The Consolidated Income Statements of Comprehensive Income and Changes in Equity

# The Consolidated Income Statements of Comprehensive Income and Changes in Equity 

## Learning Outcomes

After studying this chapter students should be able to:

- prepare a consolidated income statement and a consolidated statement of comprehensive income;
- prepare a consolidated statement of changes in equity;
- account for intra-group transactions;
- apply the concepts of fair value at the point of acquisition.


### 4.1 Introduction

The previous two chapters introduced some of the basic principles of consolidation accounting and applied them to the preparation of a consolidated statement of financial position. This chapter extends the application of the principles to the preparation of a consolidated statement of comprehensive income and statement of changes in equity.

Section 4.2 introduces the changes made by IAS 1 (revised) in respect of the income statement. Section 4.3 examines the basic principles of preparing the consolidated statements. Section 4.4 looks at the treatment of intra-group finance costs arising from investments in preference shares and loans. Section 4.5 covers the elimination of intra-group trading in the consolidated income statement. Section 4.6 revisits the issue of adjusting for fair value and changes in accounting policy, applied to the consolidated statement of comprehensive income.

### 4.2 IAS 1 (revised) Presentation of financial statements

IAS 1 has been in issue in one form or another for many years. The content of IAS 1 does not form part of the F2 syllabus, and its provisions will not be examined directly in the form of specific questions. However, its presentation requirements will affect the way many F2 questions and answers are set out, and to that extent it is pervasive.

IAS 1 was revised in September 2007 and entities are required to apply it for accounting periods beginning on or after 1 January 2009. The requirements of the revised standard will be followed in this study system.

The principal changes in financial statement presentation are briefly explained below.

## Presentation of the income statement and statement of changes in equity (SOCIE).

Prior to the issue of the revised IAS 1, entities were required to present an income statement that included items of income and expense recognised in profit or loss. Any other items of income and expenditure, i.e. those not recognised in profit or loss, were to be presented in the SOCIE, together with owner changes in equity (such as increases in share capital and dividends paid).

IAS 1 (revised) draws a distinction between owner changes in equity and all other items of income and expense (which are known as 'comprehensive income'). IAS 1 (revised) requires that all non-owner changes in equity should be presented either in:

- A single statement of comprehensive income

Or

- Two statements, one being an income statement and the other a statement of comprehensive income.


## The SOCIE is to be used exclusively for presenting changes in owner equity.

The lower part of the single statement or the statement of comprehensive income are used to present items of income or expense that IFRS require to be recognised outside profit or loss such as translation differences relating to foreign operations and gains or losses on available-for-sale investments.

The IASB would have preferred a single statement of comprehensive income, but the Board's constituents who responded to the exposure draft preceding IAS 1 (revised) mostly preferred the use of two statements.

A pro-forma example showing the headings to be used in a statement of comprehensive income is shown below. This is taken from the illustrative examples in IAS 1 (revised).

## Statement of comprehensive income

|  | $\$$ |
| :--- | :--- |
| Revenue | X |
| Cost of sales | X |
| Gross profit | X |
| Other income | X |
| Distribution costs | X |
| Administrative expenses | X |
| Other expenses | X |
| Finance costs | X |
| Share of profit of associates | X |
| Profit before tax | X |
| Income tax expense | X |
|  | X |
| Other comprehensive income: | X |
| Exchange differences on translating foreign operations | X |
| Available-for-sale financial assets | X |
| Cash flow hedges |  |
| Gains on property revaluation | X |
| Actuarial gains/(losses) on defined benefit pension plans | X |


| Share of other comprehensive income of associates | X |
| :--- | :--- |
| Income tax relating to components of other comprehensive income | X |
| Other comprehensive income for the year, net of tax | X |
| TOTAL COMPREHENSIVE INCOME FOR THE YEAR | -X |
| Profit attributable to: | X |
| Owners of the parent | $\frac{\mathrm{X}}{\mathrm{X}}$ |
| Non-controlling interests | X |
| Total comprehensive income attributable to: | $\underline{\mathrm{X}}$ |
| Owners of the parent | $\underline{X}$ |

Where the two statement option is adopted, the statement above is split after PROFIT FOR THE YEAR. The upper part of the statement is the income statement, followed by a split of profit attributable to the owners of the parent and non-controlling interests. The lower part of the statement is the statement of comprehensive income, followed by a split of the total comprehensive income attributable to the owners of the parent and the non-controlling interests.
For the purposes of this study system an income statement will be presented unless the questions or example specifically includes an item or transaction that would be recorded in other comprehensive income, whereby we will adopt the single statement approach of producing a statement of total comprehensive income.

### 4.3 Basic principles

We discussed the underlying rationale for consolidated financial statements in Chapter 2. The objective is to present one set of financial statements for all entities under common control. In the context of the income statement, this means presenting the results of all group entities in one income statement. As far as the consolidated statement of changes in equity is concerned, this means just one statement dealing with all the entities in the group.

The majority of the figures are simple aggregations of the results of the parent entity and all the subsidiaries. Non-controlling interests are ignored in the aggregations, as with the statement of financial positions we have already studied in chapter 3.

Intra-group investment income is eliminated. This is because intra-group investment income is replaced by the underlying profits and losses of the group entities.

