PART 4

Consolidated accounts
20.1 Introduction

The main purpose of this chapter is to explain the reasons for and how to prepare consolidated financial statements at the date of acquisition.

Objectives

By the end of this chapter, you should be able to:

- explain the need for consolidated financial statements;
- define the meaning of the term ‘subsidiary’;
- prepare consolidated accounts at the date of acquisition and calculate goodwill for a wholly-owned subsidiary;
- explain the treatment of goodwill;
- account for non-controlling interests under the two options available in IFRS 3;
- understand the need for fair value adjustments and prepare consolidated financial statements reflecting such adjustments.

20.2 The definition of a group

Under IAS 27 Consolidated and Separate Financial Statements, a group exists where one enterprise (the parent) controls, either directly or indirectly, another enterprise (the subsidiary). A group consists of a parent and its subsidiaries. This book will deal only with situations where both the parent and subsidiary enterprises are companies.

20.3 Consolidated accounts and some reasons for their preparation

In most cases a parent company is required by IAS 27 to prepare consolidated financial statements. These show the accounts of a group as though that group were one enterprise. The net assets of the companies in a group will therefore be combined and any inter-company profits and balances eliminated.

Why are groups required to prepare consolidated accounts?

(i) To prevent the preparation of misleading accounts by such means as inflating the sales through selling to another member of a group.
(ii) To provide a more meaningful EPS figure. Consolidated accounts show the full earnings on a parent company’s investment while parent’s individual accounts only show the dividend received from the subsidiaries.

(iii) To provide a better measurement of the performance of a parent company’s directors. In consolidated accounts the total earnings of a group can be compared with its total assets in arriving at a group’s return on capital employed (ROCE).

ROCE is regarded as important strategic information. For example, the Danish group FLS Industries A/S stated in its 1999 Financial Results Statement:

**Return on capital employed (ROCE)**
The FLS Group has decided to introduce value-based management with the overall objective of strengthening the framework for monitoring and controlling the Group’s long-term capability for generating earnings. For this purpose a version of EVA™ – Economic Value Added – is used. This entails relating the financial result to the capital it requires and the risk it entails . . .

Although the return on capital employed is not satisfactory, over the past five years the FLS Group has achieved an increasing return on its capital employed. In 1995, ROCE amounted to 6.6%, compared with 10.2% in 1998 and 21.1% in 1999. Adjusted for non-recurring items, ROCE for 1999 amounts to 5.9%.

In 2000 the Group will intensify the focus on optimising capital employed.

Note that in 2004 there was an operational integration of the parent company, FLS Industries A/S, and F.L.Smidth A/S now trading as FLSmidth A/S and that the ROCE for 2005 was 19%.

**When may a parent company not be required to prepare consolidated accounts?**

It may not be necessary for a parent company to prepare consolidated accounts if the parent is itself a wholly-owned subsidiary and the ultimate parent produces consolidated financial statements available for public use that comply with International Financial Reporting Standards (IFRSs). This situation arises when the ultimate parent exercises control over a company through a subsidiary company’s investment as illustrated by the extract from the 2008 Accounts of Eybl International:

**Consolidation principles**
The consolidation constituency has been disclosed in accordance with IAS 27.12 . . .

The Consolidated Annual Report comprises the Annual Report of Eybl International Aktiengesellschaft as parent company as well as the annual financial accounts of 16 subsidiaries that are subject to uniform control by Eybl International Aktiengesellschaft and in which the latter or one of its subsidiaries holds the majority of voting rights.

If the parent company is a partially-owned subsidiary of another entity, then, if its other owners have been informed and do not object, the parent company need not present consolidated financial statements.

**When may a parent company exclude a subsidiary from a consolidation?**

IAS 27 does not allow subsidiaries to be excluded from consolidation on the grounds of severe long-term restrictions on control, or on the grounds of dissimilar activities. A subsidiary would be accounted for under IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations* if it was acquired exclusively with a view to sale and it meets the criteria in IFRS 5. This is illustrated by an extract from the 2008 GKN annual report:
Basis of consolidation
The statements incorporate the financial statements of the Company and its subsidiaries . . . Subsidiaries are entities over which, either directly or indirectly, the Company has control through the power to govern financial operating policies so as to obtain benefit from their activities. Except as noted below, this power is accompanied by a shareholding of more than 50% of the voting rights. . . .

In a single case the Company indirectly owns 100% of the voting share capital of an entity but is precluded from exercising either control or joint control by a contractual agreement with the United States Department of Defense. In accordance with IAS 27 this entity has been excluded from the consolidation and treated as an investment.

Exclusion is permissible on grounds of non-materiality as the International Accounting Standards are not intended to apply to immaterial items. For example, the Nissan group state in its 2009 Annual Report:

Unconsolidated subsidiaries 167
● Domestic companies 106

Nissan Marine Co., Ltd., Shinwa Kogyo Co., Ltd. and others
● Foreign companies 61

Nissan Industrial Equipment Co. and others
These unconsolidated subsidiaries are small in terms of their total assets, sales, net income or loss, retained earnings and others, and do not have a significant effect on the consolidated financial statements. As a result, they have been excluded from consolidation.

