Answers
Duke Co

(a) Calculation of NCI and retained earnings:

\[
\begin{align*}
\text{Non-controlling interest (w1)} & \quad 3,740 \\
\text{Retained earnings (w2)} & \quad 14,060 \\
\end{align*}
\]

(w1) Non-controlling interest

\[
\begin{align*}
\text{NCI at acquisition} & \quad 3,400 \\
\text{NCI% x S post acq} & \quad 700 \quad 20\% \times (7\text{m} \times 6/12) \\
\text{NCI% x FV depn} & \quad (60) \quad 20\% \times (3\text{m}/5 \times 6/12) \\
\text{NCI% x URP} & \quad (300) \quad 20\% \times 1.5\text{m} \\
\text{Total} & \quad 3,740 \\
\end{align*}
\]

Alternative presentation:

\[
\begin{align*}
\text{NCI at acquisition} & \quad 3,500 \quad (7\text{m} \times 6/12) \\
\text{Profit} & \quad (300) \quad (3\text{m}/5 \times 6/12) \\
\text{URP} & \quad (1,500) \quad (4,500 – 2,500 = 1.5\text{m}) \\
\text{Total} & \quad 1,700 \quad \times 20\% \quad 340 \\
\end{align*}
\]

(w2) Retained earnings

\[
\begin{align*}
100\% \times \text{P RE} & \quad 13,200 \\
\text{P% x S post acq} & \quad 2,800 \quad 80\% \times (7\text{m} \times 6/12) \\
\text{P% x FV depn} & \quad (240) \quad 80\% \times (3\text{m}/5 \times 6/12) \\
\text{P% x URP} & \quad (1,200) \quad 80\% \times 1.5\text{m} \\
\text{Professional fees} & \quad (500) \\
\text{Total} & \quad 14,060 \\
\end{align*}
\]

Alternative presentation:

\[
\begin{align*}
\text{NCI at acquisition} & \quad 3,500 \quad (7\text{m} \times 6/12) \\
\text{Profit} & \quad (300) \quad (3\text{m}/5 \times 6/12) \\
\text{URP} & \quad (1,500) \quad (4,500 – 2,500 = 1.5\text{m}) \\
\text{Total} & \quad 1,700 \quad \times 80\% \quad 1,360 \\
\end{align*}
\]

(b) Ratios:

\[
\begin{array}{ccc}
\text{20X8} & \text{Working} & \text{20X7} & \text{Working} \\
\text{Current} & 1.4:1 & 30,400/21,300 & 1.8:1 & 28,750/15,600 \\
\text{ROCE} & 31.3\% & 14,500/(11,000 + 6,000 + 14,060 + 3,740 + 11,500) & 48.1\% & 12,700/(19,400 + 7,000) \\
\text{Gearing} & 33\% & (11,500/11,000 + 6,000 + 14,060 + 3,740) & 36.1\% & (7,000/19,400) \\
\end{array}
\]

(c) Analysis

Performance

The ROCE has declined significantly from 20X7. However, rather than being due to a reduction in profit from operations which has increased slightly ($14.5m from $12.7m), it is due to a significant increase in capital employed which has gone from
$26.4m to nearly $50m. This will be partly due to the fact that Smooth Co was acquired through the issue of shares in Duke Co.

The ROCE will look worse in the current period as it will only contain six months’ profit from Smooth, but the entire liabilities and non-controlling interest at the reporting period.

As Smooth Co made a profit after tax of $7m in the year, six months of this would have made a significant increase in the overall profit from operations. If excluded from the consolidated SOPL, it suggests that there is a potential decline (or stagnation) in the profits made by Duke Co.

Position

The current ratio has decreased in the year from 1.8:1 to 1.4:1. Some of this will be due to the fact that Smooth Co is based in the service industry and so is likely to hold very little inventory. The large fall in inventory holding period would also support this.

An increase in trade receivables is perhaps expected given that Smooth Co is a service based company. This is likely to be due to Smooth Co’s customers having significant payment terms, due to their size.

This increase in receivables collection period could mean that Smooth Co has a weaker cash position than Duke Co. While the size of the customers may mean that there is little risk of irrecoverable debts, Smooth Co may have a small, or even overdrawn, cash balance due to this long collection period.

The gearing has reduced in the year from 36.1% to 33%. This is not due to reduced levels of debt, as these have actually increased during the year. This is likely to be due to the consolidation of the debt held by Smooth Co, as Duke Co has not taken out additional loans in the year.

This increase in debt has been offset by a significant increase in equity, which has resulted from the share consideration given for the acquisition of Smooth Co.