The figure of profit for the period is split into the amounts attributable to equity holders of the parent and to non-controlling interest. IAS 1 requires that the split should be disclosed on the face of the income statement or statement of comprehensive income.

The statement of changes in equity, according to IAS 1, should show amounts attributable to the equity holders of the parent, and, in a separate column, the amounts attributable to non-controlling interest.

## Example 4.A

Draft income statements for the year ended 31 December 20X4

|  | Acquirer | Swallowed |
| :--- | :---: | :---: |
| Revenue | $\$$ | $\$$ |
| Cost of sales | 600,000 | 300,000 |
| Gross profit | $\frac{(420,000)}{180,000}$ | $\underline{(230,000)}$ |
| Distribution costs | $(50,000)$ | $(25,000$ |


| Administrative expenses | $(50,000)$ | $(22,000)$ |
| :--- | :---: | :---: |
| Profit from operations | 80,000 | 23,000 |
| Investment income | 4,000 | - |
| Finance cost | $(8,000)$ | $\underline{(3,000)}$ |
| Profit before tax | $\underline{76,000}$ | $\underline{20,000}$ |
| Income tax expense | $\underline{(30,000)}$ | $\underline{(8,000)}$ |
| Profit for the year | $\underline{46,000}$ | $\underline{12,000}$ |

Summarised statements of changes in equity for the year ended 31 December 20X4

|  | Acquirer | Swallowed |
| :--- | :---: | :---: |
|  | $\$$ | $\$$ |
| Balance at start of year | 78,000 | 48,000 |
| Profit for the year | 46,000 | 12,000 |
| Dividends | $\underline{(20,000)}$ | $\underline{(5,000)}$ |
| Balance at end of year | $\underline{104,000}$ | $\underline{55,000}$ |

Acquirer purchased 16,000 of the 20,000 issued \$1 shares in Swallowed on 31 December 20X1 for $\$ 33,000$. The balance on Swallowed's equity at that date was $\$ 35,000$ lissued share capital $\$ 20,000$ plus retained earnings $\$ 15,000$ ). There has been no impairment of goodwill since acquisition.

Prepare a consolidated income statement and a consolidated statement of changes in equity for the Acquirer group for the year ended 31 December 20X4.

## Solution

Before we prepare the income statement itself we should note that:

- Acquirer owns 16,000 of Swallowed's 20,000 issued $\$ 1$ shares so this makes Swallowed an $80 \%$ subsidiary.


## Consolidated income statement

| Revenue | 900,000 | $A+S$ |
| :---: | :---: | :---: |
| Cost of sales | (650,000) | $A+S$ |
| Gross profit | 250,000 |  |
| Distribution costs | (75,000) | $A+S$ |
| Administrative expenses | (72,000) | $A+S$ |
| Profit from operations | 103,000 |  |
| Finance cost | (11,000) | $A+S:$ |
| Profit before tax | 92,000 |  |
| Income tax expense | $(38,000)$ | $A+S$ |
| Profit for the period | 54,000 |  |
| Atributable to: <br> Equity holders of the parent | $\begin{gathered} \$ \\ 51,600 \end{gathered}$ |  |
| Non-controlling interest $(20 \% \times$ profit of $S$ only) | $\frac{2,400}{54,000}$ |  |

## Consolidated statement of changes in equity

Balance at start of year (W1)
Profit for the period
Dividends (W2)
Balance at end of year

| Attributable to equity <br> holders of the parent | Non-controlling <br> interestt | Total equity |
| :---: | :---: | :---: |
| $\$$ | $\$$ | $\$$ |
| 88,400 | 9,600 | 98,000 |
| 51,600 | 2,400 | 54,000 |
| $\underline{(20,000)}$ | $\underline{(1,000)}$ | $\underline{(21,000)}$ |
| $\underline{120,000}$ | $\underline{131,000}$ |  |

## Workings

1. Balance at the start of the year

Attributable to equity holders of the parent:

|  | $\$$ |
| :--- | :---: |
| Acquirer | 78,000 |
| Swallowed $(80 \% \times[\$ 48,000-\$ 35,000])$ | $\underline{10,400}$ |
| $\underline{88,400}$ |  |

The balance attributable to the non-controlling interest is $20 \%$ of Swallowed's brought forward balance: $\$ 48,000 \times 20 \%=\$ 9,600$
2. Dividends

The amount paid to the minority was $\$ 5,000 \times 20 \%=\$ 1,000$
Note that the non-controlling interest carried forward represents 20\% of the equity in Swallowed: $\$ 55,000 \times 20 \%=\$ 11,000$.
The disclosure requirements in IAS 1 require that the amounts attributable to equity holders of the parent are broken down into share capital and the different categories of reserves. However, this question does not provide sufficient information for full disclosure.

### 4.4 Investments in preference shares and loans

Investment by the parent in loans to its subsidiary means that there will be an intra-group finance cost as well as intra-group dividends. These will cancel out in the same way. The only difference is that loan interest receivable from a subsidiary will cancel out against the finance cost of that subsidiary rather than against dividends. The same principle is followed in respect of preference shares. Preference shares, as noted in Chapter 3, will almost always be classfied as liabilities, rather than equity, and so preference dividends constitute part of the finance cost.