Exclusion might also be appropriate where there are substantial minority rights as seen in the following extract from the 2008 Linde AG annual report:

Scope of consolidation
The Group financial statements comprise Linde AG and all the companies over which Linde AG exercises direct or indirect control by virtue of its power to govern their financial and operating policies. . . .

Companies in which Linde AG holds the majority of the voting rights, either directly or indirectly, but where it is unable to control the company due to substantial minority rights, are also accounted for using the equity method.

Exclusion on the grounds that a subsidiary’s activities are dissimilar from those of the others within a group cannot be justified. This is because information is required under IFRS 8 Operating Segments on the different activities of subsidiaries, and users of accounts can, therefore, make appropriate adjustments for their own purposes if required.

20.4 The definition of control

Under IFRS 3 Business Combinations, control is defined as ‘the power to govern the financial and operating policies of an entity or business so as to obtain benefits from its activities’. Control is assumed when one party to the combination owns more than half of the voting rights of the other either directly or through a subsidiary. This is illustrated with the following extract from the 2008 accounts of the Wartsila Corporation:
Principles of consolidation
The consolidated financial statements include the parent company Wartsila Corporation and all subsidiaries in which the parent directly or indirectly holds more than 50 per cent of the voting rights or in which Wartsila is otherwise in control...

What if the voting rights acquired are less than half?
Even in this situation, it may still be possible to identify an acquirer when one of the combining enterprises, as a result of the business combination, acquires:

(a) power over more than one-half of the voting rights of the other enterprise by virtue of an agreement with other investors;
(b) power to govern the financial and operating policies of the other enterprise under a statute or an agreement;
(c) power to appoint or remove the majority of the members of the board of directors or equivalent governing body of the other enterprise; or
(d) power to cast the majority of votes at a meeting of the board of directors or equivalent governing body of the other enterprise.

An extract from the 2008 Informa plc Annual Report states:

Basis of consolidation
The consolidated financial statements incorporate the accounts of the Company and all of its subsidiaries... Control is achieved where the Company has the power to govern the financial and operating policies of an investee entity so as to obtain benefits from its activities.

20.5 Alternative methods of preparing consolidated accounts
Before IFRS 3 there were two main methods of preparing consolidated statements, the purchase method and the pooling of interests method. The former method was the more common and was used in all cases where one company was seen as acquiring another. IFRS 3 now allows only the purchase method. This should ensure greater comparability of financial statements and remove the incentive to structure combinations in such a way as to produce the desired accounting result.

The purchase method
The fair value of the parent company’s investment in a subsidiary is set against the fair value of the identifiable net assets in the subsidiary at the date of acquisition. If the investment is greater than the share of net assets then the difference is regarded as the purchase of goodwill – see the Rose Group example below.

EXAMPLE ● THE ROSE GROUP CONSOLIDATED USING THE PURCHASE METHOD

On 1 January 20X0 Rose plc acquired 100% of the 10,000 £1 common shares in Tulip plc for £1.50 per share in cash and gained control. The fair value of the net assets of Tulip plc at that date was the same as the book value. The individual statements of financial position immediately after the acquisition and the group accounts at that date were as follows:
Rose plc       Tulip plc       Group
£              £              £     

ASSETS
Non-current assets   20,000   11,000   31,000 Note 2
Goodwill            —         —       1,000 Note 1
Investment in Tulip 15,000   —       —
Net current assets   8,000     3,000   11,000 Note 2
Net assets          43,000    14,000  43,000

Share capital       16,000    10,000  16,000 Note 3
Retained earnings   27,000    4,000   27,000 Note 3

43,000    14,000  43,000

Note 1. Calculate the goodwill for inclusion in the group accounts:

The parent company’s investment

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Less: The parent’s share of

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<tr>
<td>4,000</td>
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The difference is goodwill for inclusion in the consolidated statement of financial position.

1,000*

* This is equivalent to the 100% share of net assets, i.e. Non-current assets 11,000 + Net current assets 3,000.

Note 2. Add together the assets and liabilities of the two companies for the group accounts:

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<td>31,000</td>
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<tr>
<td>11,000</td>
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43,000

Note 3. Calculate the consolidated share capital and reserves for the group accounts:

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<td>16,000</td>
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<tr>
<td>27,000</td>
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43,000

Note that:

- In Note 1 the investment in the subsidiary (£15,000) has been set off against the parent company’s share of the subsidiary’s share capital and reserves (£14,000) and these cancelled inter-company balances do not, therefore, appear in the consolidated accounts.
• In Note 2 the total of the net assets in the group account is the same as the net assets in
the individual statement of financial position but the Tulip plc investment in Rose plc’s
accounts has been replaced by the net assets of Tulip plc of £14,000 plus the previously
unrecorded £1,000 goodwill.

• In Note 3 the consolidated statement of financial position only includes the share capital
and retained earnings of the parent company, because the subsidiary’s share capital and
retained earnings have been used in the calculation of goodwill.