Conclusion

Smooth Co is a profitable company and is likely to have boosted Duke Co profits, which may be slightly in decline. Smooth Co may have more debt and have potentially put pressure on the cash flow of the group, but Duke Co seems in a stable enough position to cope with this.

32 Duggan Co

(a) Duggan Co statement of profit or loss for the year ended 30 June 20X8

<table>
<thead>
<tr>
<th></th>
<th>$000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue (43,200 + 2,700 (w1))</td>
<td>45,900</td>
</tr>
<tr>
<td>Cost of sales (21,700 + 1,500 (w1))</td>
<td>(23,200)</td>
</tr>
<tr>
<td>Gross profit</td>
<td>22,700</td>
</tr>
<tr>
<td>Operating exp (13,520 + 120 (w2) – 8 (w5) + 900 (w6))</td>
<td>(14,532)</td>
</tr>
<tr>
<td>Profit from operations</td>
<td>8,168</td>
</tr>
<tr>
<td>Finance costs (1,240 + 46 (w2) + 86 (w4) + 640 (w5))</td>
<td>(2,012)</td>
</tr>
<tr>
<td>Investment income</td>
<td>120</td>
</tr>
<tr>
<td>Profit before tax</td>
<td>6,276</td>
</tr>
<tr>
<td>Income tax expense  (2,100 – 500 – 130 (w3))</td>
<td>(1,470)</td>
</tr>
<tr>
<td>Profit for the year</td>
<td>4,806</td>
</tr>
</tbody>
</table>

(b) Statement of changes in equity for the year ended 30 June 20X8

<table>
<thead>
<tr>
<th></th>
<th>Share capital $000</th>
<th>Share premium $000</th>
<th>Retained earnings $000</th>
<th>Convertible option $000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at 1 July 20X7</td>
<td>12,200</td>
<td>35,400</td>
<td>(1,600)</td>
<td></td>
</tr>
<tr>
<td>Restated error</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share issue</td>
<td>1,500</td>
<td>1,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit (from (a))</td>
<td></td>
<td></td>
<td>4,806</td>
<td>180</td>
</tr>
<tr>
<td>Convertible issue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at 30 June 20X8</td>
<td>13,700</td>
<td>1,800</td>
<td>38,606</td>
<td>180</td>
</tr>
</tbody>
</table>

10
(c) Basic earnings per share:

\[
\begin{align*}
4,806 & \quad \text{Profit from (a)} \\
13,200 & \quad \text{Profit from (w7)} \\
\hline
= 0.36 & \quad \text{per share}
\end{align*}
\]

Working 1 – Contract

\[
\begin{align*}
\text{Revenue} & = 2,700 \quad (80\% \times 9\text{m} = 7.2\text{m}. \text{As } 4.5\text{m} (50\%) \text{ in X7, X8 } = 2.7\text{m}) \\
\text{COS} & = 1,500 \quad (80\% \times 5\text{m} = 4\text{m}. \text{As } 2.5\text{m} (50\%) \text{ in X7, X8 } = 1.5\text{m})
\end{align*}
\]

Working 2 – Court case

As the most likely outcome is that $1.012m will be paid, this must be included in full. This is discounted to present value as the payment was not expected for 12 months. The initial entry on 1 January 20X8 in operating expenses should be $920,000 (rounded), being $1.012m x 1/1.1 (or $0.9091). As $800,000 has been included, an adjustment of $120,000 is required.

This discount should then be unwound for six months, resulting in an increase in finance costs of $46,000.

Working 3 – Tax

\[
\begin{align*}
\text{Current estimate} & = 2,100 \quad \text{Add to expense and current liabilities} \\
\text{Decrease in deferred tax} & = (500) \quad \$2\text{m decrease in temporary differences } \times 25\% \\
\text{Prior year overprovision} & = (130) \quad \text{Credit balance in trial balance} \\
\hline
= 1,470
\end{align*}
\]

Working 4 – Convertible

\[
\begin{align*}
\text{Payment} & \quad \text{Discount factor} & \quad \text{Present value} \\
\text{Year ended 30 June 20X8} & = 300 & \times 0.926 & = 278 \\
\text{Year ended 30 June 20X9} & = 5,300 & \times 0.857 & = 4,542 \\
\hline
\text{Liability element} & & & = 4,820
\end{align*}
\]

The equity element is therefore $180,000, to be shown in the statement of changes in equity.

Interest needs to be applied to the liability element. $4,820 \times 8\% = $386,000. As $300,000 has been recorded, an adjustment of $86,000 is required.

