## PREPARING SIMPLE CONSOLIDATED FINANCIAL STATEMENTS

Although 2011 saw a number of new accounting standards issued in respect of groups, throughout 2012 the Paper F3/FFA syllabus still continues to examine the principles contained in:

- IAS 27, Consolidated and Separate Financial Statements
- IAS 28, Investments in Associates
- IFRS 3, Business Combinations

From December 2011, Paper F3/FFA saw two main new examinable areas added to its syllabus - the preparation of simple consolidated financial statements and the interpretation of financial statements.

This article focuses on some of the main principles of consolidated financial statements that a candidate must be able to understand and gives examples of how they may be tested in multiple-choice questions (MCQs).

It does not attempt to cover every technical aspect of consolidation, but to give candidates the tools they need to prepare for the style and level of testing, they can expect to see in this paper.
(1) How is a parent-subsidiary relationship identified?

IAS 27 defines consolidated financial statements as 'the financial statements of a group presented as those of a single economic entity.'
A group is made up of a parent and its subsidiary.
Illustration 1 shows an example of a typical group structure.


The illustration shows how a parent company has control over a subsidiary. At Paper F3 level, it is assumed that control exists if the parent company has more than $50 \%$ of the ordinary (equity) shares - ie giving them more than $50 \%$ of the voting power.

However, there are examples where a holding of less than $50 \%$ of the ordinary shares can still lead to control existing. This may be because the parent has:

- the power over more than $50 \%$ of the voting rights by virtue of agreement with other investors
- the power to govern the financial and operating policies of the entity under statute or an agreement
- the power to appoint or remove the majority of the members of the board of directors, or
- the power to cast the majority of the votes at meetings of the board of directors.

A typical MCQ may describe a number of different investments and you would need to decide if they are subsidiaries - ie if control exists. Illustration 2 is an example of a typical question.

## Illustration (2)

Green Co owns the following investments in other companies:

|  | Equity shares | Non-equity shares held |
| :--- | :--- | :--- |
| Violet Co | $80 \%$ | Nil |
| Amber Co | $25 \%$ | $80 \%$ |
| Black Co | $45 \%$ | $25 \%$ |

Green Co also has appointed five of the seven directors of Black Co.
Which of the following investments are accounted for as subsidiaries in the consolidated accounts of Green Co Group?

A Violet only
B Amber only
c Violet and Black
D All of them

## Answer

Let's consider each of the investments in turn to determine if control exists and, therefore, if they should be accounted for as a subsidiary.

- Violet Co - by looking at the equity shares, Green Co has more than $50 \%$ of the voting shares - ie an $80 \%$ equity holding. This gives them control and, therefore, Violet Co is a subsidiary.
- Amber Co - you must remember to look at the equity shares, as despite having the majority of the non-equity shares, these do not give voting power. As Green Co only has $25 \%$ of the equity shares, they do not have control and, therefore, Amber Co is not a subsidiary.
- Black Co - by looking at the percentage of equity shares, you may incorrectly conclude that Black Co is not a subsidiary, as Green Co has less than half of the voting rights. However, by looking at the fact that Green Co has appointed five of
the seven directors, effectively they have control over the decision making in the company. This control should make you conclude that Black Co is a subsidiary.

Therefore the correct answer is C.

## Illustration (3)

Pink Co acquired 80\% of Scarlett's Co ordinary share capital on 1 January 2012.
As at 31 December 2012, extracts from their individual statements of financial position showed:

| Pink C | Scarlett Co |
| :--- | :--- |
| $\$$ | $\$$ |

Current assets:
Receivables
50,000
30,000

Current liabilities:
Payables $\quad 70,000 \quad 42,000$

As a result of trading during the year, Pink Co's receivables balance included an amount due from Scarlett of $\$ 4,600$.