The adjustments are often set out in a schedule format as follows:

<table>
<thead>
<tr>
<th></th>
<th>Rose plc</th>
<th>Tulip plc</th>
<th>Adjustments</th>
<th>Group</th>
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<tr>
<td>ASSETS</td>
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<td></td>
<td></td>
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<tr>
<td>Non-current assets</td>
<td>20,000</td>
<td>11,000</td>
<td>31,000</td>
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<tr>
<td>Goodwill</td>
<td>—</td>
<td>—</td>
<td>1,000</td>
<td>1,000</td>
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<tr>
<td>Investment in Tulip</td>
<td>15,000</td>
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<tr>
<td>Net current assets</td>
<td>8,000</td>
<td>3,000</td>
<td>11,000</td>
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<tr>
<td>Net assets</td>
<td>43,000</td>
<td>14,000</td>
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<tr>
<td>Share capital</td>
<td>16,000</td>
<td>10,000</td>
<td>(10,000) a</td>
<td>16,000</td>
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<tr>
<td>Retained earnings</td>
<td>27,000</td>
<td>4,000</td>
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<td></td>
<td>43,000</td>
<td>14,000</td>
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Supported by the same notes (Notes 1–3) shown above.

An extract from the 2008 annual report of EnBW Energie Baden-Württemberg AG
(EnBW) states:

Capital consolidation is performed according to the purchase method by offsetting the
cost of acquisition against the proportionate revalued equity of the subsidiaries at the
date of acquisition.

20.6 The treatment of positive goodwill

Positive purchased goodwill, where the investment exceeds the total of the net assets acquired,
should be recognised as an asset with no amortisation. Goodwill must be subject to impair-
ment tests in accordance with IAS 36 Impairment of Assets. These tests will be annual,
or more frequently if circumstances indicate that the goodwill might be impaired.7 Once
recognised, an impairment loss for goodwill may not be reversed in a subsequent period,8
which helps in preventing the manipulation of period profits.

20.7 The treatment of negative goodwill

The acquiring company does not always pay more than the fair value of the identifiable net
assets. If it pays less then negative goodwill is said to arise.

Negative goodwill, where the fair value of the net assets exceeds the amount of the invest-
ment, can arise9 because –
(a) there have been errors measuring the fair value of either the cost of the combination or the acquiree’s identifiable assets, liabilities or contingent liabilities;
(b) future costs such as losses have been taken into account;
(c) there has been a bargain purchase.

Where negative goodwill apparently arises, IFRS 3 requires parent companies to review the fair value exercise to ensure that no assets are overstated or liabilities understated. Assuming this review reveals no errors, then the resulting negative goodwill is recognised immediately in the statement of comprehensive income.

The following is an extract from the 2008 EnBW Annual Report:

**Basis of consolidation**

Capital consolidation is performed according to the purchase method by offsetting the cost of acquisition against the proportionate revalued equity of the subsidiaries at the date of acquisition.

Assets, liabilities and contingent liabilities are carried at fair value. Any remaining positive differences are recognised as goodwill.

Negative differences are immediately recognised in profit or loss following a review of their calculation.

### 20.8 The comparison between an acquisition by cash and an exchange of shares

Shares in another company can be purchased with cash or through an exchange of shares. In the former case, the cash will be reduced and exchanged for another asset called ‘Investment in the subsidiary company’. If there is an exchange of share, there will be an increase in the share capital and, probably, the share premium of the acquiring company rather than a decrease in cash. There is no effect in either case on the accounts of the acquired company. The purchase price may contain a mixture of cash and shares and possibly other assets as well.

### 20.9 Non-controlling interests

A parent company does not need to purchase all the shares of another company to gain control. The holders of the remaining shares are collectively referred to as the non-controlling interest. They are part owners of the subsidiary. In such a case, therefore, the parent does not own all the net assets of the acquired company but does control them.

One of the purposes of preparing group accounts is to show the effectiveness of that control and of the directors of the parent company who are responsible for it. Therefore, all of the net assets of the subsidiary will be included in the group statement of financial position and the non-controlling interest will be shown as partly financing those net assets.

IFRS 3 allows for two different methods of measuring the non-controlling interest in the statement of financial position:

- **Method 1** requires that the non-controlling interest be measured at the proportionate share of the net assets of the subsidiary at the date of acquisition plus the relevant share of changes in the post-acquisition net assets of the acquired subsidiary. The practical effect of this method is that at each reporting date the non-controlling interest is measured as the share of the net assets of the subsidiary.
Method 2 requires that the non-controlling interest be measured at \textit{fair value} at the date of acquisition, plus the relevant share of changes in the post-acquisition net assets of the acquired subsidiary. The practical effect of this method is that at each reporting date the non-controlling interest is measured as the share of the net assets of the subsidiary, plus the goodwill that has been apportioned to the non-controlling interest.

In the group statement of comprehensive income the full profit of the subsidiary is included and the non-controlling interest in it then separately identified. The statement of comprehensive income will be dealt with in more detail in Chapter 22. The effect on the statement of financial position is illustrated in the Bird Group example below.