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Note to illustrate the format of the statement of comprehensive income, the following example includes other comprehensive income in the period, being a revaluation gain. The format followed, therefore is that of the single statement of comprehensive income.

## Example 4.B

Statements of comprehensive income for the year ended 31 December 20X5

|  | $A$ | $B$ |
| :--- | ---: | :---: |
|  | $\$$ | $\$$ |
| Profit from operations | 100,000 | 30,000 |
| Investment income | 6,000 | - |
| Finance cost <br> Profit before tax <br> Income tax expenses <br> Profit for the period <br> Other comprehensive <br> income: <br> Gain on revaluation of | $\underline{(11,000)}$ | $\underline{(7,000)}$ |
| property (net of tax) | $\underline{(38,000}$ | $\underline{23,000)}$ |
| Total comprehensive <br> income | 57,000 | $\underline{(13,000)}$ |

Summarised statements of changes in equity for the year ended 31 December 20X5

|  | $A$ | $B$ |
| :--- | :---: | :---: |
|  | $\$$ | $\$$ |
| Balance at start of period | 152,000 | 65,000 |
| Total comprehensive | 62,000 | 15,000 |
| income for the period |  |  |
| period <br> Dividends - ordinary shares <br> Balance at end of period | $\underline{(10,000)}$ | $\underline{(15,000)}$ |
| $\underline{75,000}$ |  |  |

## Additional information

A made its investments in $B$ on 1 January 20X3 when the statement of financial position of $B$ showed the following:

|  | $\$$ |
| :--- | :---: |
| Ordinary share capital $-\$ 1$ shares | 25,000 |
| Preference share capital $-\$ 1$ shares | 20,000 |
| Reserves | $\underline{12,000}$ |
|  | $\underline{57,000}$ |

The cost of investing in the shares of $B$ was:

- \$27,700 for 15,000 ordinary shares;
- \$5,200 for 5,000 preference shares.

On 1 Janvary 20X3 A provided 50\% of B's loans. The finance cost of $\$ 7,000$ in B relates both to the preference share dividend $(2,000)$ and loan interest $(5,000)$.

## Solution

The first step is to establish the group structure and reconcile the investment income that is included in A's income statement. You may ask: Why bother with the reconciliation if we're going to eliminate A's investment income anyway? There are two reasons:

- We only eliminate intra-group investment income. Entity A may have some income from trade investments.
- When the investment income is partly interest and partly dividends then the elimination has different consequences.

The table below shows the position regarding A's three-part investment in B.

| Investment type | A's share | Total finance <br> cost/dividend <br> I | A's share of total |
| :--- | :---: | :---: | :---: |
| Loans | $50 \%$ | 5,000 | $\$$ |
| Preference shares | $25 \%$ | 2,000 | 2,500 |
| Ordinary shares | $60 \%$ | 5,000 | 500 |
|  |  |  | $\underline{3,000}$ |

You can see that in this case all of the investment income is intra-group and so should be eliminated.

## Consolidated statement of comprehensive income

Profit from operations
Finance cost
Profit before tax
Tax
Profit for the period
\$ Comments
130,000
$115,000)$
115,000
$\begin{array}{r}(48,000) \\ \hline 67,000 \\ \hline\end{array}$
$A+B$
$A+B$
$A+B 2$ inter-group finance cost of $\$ 2,500+\$ 500$

Other comprehensive income:
Gain on revoluation of property
(net of tax)
7,000
Total comprehensive income (TCI)
74,000

| Profit attributable to: | $\$$ |  |
| :--- | :---: | :--- |
| Owners of the parent | 61,800 |  |
| Non-controlling interest | $\frac{5,200}{67,000}$ | See working 1 |
|  | $\$$ |  |
| TCl attributable to: | 68,000 |  |
| Owners of the parent | $\underline{6,000}$ | See working 1 |
| Non-controlling interest | $\underline{74,000}$ |  |

Consolidated statement of changes in equity

|  | Atributable to equity <br> holders of the parent | Non-controlling <br> interestt | Total equity <br> $\$$ |
| :--- | :---: | :---: | :---: |
| $\$ 156,800$ | 18,000 | 174,800 |  |
| Balance at the start of the year (W2) | 68,000 | 6,000 | 74,000 |
| Total comprehensive income for the <br> period <br> Dividends (W3) <br> Balance at the end of the year | $\underline{(10,000)}$ | $\underline{(214,800}$ | $\underline{(2,000)}$ |

## Workings

1. Non-controlling interest in consolidated statement of comprehensive income

In profit for the period \$13,000 $\times 40 \%=\$ 5,200$
In total comprehensive income for the period $=\$ 5,200+(40 \% \times \$ 2,000)=\$ 6,000$
The owners share of TCI is the balance $\$ 74,000-\$ 6,000=\$ 68,000$ and represents their share of the profit of $\$ 61,800+$ A's revaluation gain $\$ 5,000+60 \%$ of B's gain $\$ 1,200$
2. Balance of equity at the start of the period

Attributable to equity shareholders of the parent:

|  | $\$$ |
| :--- | ---: |
| A | $\$ 00$ |
| B $[60 \% \times(\$ 65,000-\$ 57,000)]$ | 152,000 |
|  | $\underline{4,800}$ |