What should be shown as the consolidated figure for receivables and payables?

|  | Receivables <br> $\$$ | Payables <br> $\$$ |
| :--- | :--- | :--- |
| A | 80,000 | 112,000 |
| B | 75,400 | 112,000 |
| C | 74,000 | 103,600 |
| D | 75,400 | 107,400 |

## Answer

From the question, we can see that Pink Co has control over Scarlett Co. This should mean that you immediately consider adding together 100\% of Pink Co's balances and Scarlett Co's balances to reflect control.
However, the intra-group balances at the year end need to be eliminated, as the consolidated accounts need to show the group as a single economic entity - in other words, the group position with the outside world.

As Pink Co shows a receivable of $\$ 4,600$, then in Scarlett Co’s individual accounts there must be a corresponding payable of $\$ 4,600$. When these balances are eliminated, the consolidated figures become:

Receivables $\quad(\$ 50,000+\$ 30,000-\$ 4,600)=\$ 75,400$
Payables $\quad(\$ 70,000+\$ 42,000-\$ 4,600)=\$ 107,400$
Therefore, the correct answer is D, not A which completely omits the elimination of the intra-group balances, nor answer B which omits to cancel the corresponding payable within liabilities.
You would not select answer C, which incorrectly adds $100 \%$ of Pink Co (the parent) and only $80 \%$ of Scarlett Co (the subsidiary).
(3) Adjustments for unrealised profits

Another common adjustment that you could be asked to deal with is the removal of unrealised profit. This arises when profits are made on intra-group trading and the related inventories have not subsequently been sold to customers outside the group.

The following illustration demonstrates this in the context of the consolidated income statement.

## Illustration (4)

Purple Co acquired $70 \%$ of the voting share capital of Silver Co on 1 October 2011. The following extracts are from the individual income statements of the two companies for the year ended 30 September 2012:

| Purple Co <br> $\$$ | Silver Co <br> 79,300 |
| :--- | :--- |
| $\underline{(54,990)}$ | 29,900 |
| 24,310 | $\underline{(17,940)}$ |

Gross profit $\quad 24,310 \quad 11,960$

Purple Co had made sales to Silver Co during the year of $\$ 5,000$. Purple Co had originally purchased the goods at a cost of $\$ 4,000$. Half of these items remained in inventory at the year end.

What should be the consolidated revenue for the year ended 30 September 2012?
A \$104,700
B \$95,230
c $\$ 108,700$
D \$104,200

## Answer

Even though this question requires an extract from the consolidated income statement, the principle is still the same as Illustration (3) - consolidate the group as if it is a single economic entity by adding in $100 \%$ line by line, and showing group performance with the outside world.
Therefore, answer B would not be selected as it incorrectly adds $100 \%$ of Purple Co and only $70 \%$ of Silver Co.

The other adjustment that requires careful consideration is the intra-group trading. In the consolidated income statement we must always consider two steps:

- Has there been any intra-group trading during the year, irrespective of whether the goods are included in inventory?
- Do any of the items remain in inventory at the end of the year?

In this question, \$5,000 of sales have been made from Purple Co selling to Silver Co. This must be eliminated, irrespective of whether the items remain unsold at the year end. This is because the consolidated income statement needs to show revenue (and costs of sales) and, therefore, performance with the outside world.

The second step here is to identify the provision for unrealised profit. Purple Co has made a profit of $\$ 1,000$ (calculated as revenue of $\$ 5,000$ - cost of $\$ 4,000$ ). As only half of the items remain in inventory, their value is overstated by half of that profit that is, $\$ 500$. Note: in many Paper F3 questions, you will be expected to calculate the profit made by using margins or mark-ups, which are not discussed here.)

The consolidation adjustment, in effect, is saying that the group has made a profit of $\$ 500$ on items, which have not been sold on to a third party - so effectively selling inventory at a profit to itself, therefore inflating the value of the inventory held by the group in the statement of position and the profit in the income statement.

The adjustment would be:
Cr. Inventory (CSOFP) \$500
Dr. Cost of sales \$500
However, by reading the question stem carefully, you will see that eliminating the unrealised profit is a red herring, as we are being asked for consolidated revenue.