\textbf{EXAMPLE \centering THE BIRD GROUP}

On 1 January 20X0 Bird plc acquired 80\% of the 10,000 £1 Ordinary shares in Flower plc for £1.50 per share in cash and gained control. The fair value of the net assets of Flower at that date was the same as the book value. We will first use method 1 to compute the non-controlling interest. The individual statements of financial position immediately after the acquisition and the group accounts at that date were as follows:

\begin{tabular}{lrrr}
\hline
 & \textit{Bird} & \textit{Flower} & \textit{Group} \\
\hline
\textbf{ASSETS} & £ & £ & £ \\
Non-current assets & 20,000 & 11,000 & 31,000 \footnote{Note 3}
Goodwill & — & — & 800 \footnote{Note 1}
Investment in Flower & 12,000 & — & —
Net current assets & 11,000 & 3,000 & 14,000 \footnote{Note 3}
Net assets & 43,000 & 14,000 & 45,800
\hline
Share capital & 16,000 & 10,000 & 16,000 \footnote{Note 4}
Retained earnings & 27,000 & 4,000 & 27,000 \footnote{Note 4}
 & 43,000 & 14,000 & 43,000
Non-controlling interest & — & 2,800 & 2,800 \footnote{Note 2}
 & 43,000 & 14,000 & 45,800
\hline
\end{tabular}

\textbf{Note 1. Calculate goodwill}

\begin{align*}
\text{The parent company’s investment in Flower} & = £12,000 \\
\text{Less: The parent’s share of the subsidiary’s share capital} & = (80\% \times 10,000) = 8,000 \\
\text{The parent’s share of the retained earnings} & = (80\% \times 4,000) = 3,200 \\
\text{(Equivalent to the share of net assets, i.e. } 80\% \times (11,000 + 3,000) & = 11,200 \\
\text{The difference is goodwill} & = \underline{800}
\end{align*}

\textbf{Note 2. Calculate the non-controlling interest}

\begin{align*}
\text{The non-controlling interest in the share capital} & = (20\% \times 10,000) = 2,000 \\
\text{The non-controlling interest in the retained earnings of Flower} & = (20\% \times 4,000) = 800 \\
\text{Represents the non-controlling interest in the net assets of Flower} & = \underline{2,800}
\end{align*}
In published group accounts the non-controlling interest will be shown as a separate item in the equity of the group as follows:

Share capital 16,000  
Retained earnings 27,000  
Bird shareholders’ share of equity 43,000  
Non-controlling interest 2,800  
Total equity 45,800  

Non-controlling interest is, therefore, now shown as part of the ownership of the group rather than as a liability.

Note 3. Add together the assets and liabilities of the two companies for the group accounts

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<tbody>
<tr>
<td>Non-current assets other than goodwill (20,000 + 11,000)</td>
<td>31,000</td>
</tr>
<tr>
<td>Goodwill (as calculated in Note 1)</td>
<td>800</td>
</tr>
<tr>
<td>Net current assets (11,000 + 3,000)</td>
<td>14,000</td>
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<td></td>
<td><strong>45,800</strong></td>
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Note 4. Calculate the consolidated share capital and reserves for the group accounts

<table>
<thead>
<tr>
<th></th>
<th>£</th>
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</thead>
<tbody>
<tr>
<td>Share capital (parent company only)</td>
<td>16,000</td>
</tr>
<tr>
<td>Retained earnings (parent company only)</td>
<td>27,000</td>
</tr>
<tr>
<td></td>
<td><strong>43,000</strong></td>
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</table>

The schedule format would be as follows:

<table>
<thead>
<tr>
<th></th>
<th>Bird</th>
<th>Flower</th>
<th>Adjustment</th>
<th>Group</th>
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<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td>£</td>
<td>£</td>
<td></td>
<td>£</td>
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<tr>
<td>Non-current assets</td>
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<td>Goodwill</td>
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<tr>
<td>Investment in Flower</td>
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<tr>
<td>Net current assets</td>
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<td>Net assets</td>
<td>43,000</td>
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<td>Share capital</td>
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<tr>
<td>Retained earnings</td>
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Accounting for groups at the date of acquisition

- 557
Let us now consider the impact on the previous example of using method 2 to measure the non-controlling interest. In order to use this method, we need to know the fair value of the non-controlling interest in the subsidiary at the date of acquisition. Let us assume in this case that this fair value is £2,900.

The use of method 2 affects two figures – goodwill and the non-controlling interest. The impact is the goodwill that is attributed to the non-controlling interest and it is computed as follows:

\[
\begin{array}{c|c}
\hline
\text{Fair value of non-controlling interest at date of acquisition} & \£2,900 \\
20\% (\text{the share attributable to the non-controlling interest}) \times \text{the net assets at the date of acquisition (\£14,000)} & (\£2,800) \\
\text{Attributable goodwill} & \£100 \\
\hline
\end{array}
\]

The consolidated statement of financial position would now be as follows:

\[
\begin{array}{c|c}
\hline
\text{Non-current assets other than goodwill} & \£31,000 \\
\text{Goodwill (\£800 + \£100)} & \£900 \\
\text{Net current assets} & \£14,000 \\
\hline
\text{Share capital} & \£16,000 \\
\text{Retained earnings} & \£27,000 \\
\text{Non-controlling interest (\£2,800 + \£100)} & \£2,900 \\
\hline
\text{Total} & \£45,900 \\
\hline
\end{array}
\]

Note that we assumed that the fair value of the non-controlling interest at the date of acquisition was £2,900. This figure may well be given in a question. However, if it were necessary to calculate it, one approach would be to calculate the value of the subsidiary at the date of acquisition and take 20% of that figure. The non-controlling interest would be:

\[
20\% \times \text{the fair value of the subsidiary} \times \frac{\text{share price if available}}{\text{share price}} - 20\% \times \text{the net assets at the date of acquisition}
\]

We would, however, expect the 20% attributable to the non-controlling interest to be less than the 20% attributable to the parent company which would be normally have paid an additional amount to obtain control.