Atributable to NCI :

Share of balance of equity $[40 \% \times(\$ 65,000-\$ 20,000)]$
$\$$
18,000
3. Dividends paid to the NCl :

Ordinary shares $(\$ 5,000 \times 40 \%)$ 2,000
The closing balance in respect of the NCl in the statement of changes in equity can be proved as follows:

Share of balance of equity $(40 \% \times[75,000-20,000$ preference shares]) 22,000

### 4.5 Intra-group trading

There is no need to worry about cancellation of intra-group balances for the consolidated income statement. This is clearly a statement of financial position issue. Intra-group trading will be of relevance in the consolidated income statement to the extent that one group
entity provides goods or services for another group entity. In these circumstances there are clearly income and costs that are wholly intra-group.

Intra-group revenue must be eliminated in full from revenue. This is the case whatever has subsequently happened to any goods that are sold by one group entity to another. Unless there is unrealised profit on unsold inventory (see below) then the adjustment to costs is the same as the adjustment to revenue.

We have already seen from our studies of the consolidated statement of financial position (see Chapter 3) that unrealised profit on intra-group revenue must be eliminated from closing inventory and profit. Unrealised profit on intra-group revenue is deducted from gross profit. The adjustment to cost of sales is the difference between the adjustment to revenue and the adjustment to gross profit.

Where there is unrealised profit brought forward then this amount will have been charged against the consolidated reserves of previous years. Therefore the charge to gross profit for the year is the movement on the provision for unrealised profit.

Where the unrealised profit is made by a subsidiary in which there is a non-controlling interest then a share of the charge to the consolidated income statement is made against the non-controlling interest.

## Example 4.C

Income statements of PQR and its subsidiary XYZ for the year ended 31 December 20X1

|  | $P Q R$ | XYZ |
| :--- | :---: | :---: |
|  | $\$ \prime 000$ | $\$ ' 000$ |
| Revenue | 125,000 | 50,000 |
| Cost of sales | $\frac{(50,000)}{75,000}$ | $\underline{(20,000)}$ |
| Gross profit | $(10,000)$ | $(4,000$ |
| Distribution costs | $\underline{(8,000)}$ | $\underline{(3,200)}$ |
| Administrative expenses | 57,000 | 22,800 |
| Profit from operations | 3,180 | - |
| Investment income | $\underline{(24,500)}$ | $\underline{(7,750)}$ |
| Finance cost | $\underline{35,680}$ | $\underline{15,050}$ |
| Profit before taxation | $\underline{(14,000)}$ | $\underline{(7,000)}$ |
| Income tax | $\underline{8,050}$ |  |
| Profit for the period |  |  |

Summarised statements of changes in equity for PQR and XYZ

|  | $P Q R$ | XYZ |
| :--- | :---: | ---: |
|  | $\$ \prime 000$ | $\$ \prime 000$ |
| Balance at 1 January 20X1 | 76,700 | 50,300 |
| Profit for the period | 21,680 | 8,050 |
| Ordinary dividends | $\underline{(8,000)}$ | $\underline{(2,100)}$ |
| Balance at 31 December 20X1 | $\underline{90,380}$ | $\underline{56,250}$ |

## Other information

1. Included in the revenue of $X Y Z$ is $\$ 5$ million in respect of sales to $P Q R$. $X Y Z$ earns a profit of $25 \%$ on cost. These are sales of components that $X Y Z$ has been supplying to $P Q R$ on a regular basis for a number of years. The amount included in the inventory of $P Q R$ in respect of goods purchased from $X Y Z$ at the beginning and end of the year was as follows:

| Date | Inventory of components in PQR's books |
| :---: | :---: |
| $31.12 . \times 1$ | $\$ ' 000$ |
| $31.12 . X 0$ | 800 |
|  | 600 |

2. At the date of PQR's investment in $X Y Z$ the statement of financial position of $X Y Z$ showed:

|  | $\$ \prime 000$ |
| :--- | :---: |
| Ordinary share capital (1 \$ shares) | 25,000 |
| Reserves | $\underline{22,500}$ |
|  | $\underline{47,500}$ |

PQR bought 20 million ordinary shares in $X Y Z$ at a cost of $\$ 27$ million. On the same date PQR purchased $25 \%$ of the loan stock of $X Y Z$.

XYZ's finance cost for the year ended 31 December 20X1 comprised the following:

|  | $\$ \prime 000$ |
| :--- | :--- |
| Loan stock interest | 6,000 |
| Interest payable on short-term borrowings | $\underline{1,750}$ |
|  | $\underline{7,750}$ |

## Solution

1. PQR owns $80 \%$ of the ordinary shares of $X Y Z$ and $25 \%$ of the loans. The intra-group investment income that PQR credits in its own income statement is:

- Loan stock interest $\$ 1,500,000(25 \% \times \$ 6,000,000)$
- Dividends \$1,680,000 (80\% $\times$ \$2,100,000)
- Total $=\$ 3,180,000$

2. Intra-group sales of $\$ 5$ million will be eliminated from revenue and cost of sales:

DR Group revenue \$5,000,000
CR Group cost of sales \$5,000,000
There is unrealised profit on both opening and closing inventory:

- Unrealised profit on closing inventory $=\$ 160,000(25 / 125 \times \$ 800,000)$
- Unrealised profit on opening inventory $=\$ 120,000(25 / 125 \times \$ 600,000)$

So the movement on unrealised profit and the deduction from gross profit for the year is $\$ 40,000$.