Therefore, the consolidated revenue is calculated as:
$\$ 79,300+\$ 29,900-\$ 5000=\$ 104,200$

## The correct answer is $D$.

Had the question stem asked for the consolidated cost of sales figure, the answer would be correctly calculated as:
$\$ 54,990+\$ 17,940+\$ 500-\$ 5,000=\$ 68,430$
Note: Answer A is incorrect, as although it correctly cancels the intra-group sale of $\$ 5,000$, it incorrectly adds the $\$ 500$ adjustment for unrealised profit to the revenue figure (\$79,300 + \$29,900 - \$5,000 + \$500 = \$104,700)

Answer C is also incorrect because it omits the cancelling of $\$ 5,000$ sales and deals incorrectly with the provision for unrealised profit of \$500. (\$79,300 + \$29,900 - \$500 $=\$ 108,700$ ).
(4) How is goodwill calculated?

Another typical Paper F3 question will require you to calculate goodwill.
Under this syllabus, only the full goodwill method is examinable and is calculated as:
\$
Fair value of consideration transferred X

Fair value of non-controlling
(2) plus: interest

X

Fair value of net assets at
(3) less: acquisition X

Goodwill at acquisition X

Even though we only own $80 \%$ of the share capital, the full goodwill method brings $100 \%$ of the goodwill on to the consolidated statement of financial position. This is consistent with the treatment of other assets and the concept of control. This is why we need to include the fair value of the non-controlling interest in our goodwill calculation. See Illustration 5 below for a typical MCQ on goodwill.

## Illustration (5)

Red Co acquired 80\% of Blue Co's 40,000 \$1 ordinary share capital on 1 January 2012 for a consideration of $\$ 3.50$ cash per share.
The fair value of the non-controlling interest was $\$ 50,000$ and the fair value of the net assets acquired was \$145,000.

What should be recorded as goodwill on acquisition of Blue Co in the consolidated financial statements?
A \$17,000
B $\$ 45,000$
c $\$ 46,000$
D \$112,000

## Answer

Goodwill can be tested in a variety of different ways. Always start by reading the question requirement carefully to determine what is being asked for. Here, in this specific question, it is the goodwill on acquisition that is being asked for, whereas other questions may ask for the cost of investment that would be recorded in the parent's books.
If we consider each component in turn, the first thing to identify is how much the parent company has paid to acquire control over the subsidiary. In this question, Red Co acquires control by paying $\$ 3.50$ cash per share.

Remember: Red Co has only acquired $80 \%$ of Blue Co's shares, so consideration transferred is $80 \% \times 40,000=32,000 \times \$ 3.50=\$ 112,000$.

Had the question asked for the cost of the investment that would be recorded in the parent's books this would be it - hence the inclusion of the distracter, the incorrect answer D.

Secondly, once we have identified the amount of consideration transferred to acquire control over the subsidiary, the fair value of the non-controlling interest needs to be identified. In this question the fair value of the non-controlling interest is given, so in our calculation we just need to add it to the consideration transferred.

In the final part of the calculation, following on from the point just made, it is necessary to look at all $(100 \%)$ of the fair value of net assets at acquisition. Again this figure is given in this question and just requires slotting into our goodwill working. In other MCQs, you may be expected to do more work on finding the fair value of the net assets at acquisition.

Goodwill can then be calculated as:

|  | $\$$ |
| :--- | :--- |
| Consideration transferred | 112,000 |
| Plus: Non-controlling interest | $\underline{50,000}$ |
|  | 162,000 |
| Less: fair value of net assets at acquisition | $\underline{(145,000)}$ |

## The correct answer is $\mathbf{A}$.

Note: Answer B ignores that Red Co only acquired 80\% of the shares and calculates the cost of investment incorrectly as $40,000 \times \$ 3.50=\$ 140,000$ - therefore, goodwill of $\$ 140,000+\$ 50,000-\$ 145,000=\$ 45,000$.