20.10 The treatment of differences between a subsidiary’s fair value and book value

In our examples so far we have assumed that the book value of the net assets in the subsidiary are equal to their fair value. In practice, book value in the parent company and in the subsidiary rarely equals fair value and it is necessary to revalue the group’s share of the assets and liabilities of the subsidiary prior to consolidation. Note that, when consolidating, the parent company’s assets and liabilities remain unchanged at book value – it is only the subsidiary’s that are adjusted for the purpose of the consolidated accounts. If, for example, the non-current assets of Flower in the example above had a fair value of £11,600, the non-current assets would be increased by £600 and a pre-acquisition revaluation reserve created of £600. We will assume the non-controlling interest is measured using method 1.
### Accounting for groups at the date of acquisition • 559

#### Notes

**Note 1. Goodwill**

The parent company’s investment in Flower

\[ \text{Less: The parent’s share of the subsidiary’s share capital (80\% \times 10,000) } \quad 8,000 \]

\[ \text{The parent’s share of retained earnings (80\% \times 4,000) } \quad 3,200 \]

\[ \text{The parent’s share of the revaluation (80\% \times 600) } \quad 480 \]

\[ \text{(Equivalent to the share of net assets) } 80\% \times (11,000 + 3,000 + 600) = 11,680 \]

\[ \text{The difference is goodwill } \quad 320 \]

**Note 2. Non-controlling interest**

\[ \text{The non-controlling interest in the share capital of Flower } \quad (20\% \times 10,000) = 2,000 \]

\[ \text{The non-controlling interest in the retained earnings of Flower } \quad (20\% \times 4,000) = 800 \]

\[ \text{The non-controlling interest in the revaluation of the subsidiary’s assets } \quad (20\% \times 600) = 120 \]

\[ \text{2,920} \]

**Note 3. Non-current assets (20,000 + 11,000 + 600) = £31,600**

It must be stressed that the revaluation of the subsidiary’s assets is only necessary for the consolidated accounts. No entries need be made in the individual accounts of the subsidiary or its books of account. The preparation of consolidated accounts is a separate exercise that in no way affects the records of the individual companies.

### 20.11 How to calculate fair values

IFRS 3 *Business Combinations* gives a definition of fair value as ‘The amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm’s-length transaction.’ The detailed guidance for determining fair value is also set out in IFRS 3. The main provisions are as follows:
As from the date of acquisition, an acquirer should:

(a) incorporate into the statement of comprehensive income the results of operations of the acquiree; and
(b) recognise in the statement of financial position the identifiable assets, liabilities and contingent liabilities of the acquiree and any goodwill or negative goodwill arising on the acquisition.

The identifiable assets, liabilities and contingent liabilities acquired that are recognised should be those of the acquiree that existed at the date of acquisition. Liabilities should not be recognised at the date of acquisition if they result from the acquirer’s intentions or actions. Therefore liabilities for terminating or reducing the activities of the acquiree should only be recognised where the acquiree has, at the acquisition date, an existing liability for restructuring recognised in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

Liabilities should also not be recognised for future losses or other costs expected to be incurred as a result of the acquisition, whether they relate to the acquirer or acquiree.

The IFRS sets out the rules for specific assets and liabilities in Appendix B. These are not produced in detail here.

The reason why the net assets of the subsidiary must be revalued at the date of acquisition is to ensure that all profits, both realised and unrealised, are reflected in the value of the net assets at the date of acquisition and to prevent distortion of EPS in periods following the acquisition.

There is a requirement to identify both tangible and intangible assets that are acquired. For example, fair values would be attached to intangibles such as brands and customer lists if these can be measured reliably. If it is not possible to measure reliably, then the goodwill would be reported at a higher figure as in the following extract from the 2008 AstraZeneca Annual Report:

BUSINESS COMBINATIONS AND GOODWILL

On the acquisition of a business, fair values are attributed to the identifiable assets and liabilities and contingent liabilities unless the fair value cannot be measured reliably in which case the value is subsumed into goodwill. Where fair values of acquired contingent liabilities cannot be measured reliably, the assumed contingent liability is not recognised but is disclosed in the same manner as other contingent liabilities. Goodwill is the difference between consideration paid and the fair value of net assets acquired.

Summary

When one company acquires a controlling interest in another and the combination is treated as an acquisition, the investment in the subsidiary is recorded in the acquirer’s consolidated statement of financial position at the fair value of the investment.