- DR Group cost of sales \$40,000
- CR Provision for unrealised profit \$40,000

Consolidated income statement of the PQR Group for the year ended 31 December 20X1

|  | \$'000 | Comments |
| :---: | :---: | :---: |
| Revenue | 170,000 | PQR + XYZ - \$5 million |
| Cost of sales | $\underline{(65,040)}$ | PQR + XYZ - \$5 million + \$40,000 |
| Gross profit | 104,960 |  |
| Distribution costs | $(14,000)$ | PQR + XYZ |
| Administrative expenses | $(11,200)$ | PQR + XYZ |
| Finance costs | $(30,750)$ | PQR + XYZ + (\$6 million $\times 75 \%$ ) |
| Profit before tax | 49,010 |  |
| Income tax | (21,000) | PQR + XYZ |
| Profit for the period | 28,010 |  |

Attributable to:
Equity holders of parent
26,408
Non-controlling interest
$\frac{1,602}{\underline{28,010}}$ (working 1)

Consolidated statement of changes in equity of the PQR Group for the year ended 31 December 20X1

|  | Atributable to equity <br>  <br> holders of parent | Non-controlling <br> interest | Total |
| :--- | :---: | :---: | :---: |
|  | $\$ \prime 000$ | $\$ \prime 000$ | $\$ 000$ |
| Balance at start of period (working 2) | 78,844 | 10,036 | 88,880 |
| Profit for the period | 26,408 | 1,602 | 28,010 |
| Dividends (working 3) | $\underline{(8,000)}$ | $\underline{(420)}$ | $\underline{18,420)}$ |
| Balance at end of period | $\underline{97,252}$ | $\underline{11,218}$ | $\underline{108,470}$ |

## Working 1

Profit altributable to non-controlling interest in income statement:

|  | $\$ \prime 000$ |
| :--- | :--- |
| Profit for the period per XYZ income statement | 8,050 |
| Less: increase in provision for unrealised profit | $\frac{140)}{8,010}$ |
| Non-controlling interest (20\%) | $\underline{\underline{1,602}}$ |

Working 2
Balance at start of period: attributable to equity holders of parent:

|  | $\$$ '000 |
| :--- | :---: |
| In PQR's own statement of changes in equity | 76,700 |
| Share of XYZ's post-acquisition earnings $(50,300-47,500-120) \times 80 \%$ | 2,144 |
|  | $\underline{78,844}$ |

Balance at start of period: attributable to non-controlling interest

$$
\begin{array}{cc} 
& \$ ' 000 \\
(50,300-120) \times 20 \% & 10,036
\end{array}
$$

Working 3
Dividends paid to non-controlling interest: $(\$ 2,100 \times 20 \%)=420$

### 4.6 Adjustments for fair value or to reflect changes in accounting policy

We saw when we studied these aspects in the preparation of the consolidated statement of financial position that the consolidation technique to apply was essentially the same.

The effects of the adjustments will frequently impact on the profit for the year. This may be because, for example, the group charge for depreciation needs to be increased due to the fair value of the non-current assets of an acquired subsidiary being larger than the carrying value on acquisition.

As we saw in Chapter 3 such adjustments affect the retained earnings of the subsidiary for consolidation purposes, both at the date of acquisition and at the statement of financial position date. Therefore we will need to allow for the effect of these adjustments when computing goodwill on consolidation and opening consolidated equity.

## Example 4.D

Income statements of $A$ and its subsidiaries $B$ and $C$ for the year ended 31 December 20X8

|  | $A$ | $B$ | $C$ |
| :--- | :---: | :---: | :---: |
|  | $\$, 000$ | $\$ \prime 000$ | $\$ \prime 000$ |
| Revenue | $56,000)$ | $52,000)$ | 44,000 |
| Cost of sales | $\underline{(3,000)}$ | $\underline{(23,000)}$ | $\underline{(24,000)}$ |
| Gross profit | $26,000)$ | $24,000)$ | 20,000 |
| Other operating expenses | $(13,000)$ | $(12,000)$ | $(10,000)$ |
| Investment income | 4,000 |  |  |
| Finance cost | $\underline{(3,000)}$ | $\underline{(2,000)}$ | $\underline{(1,800)}$ |
| Profit before tax | $\underline{14,000}$ | $\underline{10,000)}$ | $\underline{(2,500)}$ |
| Tax | $\underline{(5,000)}$ | $\underline{(3,000)}$ | $\underline{7,000}$ |
| Profit for the period | $\underline{9,700}$ |  |  |
|  |  |  | $\underline{0}$ |

Notes
A acquired $80 \%$ of the ordinary shares of B on 1 January $20 \times 5$ and $75 \%$ of the ordinary share capital of $C$ on 1 January 20X6. Details of the cost of the investments and the net assets at the date of acquisition as shown in the statement of financial positions of B and C are given below.