Working 5 – Capitalised interest

Of the $2.56m capitalised, 3/12 of this was after the construction was complete and so should be expensed. This will lead to an increase in finance costs of $640,000.

An adjustment must also be made to the depreciation, being $640,000/20 \times 3/12 = $8,000 reduction in the depreciation charge for the year.

Working 6 – Fraud

The $1.6m must be taken to retained earnings as a prior year error. The remaining $0.9m will be taken to operating expenses.

Working 7 – Weighted average number of shares

\[
\begin{align*}
\text{Date} & \quad \text{No. of shares} & \quad \text{Fraction of year} & \quad \text{Weighted average number of shares} \\
& \quad (\prime 000) & & \quad (\prime 000) \\
1 \text{ July 20X7} & = 12,200 & \times 4/12 & = 4,067 \\
1 \text{ November 20X7} & = 13,700 & \times 8/12 & = 9,133 \\
\hline
= 13,200
\end{align*}
\]

11
This marking scheme is given as a guide in the context of the suggested answers. Scope is given to markers to award marks for alternative approaches to a question, including relevant comment, and where well-reasoned conclusions are provided. This is particularly the case for written answers where there may be more than one acceptable solution.

Section C

31 (a) Non-controlling interests
       Retained earnings

(b) Ratios

(c) Performance
       Position
       Conclusion

32 (a) Revenue and COS
       Operating costs
       Finance costs
       Investment income and tax

(b) Opening balances (incl error)
       Share issue, profit, loan notes

(c) EPS calculation
FR Examiner’s commentary on September/December 2018 sample questions

This commentary has been written to accompany the published sample FR questions and answers based on observations of the marking team. The aim of this commentary is to provide constructive guidance for future candidates and their tutors by giving insight into what markers are looking for and identifying issues encountered by candidates who sat these questions.

Question 31 – Duke Co

This question required three tasks to be completed with most of the marks being awarded for the calculation of some standard ratios and an analysis of financial statement extracts for a newly formed, two company group.

Part (a) required a calculation of non-controlling interests and group retained earnings to complete the financial statement extracts. Overall, this section of the question was well received by most candidates with some achieving full marks. For those who did not achieve full marks, this was generally due to some common mistakes noted below.

Many candidates treated the professional fees incurred by Duke Co as an expense in Smooth Co’s calculation of profit. Professional fees (acquisition costs) per IFRS 3 are not to be included within the calculation of goodwill but should instead be expensed as incurred. This cost would need to be deducted from Duke Co’s profit within the retained earnings working.

When looking at the detail in the question, Duke Co acquired Smooth Co on 1 January 20X8. The acquisition therefore took place six months into the accounting year. As a result, when looking to identify Smooth Co’s post-acquisition profit, the profit for the year of $7 million needed to be time apportioned 6/12. Similarly, fair value depreciation on the brand also needed to be time apportioned and this was often omitted by candidates.

Finally, for those candidates who calculated unrealised profit on the non-current asset transfer correctly, many included this as a deduction against Duke Co. It was Smooth Co that transferred the asset and made the profit on disposal and therefore the unrealised profit needed to be split between both non-controlling interests and retained earnings according to the percentage of ownership.

For part (b) candidates were asked to calculate three ratios for both 20X7 and 20X8 using some of the information that been calculated in part (a). Provided candidates used the correct formula and financial information from both the question and their answers in part (a) the ‘own figure’ rule was applied.

Most candidates correctly calculated current ratio for both 20X7 and 20X8 but for many, calculating return on capital employed and gearing correctly proved to be more challenging.

Many candidates calculated gearing incorrectly by using the formula debt / (debt + equity). This is an allowed calculation if the question requirement was non-specific. Candidates must
be sure to read the requirement carefully as the question specifically asked for gearing to be calculated as debt/equity.

Candidates, as always, are reminded to provide workings for their ratio calculations. This is because an incorrect answer that has no supporting workings will be awarded no marks. However, the same response may have been awarded full marks if the incorrect balance was found using the candidates ‘own figures’ from part (a).

Finally, part (c) to this question required candidates to comment on the comparative performance and position over the two-year period and to specifically comment on the impact that the acquisition had on the analysis. Despite the requirement being very clear, many candidates failed to refer to the acquisition at all. This was disappointing for the marking team as group interpretation is no longer a new area to the syllabus and there are numerous examiner commentaries and several past practice questions that have similar requirements.

For some candidates, the analysis was very weak with many simply noting that a ratio had increased or decreased in the year. This approach will continue to secure limited marks as it is not providing an analysis of why there was a change in performance during the year.