Answer C is incorrect as, despite calculating the cost of investment correctly as $\$ 112,000+$ non controlling interest of $\$ 50,000=\$ 162,000$, it incorrectly deducts ( $80 \%$ $x \$ 145,000$ ) as the share of net assets at acquisition giving goodwill of $\$ 46,000$.
(5) What is an associate and how does equity accounting work?

We began this article with consideration of how to identify a subsidiary, and we conclude it with consideration of a relationship between a parent and an associate. The Paper F3 syllabus is limited to the definition and identification of an associate and describing the principle of equity accounting only.

An associate is defined by IAS 28, Investments in Associates as 'an entity over which the investor has significant influence'.

Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control over those policies.

IAS 28 also states that a holding between $20 \%$ and $50 \%$ of the ordinary (equity) shares can be presumed to give the investor significant influence unless it can be demonstrated otherwise.

Conversely, significant influence can still be demonstrated where less than $20 \%$ of the voting rights are obtained, usually evidenced by:

- representation on the board of directors of the investee
- participation in the policy-making process
- material transactions between the investor and investee
- interchange of management personnel
- provision of essential technical information.

Once we have identified an associate exists, we do not consolidate line by line like we do for a subsidiary (neither do we calculate goodwill). This is simply because we do not have control.

For an associate we have to equity account, which means we simply bring in our share of the associate's results. In the consolidated income statement, any dividend income received from the associate is replaced by bringing in one line that shows the parent's share of the associate's profit.

In the consolidated statement of financial position, the investment in the associate is shown as a single figure in non-current assets. It is calculated as the cost of the investment + parents share of post-acquisition retained profits (ie the profits the associate has earned since the parent has had significant influence).

## Illustration (6)

Which of the following investments owned by Indigo Co should be equity accounted in the consolidated financial statements?

- $30 \%$ of the non-voting preference share capital in Yellow Co
- $18 \%$ of the ordinary share capital in Blue Co with directors of Indigo Co having two of the five places on the board of Blue Co
- $45 \%$ of the ordinary share capital of Red Co, with directors of Indigo Co having four of the six places on the board of Red Co

A 1 and 2
B 2 only
C 1 and 3 only
D 2 and 3 only

## Answer

Statement (1): Although a $30 \%$ holding appears to fall within the 20-50\% range, it is a $30 \%$ holding in non-voting preference share capital. These do not give Indigo Co
significant influence over Yellow Co and, therefore, Yellow Co is not an associate and would not be equity accounted.
Statement (2): Despite only $18 \%$ of the ordinary share capital being held by Indigo Co, as we have already discussed, we do not just consider the percentage of equity shares held, but also look at whether there can be an exercise of significant influence. Having two out of the five directors effectively gives Indigo Co influence, but not control, over decision making in the company and, therefore, Blue Co is an associate and would be equity accounted.

Statement (3): Don't just look at the $45 \%$ holding and presume it is an associate without considering the other facts. By looking at the ability to appoint directors shows that Indigo Co has four of the six directors, effectively giving them control over the decision making in the company. Having control should make you spot that actually Red Co is a subsidiary and, therefore, would be consolidated line by line in the group accounts and would not be equity accounted.

Therefore, the correct answer is B - Statement 2 only.

## (6) Concluding exam tips

Remember that at Paper F3/FFA, despite the current exam format testing MCQ only, a good solid platform of understanding the principles of consolidation is required. Although you are only being asked for extracts and calculations of typically one figure, learning standard consolidation workings can help with your exam approach.

Practising full length consolidation questions will help you grasp a better understanding of consolidation. It is important to understand how each calculation fits into the consolidated financial statement, and this will also benefit your future studies when you revisit consolidation in your later Paper F7 and Paper P2 studies.

When answering MCQs, remember to:

- read the questions requirement carefully and understand what is being asked for
- think about relevant consolidation workings or extracts that may help you
- calculate what you think the correct figure is before you look at MCQ answer options - be careful not to let the distracters catch you out, so think carefully about your calculation
- re-read the question to ensure you understand it and check you are answering the question set if your initial calculation does not match any of the answer options.