On consolidation, if the acquirer has acquired less than 100% of the common shares, any differences between the fair values of the assets or liabilities and their face value are recognised in full and the parent and non-controlling interests credited or debited with their respective percentage interests.

Also, on consolidation, any differences between the fair values of the net assets and the consideration paid to acquire them is treated as positive or negative goodwill and dealt with in accordance with IFRS 3 Business Combinations.
REVIEW QUESTIONS

1. Explain how negative goodwill may arise and its accounting treatment.

2. Explain how the fair value is calculated for:
   - tangible non-current assets
   - inventories
   - monetary assets.

3. Explain why only the net assets of the subsidiary and not those of the parent are adjusted to fair value at the date of acquisition for the purpose of consolidated accounts.

4. Coil SA/NV is a company incorporated under the laws of Belgium. Its accounts are IAS compliant. It states in its 2003 accounts (in accordance with IAS 27, para. 13):

   Principles of consolidation
   The consolidated Financial statements include all subsidiaries which are controlled by the Parent Company, unless such control is assumed to be temporary or due to long-term restrictions significantly impairing a subsidiary’s ability to transfer funds to the Parent Company.

   Required: Discuss whether these are acceptable reasons for excluding a subsidiary from the consolidated financial statements under the revised IAS 27.

5. The 2008 Annual Report of Bayer AG:

   Subsidiaries that do not have a material impact on the Group’s net worth, financial position or earnings, either individually or in aggregate, are not consolidated.

   Discuss what criteria might have applied in determining that a subsidiary does not have a material impact.

6. Parent plc acquired Son plc at the beginning of the year. At the end of the year there were intangible assets reported in the consolidated accounts for the value of a domain name and customer lists. These assets did not appear in either the Parent or Son’s Statements of Financial Position.

   Required: Discuss why assets only appear in the consolidated accounts.

7. In each of the following cases you are required to give your opinion, with reasons, on whether or not there is a parent/subsidiary under IFRS 3. Suggest any other information, if any, that might be helpful in making a decision.

   (a) Tin acquired 15% of the equity voting shares and 90% of the non-voting preferred shares of Copper. Copper has no other category of shares. The directors of Tin are also the directors of Copper; there is a common head office with shared administration departments and the functions of Copper are mainly the provision of marketing and transport facilities for Tin. Another company, Iron, holds 55% of the equity voting shares of Copper but has never used its voting power to interfere with the decisions of the directors.

   (b) Hat plc owns 60% of the voting equity shares in Glove plc and 25% of the voting equity shares in Shoe plc. Glove owns 30% of the voting equity shares in Shoe plc and has the right to appoint a majority of the directors.

   (c) Morton plc has 30% of the voting equity shares of Berry plc and also has a verbal agreement with other shareholders, who own 40% of the shares, that those shareholders will vote according to the wishes of Morton.
(d) Bean plc acquired 30% of the shares of Pea plc several years ago with the intention of acquiring influence over the operating and financial policies of that company. Pea sells 80% of its output to Bean. While Bean has a veto over the operating and financial decisions of Pea’s board of directors it has only used this veto on one occasion, four years ago, to prevent that company from supplying one of Bean’s competitors.

**EXERCISES**

An extract from the solution is provided on the Companion Website (www.pearsoned.co.uk/elliott-elliott) for exercises marked with an asterisk (*).

**Questions 1–5**

Required:
Prepare the statements of financial position of Parent Ltd and the consolidated statement of financial position as at 1 January 20X7 after each transaction, using for each question the statements of financial position of Parent Ltd and Daughter Ltd as at 1 January 20X7 which were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Parent Ltd</th>
<th>Daughter Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary shares of £1 each</td>
<td>40,500</td>
<td>9,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>4,500</td>
<td>1,800</td>
</tr>
<tr>
<td>Cash</td>
<td>20,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Other net assets</td>
<td>25,000</td>
<td>8,800</td>
</tr>
<tr>
<td></td>
<td><strong>45,000</strong></td>
<td><strong>10,800</strong></td>
</tr>
</tbody>
</table>

**Question 1**

(a) Assume that on 1 January 20X7 Parent Ltd acquired all the ordinary shares in Daughter Ltd for £10,800 cash. The fair value of the net assets in Daughter Ltd was their book value.

(b) The purchase consideration was satisfied by the issue of 5,400 new ordinary shares in Parent Ltd. The fair value of a £1 ordinary share in Parent Ltd was £2. The fair value of the net assets in Daughter Ltd was their book value.

**Question 2**

(a) On 1 January 20X7 Parent Ltd acquired all the ordinary shares in Daughter Ltd for £16,200 cash. The fair value of the net assets in Daughter Ltd was their book value.

(b) The purchase consideration was satisfied by the issue of 5,400 new ordinary shares in Parent Ltd. The fair value of a £1 ordinary share in Parent Ltd was £3. The fair value of the net assets in Daughter Ltd was their book value.