Well-prepared candidates discussed liquidity and noted that the change in current ratio was likely due to Smooth Co being in the service industry and therefore holding limited (if any) inventory. Few candidates went on to support this comment with evidence from the decrease in the inventory holding period. Only a few candidates noted that Duke Co’s liquidity would have reduced due to the acquisition of Smooth Co in part being due to a cash element.

Many candidates stated that the current ratio was very poor, and that the company faced going concern issues as the ratio was below the ‘norm’ of 2:1. These comments received few, if any marks, and candidates are discouraged from making statements such as this. Instead, candidates are encouraged to use the scenario to suggest possible reasons for the change in the ratio.

Return on capital employed (ROCE) had deteriorated significantly in 20X8. Indeed, the scenario provided candidates with clues as to why ROCE may have deteriorated which included an increase in share capital and share premium because of the share exchange on acquisition of Smooth Co. Also, there had been an increase in long-term loans which must have been due to the acquisition, given that the scenario said that Duke Co had no new loans during the year. In addition, it was worth noting that Smooth Co’s profit had only been consolidated for six months and therefore ROCE may improve in the following year. Very few candidates discussed all of these issues.

There had been very little change in gearing during the year with a small decrease in gearing being recognised. Many candidates suggested that this was due to a reduction in loans, when in fact long-term loans had increased following the acquisition (as previously mentioned this was solely due to the acquisition of Smooth Co). Well-prepared candidates were able to identify that the fall in gearing was due to the increase in equity following the acquisition of Smooth Co resulting in increased share capital and share premium.
Candidates are encouraged to provide a conclusion for any analysis requirement, pulling together the key findings from the scenario and the analysis performed.

Q32 – Duggan Co

Parts (a) and (b) to this question required candidates to prepare a statement of profit or loss and a statement of changes in equity for a single entity, from a trial balance. Overall the performance on this question was reasonably good. There were, however, some common errors and weaknesses:

A contract, where the performance obligation was satisfied over the time, was well attempted by most candidates. However, several candidates recorded the profit for the year as revenue instead of recognising the revenue and costs separately. Some marks were awarded for this, but candidates needed to record both the revenue and the costs to achieve the full marks available. Some candidates also failed to spot that this contract was in the second year and recorded the total revenue and costs to date.

There were several variations being noted by the marking team on the accounting for the unfair dismissal. Many candidates attempted to discount the $800,000 or to include the full $1,021 million. The question had included a provision of $800,000 to date, being 80% of the future expected payment. However, this treatment is incorrect. In accordance with IAS 37, the future liability should be recognised in full, but at present value (to take into account the liability being paid 12 months after recognition). Many candidates attempted discounting, but then failed to unwind the discount and recognise the subsequent finance cost.

Generally, the convertible loan was dealt with well. The most common mistake was where the market rate of interest was taken to finance costs in full and candidates did not deduct the interest already paid. Some candidates incorrectly split the convertible loan between the debt and equity components using the coupon rate of interest at 6%, this was then generally accounted for correctly thereafter earning ‘own figure’ marks. For those candidates who dealt with the convertible loan correctly, only a minority transferred the equity component into the statement of changes in equity. Many candidates failed to discount the liability to present value at all and made no attempt to split it. This is surprising as convertible loans have been tested on numerous occasions. Candidates are therefore encouraged to revise this topic area.

The borrowing cost treatment varied considerably with many candidates making no adjustment for borrowing costs at all. The interest on borrowing costs must be capitalised on a qualifying asset, but only for the period up to the date that the asset is complete. For Duggan, interest should have been capitalised between 1 July 20X7 and 31 March 20X8 (9 months). A full 12 months’ interest had been capitalised and therefore three months’ interest needed to be removed from property, plant and equipment and allocated to finance costs. This then had a knock-on-effect in the depreciation calculation which had been overstated by Duggan. A further adjustment was then required to eliminate this excess depreciation for the three-month period from the date the asset was completed.
It was pleasing to see that most candidates dealt with the fraud correctly identifying that $900,000 should be recorded as an expense in the statement of profit of loss and $1·6 million being recognised as a prior year error in the statement of changes in equity.

The share issue was also well done by the majority of candidates and recorded in the statement of changes in equity. Most candidates, however, did not deal with the share issue correctly in part (c) when asked to calculate the earnings per share for Duggan. The market issue of shares would require a weighted average of the share capital to be performed when calculating EPS and only a small minority of candidates remembered to do this.

Candidates should know that all of these issues have been assessed previously by the FR examiner and so they should attempt as many past exam questions as possible for practice and exposure to all possible learning outcomes.