
Answers

1 (a) Penketh – Consolidated goodwill as at 1 October 2013

	\$'000	\$'000
Controlling interest		
Share exchange ($90,000 \times 1/3 \times \4)		120,000
Deferred consideration ($90,000 \times \$1.54/1.1$)		126,000
Non-controlling interest ($60,000 \times \$2.50$)		150,000
		<u>396,000</u>
Equity shares	150,000	
Pre-acquisition retained profits:		
– at 1 April 2013	120,000	
– 1 April to 30 September 2013 ($80,000 \times 6/12$) (excluding OCI)	40,000	
Fair value adjustments: land	2,000	
plant	6,000	
customer relationships	5,000	
	<u>15,000</u>	(323,000)
Goodwill arising on acquisition		<u>73,000</u>

(b) Penketh – Consolidated statement of profit or loss and other comprehensive income for the year ended 31 March 2014

	\$'000
Revenue ($620,000 + (310,000 \times 6/12) - 20,000$ intra-group sales)	755,000
Cost of sales (w (i))	<u>(458,200)</u>
Gross profit	296,800
Distribution costs ($40,000 + (20,000 \times 6/12)$)	(50,000)
Administrative expenses ($36,000 + (25,000 \times 6/12) + (5,000/5 \text{ years} \times 6/12)$)	(49,000)
Investment income: Share of profit from associate ($10,000 \times 30\% \times 6/12$)	1,500
Other ($((5,000 - 1,800 \text{ dividend from associate}) + (1,600 \times 6/12))$)	4,000
Finance costs ($2,000 + (5,600 \times 6/12) + (126,000 \times 10\% \times 6/12 \text{ re deferred consideration})$)	<u>(11,100)</u>
Profit before tax	192,200
Income tax expense ($45,000 + (31,000 \times 6/12)$)	<u>(60,500)</u>
Profit for the year	131,700
Other comprehensive income	
Loss on revaluation of land ($2,200 - (3,000 - 2,000)$ gain for Sphere)	<u>(1,200)</u>
Total comprehensive income for the year	<u>130,500</u>
Profit attributable to:	
Owners of the parent	116,500
Non-controlling interest (w (ii))	15,200
	<u>131,700</u>
Total comprehensive income attributable to:	
Owners of the parent	114,900
Non-controlling interest (w (ii))	15,600
	<u>130,500</u>

Workings (figures in brackets in \$'000)

(i) Cost of sales

	\$'000
Penketh	400,000
Sphere ($150,000 \times 6/12$)	75,000
Intra-group purchases	(20,000)
Additional depreciation of plant ($6,000/2 \text{ years} \times 6/12$)	1,500
Unrealised profit in inventory:	
Sales to Sphere ($20,000 \times 1/5 \times 25/125$)	800
Sales to Vantor ($15,000 \times 30\% \times 25/125$)	900
	<u>458,200</u>

(ii) **Non-controlling interest in profit for the year:**

		\$'000
Sphere's post-acquisition profit (80,000 x 6/12)		40,000
Less: Additional depreciation of plant (w (i))	(1,500)	
Additional amortisation of intangible (5,000/5 years x 6/12)	(500)	(2,000)
		<u>38,000</u>
		x 40% =
		<u>15,200</u>
Non-controlling interest in total comprehensive income:		
Non-controlling interest in statement of profit or loss (above)		15,200
Other comprehensive income ((3,000 – 2,000) x 40%)		400
		<u>15,600</u>

2 (a) Xtol – Statement of profit or loss for the year ended 31 March 2014

	\$'000
Revenue (490,000 – 20,000 agency sales (w (i)))	470,000
Cost of sales (w (i))	(294,600)
Gross profit	175,400
Distribution costs	(33,500)
Administrative expenses	(36,800)
Other operating income – agency sales	2,000
Finance costs (900 overdraft + 3,676 (w (ii)))	(4,576)
Profit before tax	102,524
Income tax expense (28,000 + 3,200 + 3,700 (w (iii)))	(34,900)
Profit for the year	<u>67,624</u>

(b) Xtol – Statement of changes in equity for the year ended 31 March 2014

	Share capital \$'000	Equity option \$'000	Retained earnings \$'000	Total equity \$'000
Balance at 1 April 2013	42,600	nil	26,080	68,680
Rights issue (see below)	38,400			38,400
5% loan note issue (w (ii))		4,050		4,050
Dividends paid (w (iv))			(10,880)	(10,880)
Profit for the year			67,624	67,624
Balance at 31 March 2014	<u>81,000</u>	<u>4,050</u>	<u>82,824</u>	<u>167,874</u>

The number of shares prior to the 2 for 5 rights issue was 160 million (i.e. 224,000 shares x 5/7). Therefore the rights issue was 64 million shares at 60 cents each, giving additional share capital of \$38.4 million.