**Question 3**

(a) On 1 January 20X7 Parent Ltd acquired all the ordinary shares in Daughter Ltd for £16,200 cash. The fair value of the net assets in Daughter Ltd was £12,000.
(b) The purchase consideration was satisfied by the issue of 5,400 new ordinary shares in Parent Ltd. The fair value of a £1 ordinary share in Parent Ltd was £3. The fair value of the net assets in Daughter Ltd was £12,000.

**Question 4**

On 1 January 20X7 Parent Ltd acquired all the ordinary shares in Daughter Ltd for £6,000 cash. The fair value of the net assets in Daughter Ltd was their book value.

**Question 5**

On 1 January 20X7 Parent Ltd acquired 75% of the ordinary shares in Daughter Ltd for £9,000 cash. The fair value of the net assets in Daughter Ltd was their book value. Assume in each case that the non-controlling interest is measured using method 1.

**Question 6**

The following accounts are the consolidated statement of financial position and parent company statement of financial position for Alpha Ltd as at 30 June 20X2.

<table>
<thead>
<tr>
<th></th>
<th>Consolidated statement of financial position</th>
<th>Parent company statement of financial position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>Ordinary shares</td>
<td>140,000</td>
<td>140,000</td>
</tr>
<tr>
<td>Capital reserve</td>
<td>92,400</td>
<td>92,400</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>79,884</td>
<td>35,280</td>
</tr>
<tr>
<td>Non-controlling interest</td>
<td>12,329</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td><strong>324,613</strong></td>
<td><strong>267,680</strong></td>
</tr>
<tr>
<td><strong>Non-current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>127,400</td>
<td>84,000</td>
</tr>
<tr>
<td>Plant and equipment</td>
<td>62,720</td>
<td>50,400</td>
</tr>
<tr>
<td>Goodwill</td>
<td>85,680</td>
<td>151,200</td>
</tr>
<tr>
<td>Investment in subsidiary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(50,400 shares)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventory</td>
<td>121,604</td>
<td>71,120</td>
</tr>
<tr>
<td>Trade receivables</td>
<td>70,429</td>
<td>51,800</td>
</tr>
<tr>
<td>Cash at bank</td>
<td>24,360</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td><strong>216,393</strong></td>
<td><strong>122,920</strong></td>
</tr>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade payables</td>
<td>140,420</td>
<td>80,920</td>
</tr>
<tr>
<td>Income tax</td>
<td>27,160</td>
<td>20,720</td>
</tr>
<tr>
<td>Bank overdraft</td>
<td>—</td>
<td>39,200</td>
</tr>
<tr>
<td></td>
<td><strong>167,580</strong></td>
<td><strong>140,840</strong></td>
</tr>
<tr>
<td>Working capital</td>
<td>48,813</td>
<td>(17,920)</td>
</tr>
<tr>
<td></td>
<td><strong>324,613</strong></td>
<td><strong>267,680</strong></td>
</tr>
</tbody>
</table>
Notes:
(i) There was only one subsidiary called Beta Ltd.
(ii) There were no capital reserves in the subsidiary.
(iii) Alpha produced inventory for sale to the subsidiary at a cost of £3,360 in May 20X2. The inventory was invoiced to the subsidiary at £4,200 and was still on hand at the subsidiary’s warehouse on 30 June 20X2. The invoice had not been settled at 30 June 20X2.
(iv) The retained earnings of the subsidiary had a credit balance of £16,800 at the date of acquisition. No fair value adjustments were necessary.
(v) There was a right of set-off between overdrafts and bank balances.
(vi) The parent owns 90% of the subsidiary.

Required:
(a) Prepare the statement of financial position as at 30 June 20X2 of the subsidiary company from the information given above. The non-controlling interest is measured using method 1.
(b) Discuss briefly the main reasons for the publication of consolidated accounts.

**Question 7**

Rouge plc acquired 100% of the common shares of Noir plc on 1 January 20X0 and gained control. At that date the statements of financial position of the two companies were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Rouge</th>
<th>Noir</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£ million</td>
<td>£ million</td>
</tr>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>100</td>
<td>60</td>
</tr>
<tr>
<td>Investment in Noir</td>
<td>132</td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>Total assets</td>
<td>312</td>
<td>130</td>
</tr>
<tr>
<td><strong>EQUITY AND LIABILITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary £1 shares</td>
<td>200</td>
<td>60</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>52</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>252</td>
<td>100</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>312</td>
<td>130</td>
</tr>
</tbody>
</table>

Note: The fair values are the same as the book values.

Required: Prepare a consolidated statement of financial position for Rouge plc as at 1 January 20X0.

**Question 8**

Ham plc acquired 100% of the common shares of Burg plc on 1 January 20X0 and gained control. At that date the statements of financial position of the two companies were as follows:
**ASSETS**

*Non-current assets*

<table>
<thead>
<tr>
<th></th>
<th>Ham</th>
<th>Burg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, plant and equipment</td>
<td>250</td>
<td>100</td>
</tr>
<tr>
<td>Investment in Burg</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>100</td>
<td>70</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>440</td>
<td>170</td>
</tr>
</tbody>
</table>

**EQUITY AND LIABILITIES**

*Capital and reserves*

<table>
<thead>
<tr>
<th></th>
<th>Ham</th>
<th>Burg</th>
</tr>
</thead>
<tbody>
<tr>
<td>£1 shares</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>160</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>360</td>
<td>110</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td>440</td>
<td>170</td>
</tr>
</tbody>
</table>

Notes:
1. The fair value is the same as the book value.
2. £15,000 of the negative goodwill arises because the net assets have been acquired at below their fair value and the remainder covers expected losses of £3,000 in the year ended 31/12/20X0 and £2,000 in the following year.