|  | $B$ | $C$ |
| :--- | :---: | :---: |
|  | $\$ \prime 000$ |  |
|  | $\underline{36,000}$ |  |
| Cost of investment | $\underline{25,500}$ |  |
| Net assets at the date of acquisition | $\underline{30,000}$ |  |
| $\quad$ Share capital | 15,000 |  |
| Share premium | $\underline{8,000}$ |  |
| Retained earnings | $\underline{38,000}$ | $\underline{6,000}$ |
|  | $\underline{27,000}$ |  |

At the dates of acquisition of B and C the fair values of the non-current assets of the companies were $\$ 4$ million and $\$ 3$ million respectively in excess of their carrying values in their financial statements. The non-current assets had an estimated future useful economic life of 5 years. The non-current assets are fully depreciable and the depreciation is charged to cost of sales. None of these non-current assets had been sold by 31 December 20X8. Goodwill on both acquisitions has remained unimpaired. B and C paid a dividend to ordinary shareholders of $\$ 3$ million and $\$ 2$ million respectively in the year to 31 December 20X8.

Prepare the consolidated income statement of the A group for the year ended 31 December 20X8.

## Solution

The question gives us the group structure. The key issue we need to resolve prior to actually preparing the consolidated income statement is the calculation of the fair value adjustments. The fair-value adjustments will affect goodwill and depreciation. Since the non-current assets that caused the fair-value adjustment have a useful economic life of 5 years the total additional depreciation is $\$ 1,400,000$, that is, $(\$ 4,000,000+\$ 3,000,000) / 5$.
The intra-group investment income that is eliminated is:

- $\$ 2,400,000$ from $B(80 \% \times \$ 3$ million) ;
- $\$ 1,500,000$ from C ( $75 \% \times \$ 2$ million);

This means that \$100,000 remains.
We now proceed to the consolidated income statement.

|  | \$'000 | Comments |
| :---: | :---: | :---: |
| Revenue | 152,000 | $A+B+C$ |
| Cost of sales | $(83,400)$ | $A+B+C+\$ 800,000+\$ 600,000$ (extra dep'n) |
| Gross profit | 68,600 |  |
| Other operating expenses | $(35,000)$ | $A+B+C$ |
| Investment income | 100 | A's income from trade investments |
| Finance cost | (6,800) | $A+B+C$ |
| Profit before tax | 26,900 |  |
| Tax | (10,500) | $A+B+C$ |
| Profit for the period | 16,400 |  |
| Attributable to: | \$'000 |  |
| Equity holders of the parent | 13,885 |  |
| Non-controlling interest | 2,515 | (See working) |
|  | 16,400 |  |

## Working: Non-controlling interest

- B $-20 \% \times(\$ 7,000,000-\$ 800,000)=\$ 1,240,000$.
- $C-25 \% \times(\$ 5,700,000-\$ 600,000)=\$ 1,275,000$.

Total \$2,515,000.

### 4.7 Summary

This chapter has explained various aspects involved in preparing a consolidated statement of comprehensive income, the consolidated income statement and a statement of changes in equity. Students will have noted that the treatment of these items is consistent with their treatment in the consolidated statement of financial position.

This examination may contain long questions ( 25 or 50 marks) that require the preparation of a consolidated income statement/statement of comprehensive income and possibly a consolidated statement of changes in equity only. It is likely that such questions would contain additional complications that we will be covering in later chapters, such as acquisitions or disposals part-way through the year, and the inclusion of interests in joint ventures or associates. The long questions at the end of this chapter are, therefore, not fully representative of the range of issues that would arise in a practical consolidation questions. They are included here because they are useful for practice. The examination standard questions are contained in the section called preparing for the examination.

## Revision Questions

## Question 1

Draft statements of comprehensive income and summarised statements of changes in equity of $\mathbf{H}$ and its subsidiary $S$ for the year ended 31 December 20X4

|  | H | $S$ |
| :---: | :---: | :---: |
|  | \$'000 | \$'000 |
| Revenue | 2,100 | 1,200 |
| Cost of sales | $(1,850)$ | $(1,066)$ |
| Gross profit | 250 | 134 |
| Distribution costs | (50) | (20) |
| Administrative expenses | (30) | (14) |
| Investment income | 16 | - |
| Profit before tax | 186 | 100 |
| Income tax expense | (80) | (40) |
| Profit for the period | 106 | 60 |
| Other comprehensive income: |  |  |
| Gains from revaluation (net of tax) | 16 | 10 |
| Total comprehensive income (TCI) | 122 | 70 |
| Opening equity | 140 | 70 |
| TCI for the period | 122 | 70 |
| Dividends | (40) | (20) |
| Closing equity | 222 | 120 |

H purchased $80 \%$ of the shares in $S$ when S's equity (share capital plus retained earnings) was $\$ 40,000$. Goodwill of $\$ 12,000$ was fully written off to consolidated retained earnings at 31.12 . X3, following an impairment review.

## Requirement

Prepare the consolidated income statement and the consolidated statement of changes in equity of the H group for the year ended 31 December 20X4.

