 40% of the net assets of CY at 31 March 20X8: $40\% \times \$80,000 = \$32,000$.

2. *Goodwill on consolidation*

	\$	\$
Consideration		60,000
Net assets at date of acquisition:		
Share capital (\$1 shares)	50,000	
Retained earnings	<u>25,000</u>	
	<u>75,000</u>	
Group share (60%)		<u>45,000</u>
Goodwill		<u>15,000</u>

3. *Retained earnings*

	\$
Retained earnings of AX	125,000
60% of post-acquisition retained earnings of CY: $60\% \times$ (\$30,000 – \$25,000)	<u>3,000</u>
	<u>128,000</u>

AX Group: consolidated statement of financial position at 31 March 20X8

	\$	<i>Comment</i>
Non-current assets		
Goodwill	15,000	See working 2
Property, plant and equipment	<u>175,000</u>	125,000 + 50,000
	190,000	
Net current assets	<u>70,000</u>	40,000 + 30,000
	<u>260,000</u>	
Equity attributable to owners of the parent		
Share capital	100,000	AX only
Retained earnings	<u>128,000</u>	See working 3
	228,000	
Non-controlling interests	<u>32,000</u>	See working 1
	<u>260,000</u>	



Solution 4

Workings

1. Goodwill on consolidation

	\$
Consideration transferred	60,000
NCI at fair value	<u>28,000</u>
	88,000
Net assets at acquisition:	
Share capital	(50,000)
Retained earnings	<u>(25,000)</u>
Goodwill on acquisition	<u>13,000</u>

2. Non-controlling interests

NCI at 31 March 20X8 = NCI at date of acquisition + share of post-acquisition profits:

At date of acquisition	28,000
Post-acquisition profit share:	
40% × (\$30,000 – \$25,000)	2,000
At 31 March 20X8	30,000

3. Retained earnings

	\$
Retained earnings of AX	125,000
Post acquisition retained earnings:	
(\$30,000 – \$25,000) × group share 60%	<u>3,000</u>
	<u>128,000</u>

	\$	<i>Comment</i>
Non-current assets		
Goodwill	13,000	See working 1
Property, plant and equipment	<u>175,000</u>	125,000 + 50,000
	188,000	
Net current assets	<u>70,000</u>	40,000 + 30,000
	<u>258,000</u>	
Equity attributable to owners of the parent		
Share capital	100,000	AX only
Retained earnings	<u>128,000</u>	See working 3
	228,000	
Non-controlling interest	<u>30,000</u>	See working 1
	<u>258,000</u>	

**Solution 5****A – consolidated statement of financial position as at 30 . 6 . X4**

	\$	\$
ASSETS		
Non-current assets		
Goodwill (W3)		–
Property, plant and equipment		<u>13,800</u>
		13,800
Current assets		
Inventories	30,000	
Trade receivables	46,000	
Cash in transit	2,000	
Bank balance	<u>20,000</u>	
		<u>98,000</u>
		<u>111,800</u>
EQUITY + LIABILITIES		
Equity		
Issued capital		40,000
Retained earnings (W4)		<u>28,240</u>
		68,240
Non-controlling interests (W2)		3,560
Current liabilities		
Trade payables	34,000	
Bank overdraft	<u>6,000</u>	
		<u>40,000</u>
		<u>111,800</u>

Workings

- Group structure*
A owns 6,400 of B's 8,000 shares. This represents a holding of 80%.
- Non-controlling interests*
 $20\% \times \$17,800 = \$3,560$
- Goodwill on consolidation (all written off)*
 $\$10,000 - 80\% (\$8,000 + \$1,000) = \$2,800$
- Consolidated retained earnings*

	\$
Retained earnings of A	24,000
80% of post-acquisition retained earnings of B ($\$9,800 - \$1,000 = \$8,800$)	7,040
Goodwill written off (W3)	<u>(2,800)</u>
	<u>28,240</u>



Solution 6

X – consolidated statement of financial position as at 31.12 . X4

	\$	\$
ASSETS		
Non-current assets		
Goodwill on consolidation (W5)		2,000
Property, plant and equipment		<u>53,800</u>
		55,800
Current assets		
Inventories (W3)	29,040	
Trade receivables	45,750	
Cash in transit (W7)	2,000	
Bank balance	<u>20,000</u>	
		<u>96,790</u>
		<u>152,590</u>
EQUITY + LIABILITIES		
Equity		
Ordinary shares of \$1		40,000
Retained earnings (W6)		<u>23,790</u>
		63,790
Non-controlling interest (W4)		4,250
Non-current liabilities		
Interest bearing borrowings (X + Y – 10,000)		40,000
Current liabilities		
Trade payables	38,300	
Interest payable (W8)	250	
Bank overdraft	<u>6,000</u>	
		<u>44,550</u>
		<u>152,590</u>

Workings

1. *Group structure*

X owns 6,000 out of 8,000 Y shares and so owns 75%.

2. *Pre-consolidation adjustment*

Group policy does not recognise the intangible assets that are in Y's own statement of financial position. This makes the retained earnings of Y at the year end date \$9,000 (\$11,000 – \$2,000) and the retained earnings of Y at the date of acquisition \$4,000 (\$5,000 – \$1,000).

3. *Unrealised profit in inventory*

Profit element is 25% of the cost to X, or 25/125 of the selling price charged by X, which is also the cost to Y.

Therefore the unrealised profit is $25/125 \times \$4,800 = \960 . There is no Non-controlling interest since the profit is made by the parent. Consolidated inventories are reduced by \$960.

4. *Non-controlling interests*

$25\% \times (\$19,000 - \$2,000) = \$4,250$. Remember the accounting policy adjustment!

5. *Goodwill*

Total goodwill is $\$11,000 - [75\% (\$8,000 + \$4,000)] = \$2,000$. Pre-acquisition retained earnings are reduced by \$1,000 for the intangible asset.

6. *Consolidated retained earnings*

	\$
retained earnings of X	21,000
75% of post-acquisition retained earnings of Y as adjusted ($\$9,000 - \$4,000$)	3,750
Unrealised profit in inventory (W3)	<u>(960)</u>
	<u>23,790</u>

7. *Intra-group balances*

The intra-group balances (receivables/payables) are cancelled out on consolidation and cash in transit of \$2000 represents the difference.

8. *Interest payable*

Half of the interest payable by Y is due to X as X invested \$10,000 in the borrowings of Y. This intercompany amount (\$250) is eliminated on consolidation.

**Solution 7**

The payment of \$3,100 is correctly deducted from STV's bank but the corresponding payable held by TUW does not yet reflect it. The cash in transit should be recognised at \$3,100 and the intra-company accounts agreed and eliminated in the consolidated accounts (dr payables, cr receivables).

**Solution 8**

The value of the goods in transit should be at the cost to the group, ie less any unrealised profit. The profit on \$100,000 sales is \$20,000 ($\$100,000 \times 25/125$) and so the goods in transit should be held at \$80,000.