**Required:**

(a) Prepare a consolidated statement of financial position for Ham plc as at 1 January 20X0.

(b) Explain how the negative goodwill will be treated.

---

**Question 9**

Set out below is the summarised statement of financial position of Berlin plc at 1 January 20X0.

<table>
<thead>
<tr>
<th></th>
<th>£000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
</tr>
<tr>
<td>Non-current assets</td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>250</td>
</tr>
<tr>
<td>Current assets</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>400</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EQUITY AND LIABILITIES</strong></td>
<td></td>
</tr>
<tr>
<td>Capital and reserves</td>
<td></td>
</tr>
<tr>
<td>Share capital (£5 shares)</td>
<td>200</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>280</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>120</td>
</tr>
<tr>
<td><strong>Total equity and liabilities</strong></td>
<td>400</td>
</tr>
</tbody>
</table>

On 1/1/20X0 Berlin acquired 100% of the shares of Hanover for £100,000 and gained control.

**Required:** Prepare the statement of financial position of Berlin immediately after the acquisition if:

(a) Berlin acquired the shares for cash.

(b) Berlin issued 10,000 common shares of £5 (market value £10.).
**Question 10**

Bleu plc acquired 80% of the common shares of Verte plc on 1 January 20X0 and gained control. At that date the statements of financial position of the two companies were as follows:

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>Bleu £m</th>
<th>Verte £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>150</td>
<td>120</td>
</tr>
<tr>
<td>Investment in Verte</td>
<td>210</td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>108</td>
<td>105</td>
</tr>
<tr>
<td>Total assets</td>
<td>468</td>
<td>225</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQUITY AND LIABILITIES</th>
<th>Bleu £m</th>
<th>Verte £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital and reserves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>300</td>
<td>120</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>78</td>
<td>60</td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>378</td>
<td>180</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>90</td>
<td>45</td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>468</td>
<td>225</td>
</tr>
</tbody>
</table>

Note: The fair values are the same as the book values.

Required: Prepare a consolidated statement of financial position for Bleu plc as at 1 January 20X0. Non-controlling interests are measured using method 1.

**Question 11**

Base plc acquired 60% of the common shares of Ball plc on 1 January 20X0 and gained control. At that date the statements of financial position of the two companies were as follows:

<table>
<thead>
<tr>
<th>ASSETS</th>
<th>Base £000</th>
<th>Ball £000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>250</td>
<td>100</td>
</tr>
<tr>
<td>Investment in Ball</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>100</td>
<td>70</td>
</tr>
<tr>
<td>Total assets</td>
<td>440</td>
<td>170</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EQUITY AND LIABILITIES</th>
<th>Base £000</th>
<th>Ball £000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital and reserves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>200</td>
<td>80</td>
</tr>
<tr>
<td>Share premium</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Retained earnings</td>
<td>160</td>
<td>10</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>360</td>
<td>110</td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>440</td>
<td>170</td>
</tr>
</tbody>
</table>
Note:
The fair value of the property, plant and equipment in Ball at 1/1/20X0 was £120,000. The fair value of the non-controlling interest in Ball at 1/1/20X0 was £55,000. The ‘fair value method’ should be used to measure the non-controlling interest.

Required: Prepare a consolidated statement of financial position for Base as at 1 January 20X0.

Question 12

On 1 January 20X0 Hill plc purchased 70% of the ordinary shares of Valley plc for £1.3 million. The fair value of the non-controlling interest at that date was £0.5 million. At the date of acquisition, Valley’s retained earnings were £0.6 million.

The statements of financial position of Hill and Valley at 31 December 20X0 were:

<table>
<thead>
<tr>
<th>Capital and reserves</th>
<th>Hill (£000)</th>
<th>Valley (£000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>5,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>3,500</td>
<td>200</td>
</tr>
<tr>
<td>Net assets</td>
<td>8,500</td>
<td>1,200</td>
</tr>
</tbody>
</table>

Because of Valley’s loss in 20X0, the directors of Hill decided to write down the value of goodwill by £0.3 million. The directors of Hill propose to use Method 2 to calculate goodwill in the consolidated statement of financial position. The goodwill is to be written down in proportion to the respective holdings of Valley’s shares by Hill and the non-controlling interest.

Required:
(a) Calculate the goodwill of Valley relating to Hill plc and the non-controlling interest.
(b) Show how the goodwill will be written down at 31 December 20X0, for both Hill plc and the non-controlling interest.
(c) Comment on your answer to part (b).

References

2. Ibid., para. 10.
8. IAS 36 Impairment of Assets, IASB, revised 2004, para. 34.
10. Ibid., Appendix A.
11. Ibid., para. 41.