## Question 2

Draft income statements and summarised statements of changes in equity of Hope and its subsidiary Despair for the year ended 30 June 20X7

|  | Hope <br> $\$$ | Despair <br> $\$$ |
| :--- | :---: | :---: |
| Revenue | 159,800 | 108,400 |
| Cost of sales | $\underline{(79,200)}$ | $\underline{(61,600)}$ |
| Gross profit | 80,600 | 46,800 |
| Administrative expenses | $(27,000)$ | $(16,000)$ |
| Investment income: |  |  |
| $\quad$ Ordinary dividend | 9,000 | - |
| $\quad$ Loan interest | 1,000 | 1,500 |
| Finance cost | $\underline{(6,000)}$ | $\underline{(4,000)}$ |
| Profit before tax | $\underline{57,600}$ | 28,300 |
| Income tax expense | $\underline{29,400)}$ | $\underline{(14,800)}$ |
| Profit for the period | $\underline{13,500}$ |  |
| Opening equity | $\underline{133,400}$ | 53,600 |
| Profit for the period | 28,200 | 13,500 |
| Ordinary dividends | $\underline{(15,000)}$ | $\underline{(10,000)}$ |
| Closing equity | $\underline{146,600}$ | $\underline{57,100}$ |

## Other information

1. Hope acquired its interest in Despair as follows:

9,000 of the $10,000 \$ 1$ ordinary shares on 30 June 20X3 when the equity of Despair was $\$ 35,000$ (ordinary shares $\$ 10,000$ plus retained earnings $\$ 25,000$ ).
2. Hope has not provided Despair with any of its loan capital.
3. The revenue of Hope includes $\$ 19,000$ in respect of goods sold to Despair at a price that yielded a profit of $20 \%$ on selling price. $\$ 8,000$ of these goods were in the inventory of Despair at 30 June 20X7. Inventories of such goods at 30 June 20X6 amounted to $\$ 6,000$.

## Requirements

(a) Explain how the investment in Despair should be accounted for the group accounts.
(b) Produce the consolidated income statement and statement of changes in equity.
(17 marks)
(c) Explain the treatment of the intra-group sales between Hope and Despair.

## ? Question 3

(a) On 1 September 20X6, BLT held $60 \%$ of the ordinary share capital of its only subsidiary CMU. The consolidated equity of the group at that date was $\$ 576,600$, of which $\$ 127,000$ was attributable to the non-controlling interest.

On 28 February 20X7, exactly halfway through the financial year, BLT bought a further $20 \%$ of the ordinary share capital of CMU. In the year ended 31 August 20X7 BLT's profits for the period were $\$ 98,970$ and CMU's were $\$ 30,000$. BLT paid a divided of $\$ 40,000$
on 1 July 20X7. There were no other movements in equity. It can be assumed that profits accrue evenly throughout the year.

Prepare a consolidated statement of changes in equity for the BLT group for the year ended 31 August 20X7.
(6 marks)
(b) GPT regularly sells goods to its subsidiary in which it owns $60 \%$ of the ordinary share capital. During the group's financial year ended 31 August 20X7. GPT sold goods to its subsidiary valued at $\$ 100,000$ (selling price) upon which it makes a margin of $20 \%$. By the group's year end $70 \%$ of the goods had been sold to parties outside the group.

Explain, with calculations, the adjustments required to correctly deal with the intragroup trading.

## Solutions to Revision Questions

## Solution 1

(a) Consolidated statement of comprehensive income

|  | \$'000 |
| :---: | :---: |
| Revenue ( $\mathrm{H}+\mathrm{S}$ ) | 3,300 |
| Cost of sales ( $\mathrm{H}+\mathrm{S}$ ) | $\underline{(2,916)}$ |
| Gross profit | 384 |
| Distribution costs ( $\mathrm{H}+\mathrm{S}$ ) | (70) |
| Administrative expenses ( $\mathrm{H}+\mathrm{S}$ ) | (44) |
| Income tax expense | (120) |
| Profit for the period | 150 |
| Profit attributable to: | \$'000 |
| Equity holders of the parent | 138 |
| Non-controlling interest ( $20 \% \times \$ 60$ ) | 12 |
|  | 150 |
| TCI attributable to: | \$'000 |
| Equity holders of the parent | 162 |
| Non-controlling interest ( $20 \% \times \$ 60$ ) | 14 |
| + (20\% $\times$ \$10) | 176 |

Consolidated statement of changes inpp equity

|  | Attributable to <br> equity holders <br> of the parent | $N C I$ | Total |
| :--- | :---: | :---: | :---: |
| equity |  |  |  |

## Workings

1. Balance at the start of the year

Attributable to equity holders of the parent:

Less: goodwill impairment

The balance attributable to the non-controlling interest is $20 \%$ of the brought forward balance of S (i.e., $\$ 70,000 \times 20 \%)=\$ 14,000$

## 2. Dividends

The amount paid to the NCI was $\$ 20,000 \times 20 \%=\$ 4,000$

## Solution 2

(a) Hope owns $90 \%$ of the equity share capital of Despair and therefore is presumed to have control over the operating and financial policies of the entity. Under IAS 27, Despair should be accounted for as a subsidiary of Hope and should be fully consolidated. $100 \%$ of the assets and liabilities of Despair should be included and the $10 \%$ interest held outwith the group should be included separately in both the income statement and the statement of financial position as "non-controlling interests".
(b) Hope Group: Consolidated income statement for the year ended 30 June 20X7

|  | $\$$ |
| :--- | :---: |
| Revenue (H + D - \$19,000 [W1]) | 249,200 |
| Costs of sales (balancing figure) | $\frac{(122,200)}{127,000}$ |
| Gross profit (H + D - \$400 [W1]) | $(43,000)$ |
| Administrative expenses (H + D) | 2,500 |
| Investment income (external only) W2 | $(10,000)$ |
| Finance cost (H + D) | 76,500 |
| Profit before taxation | $\underline{(44,200)}$ |
| Income tax expense (H + D) |  |
| Profit for the period | 30,300 |
| Attributable to: | 1,350 |
| $\quad$ Equity holders of parent | 32,300 |
| $\quad$ Non-controlling interest (W3) |  |

Hope Group: Consolidated statement of changes in equity for the year ended 30 June 20X7

|  | Attributable to equity <br> holders of the parent | Non-controlling <br> interest | Total equity |
| :--- | :---: | :---: | :---: |
| $\$$ | $\$$ | $\$, 360$ | 154,300 |
| Balance at the start of the year (W4) | 148,940 | 1,350 | 32,300 |
| Profit for the period | 30,950 | $\underline{(1,000)}$ | $\underline{(16,000)}$ |
| Dividends (W5) | $\underline{(15,000)}$ | $\underline{164,890}$ | $\underline{170,600}$ |

## Workings

1. Intra-group sales of $\$ 19$ million are adjusted in the consolidated income statement. The adjustment at gross profit level is the movement in the provision for unrealised profit:

- Unrealised profit on closing inventory is $20 \% \times \$ 8,000=\$ 1,600$
- Unrealised profit on opening inventory is $20 \% \times \$ 6,000=\$ 1,200$

So, the movement is $\$ 1,600-\$ 1,200=\$ 400$.
2. The cancellation of investment income is of the intra-group element only (the dividend received by Hope from Despair). The interest income of both entities is not intra-group and so it remains in the consolidated income statement: $\$ 1,000+\$ 1,500=\$ 2,500$.
3. Profit for the period of Despair $\times 10 \%=\$ 13,500 \times 10 \%=\$ 1,350$
4. The opening equity attributable to the equity shareholders of the parent is:

|  | $\$$ |
| :--- | :---: |
| Hope | 133,400 |
| Despair $(90 \% \times \$ 53,600-\$ 35,000)$ | 16,740 |
| Opening PUP on inventory (W1) | $\underline{(1,200)}$ |
|  | $\underline{148,940}$ |

The opening equity attributable to the non-controlling interest is: $10 \% \times \$ 53,600 \quad 5,360$
5. Dividends paid to the NCI: $\$ 10,000 \times 10 \%=\$ 1,000$.
(c) The correct treatment of the intra-group sale is to eliminate it in full from revenue in the consolidated income statement. Where the goods have not been sold on outside the group at the year-end then it is necessary to eliminate any profit made on those goods by the supplying entity (Hope in this case). Where the profit elimination is required at the beginning and end of the year then a net adjustment is required in the consolidated income statement, since the opening provision for unrealised profit will be reversed in the year, assuming that the goods are sold on outside the group. The charge is shared between the group and the non-controlling interest depending on the group interest in the entity making the unrealised profit. In this case the unrealised profit is made by the parent, so no adjustment is required against the non-controlling interest .

## Solution 3

(a) BLT Group: Statement of changes in equity for the year ended 31 August 20X7

|  | Attributable to equity <br> holders of parent | Non-controlling <br> interest | Total |
| :--- | :---: | :---: | :---: |
|  | $\$$ | $\$$ | $\$$ |
| Brought forward | 449,600 | 127,000 | 576,600 |
| Profit for the period (W1) | 119,970 | 9,000 | 128,970 |
| Transfer in respect of shares purchased by BLT | 66,500 | $(66,500)$ |  |
| Dividend | $\underline{(40,000)}$ | $\underline{(40,000)}$ |  |
| Carried forward | $\underline{596,070}$ | $\underline{69,500}$ | $\underline{665,570}$ |

W1 Profit shares
NCI share of profit

| $\$ 30,000 \times 6 / 12 \times 40 \%$ | 6,000 |
| :--- | :--- |
| $\$ 30,000 \times 6 / 12 \times 20 \%$ | $\underline{3,000}$ |
| $\underline{9,000}$ |  |

Group share
$\$ 98,970+(\$ 30,000-9,000)=\$ 119,970$
W2 Transfer in respect of share purchase
Value of non-controlling interest at date of transfer: $\$ 127,000+6,000=\$ 133,000$
$50 \%$ of shareholding transferred: $\$ 133,000 / 2=\$ 66,500$
(b) The full value of the intra-group sales must be eliminated from the group accounts. $\$ 100,000$ will be deducted from both revenue and cost of sales in the consolidated income statement. The unrealised profit of $\$ 6,000(30 \% \times$ profit $(\$ 100,000 \times$ $20 \%)$ ) will be deducted from inventories and charged to cost of sales. (note the goods flow from the parent to the subsidiary and do as the parent has earned the unrealised profits, the NCI of Despair is not affected).