(c) Xtol – Statement of financial position as at 31 March 2014

	\$'000	\$'000
Assets		
Non-current assets		
Property, plant and equipment ((100,000 – 30,000) + (155,500 – 57,500))		168,000
Current assets		
Inventory	61,000	
Trade receivables	63,000	124,000
Total assets		292,000
Equity and liabilities		
Equity (see (b) above)		
Equity shares		81,000
Other component of equity – equity option		4,050
Retained earnings		82,824
		167,874
Non-current liabilities		
Deferred tax	8,300	
5% convertible loan note (w (ii))	47,126	55,426
Current liabilities		
Trade payables (32,200 + 3,000 re Francais (w (i)))	35,200	
Bank overdraft	5,500	
Current tax payable	28,000	68,700
Total equity and liabilities		292,000

(d) Xtol – Basic earnings per share for the year ended 31 March 2014

Profit per statement of profit or loss	\$67·624 million
Weighted average number of shares (w (v))	209·7 million
Earnings per share (\$67·624m/209·7m)	32·2 cents

Workings (figures in brackets in \$'000)

(i) Cost of sales (including the effect of agency sales on cost of sales and trade payables)

	\$'000
Cost of sales per question	290,600
Remove agency costs	(15,000)
Amortisation of leased property (100,000/20 years)	5,000
Depreciation of plant and equipment ((155,500 – 43,500) x 12½%)	14,000
	294,600

The agency sales should be removed from revenue (debit \$20 million) and their 'cost' from cost of sales (credit \$15 million). Instead, Xtol should report the commission earned of \$2 million (credit) as other operating income (or as revenue would be acceptable). This leaves a net amount of \$3 million ((20,000 – 15,000) – 2,000) owing to Francais as a trade payable.

(ii) 5% convertible loan note

The convertible loan note is a compound financial instrument having a debt and an equity component which must be accounted for separately:

Year ended 31 March	outflow \$'000	8%	present value \$'000
2014	2,500	0·93	2,325
2015	2,500	0·86	2,150
2016	52,500	0·79	41,475
Debt component			45,950
Equity component (= balance)			4,050
Proceeds of issue			50,000

The finance cost for the year will be \$3,676,000 (45,950 x 8%) and the carrying amount of the loan as at 31 March 2014 will be \$47,126,000 (45,950 + (3,676 – 2,500)).

(iii) **Deferred tax**

	\$'000
Provision at 31 March 2014	8,300
Balance at 1 April 2013	<u>(4,600)</u>
Charge to statement of profit or loss	<u>3,700</u>

(iv) **Dividends**

The dividend paid on 30 May 2013 was \$6.4 million (4 cents on 160 million shares) and the dividend paid on 30 November 2013 (after the rights issue) was \$4.48 million (2 cents on 224 million shares). Total dividends paid in the year were \$10.88 million.

(v) **Number of shares outstanding (including the effect of the rights issue)**

Theoretical ex-rights fair value:

	Shares	\$	\$
Holding (say)	100	1.02	102
Rights issue (2 for 5)	<u>40</u>	<u>0.60</u>	<u>24</u>
	140		126
Theoretical ex-rights fair value		<u>0.90</u> (\$126/140)	

Weighted average number of shares:

1 April 2013 to 31 July 2013	160 million x \$1.02/\$0.90 x 4/12 =	60.4 million
1 August 2013 to 31 March 2014	224 million x 8/12 =	<u>149.3 million</u>
Weighted average for year		<u>209.7 million</u>

3 (a) Note: Figures in the calculations of the ratios are in \$million

	(i) 2014 As reported	(ii) 2014 Excluding Shaw	2013 From question
Return on (year-end) capital employed	12.0% 18/(175 – 25)	13.0% (18 – 5)/(150 – 50)	10.5%
Net asset turnover	1.0 times 150/150	1.2 times (150 – 30)/100	1.16 times
Gross profit margin	22.0% 33/150	20.0% (33 – 9)/(150 – 30)	22.0%
Profit before loan interest and tax margin	12.0% 18/150	10.8% (18 – 5)/(150 – 30)	9.1%
Current ratio	1.08:1 27/25		1.67:1
Gearing	36.7% 55/(95 + 55)		5.3%

(b) Analysis of the comparative financial performance and position of Woodbank for the year ended 31 March 2014

Note: References to 2014 and 2013 should be taken as the years ended 31 March 2014 and 2013 respectively.

Introduction

When comparing a company's current performance and position with the previous year (or years), using trend analysis, it is necessary to take into account the effect of any circumstances which may create an inconsistency in the comparison. In the case of Woodbank, the purchase of Shaw is an example of such an inconsistency. 2014's figures include, for a three-month period, the operating results of Shaw, and Woodbank's statement of financial position includes all of Shaw's net assets (including goodwill) together with the additional 10% loan notes used to finance the purchase of Shaw. None of these items were included in the 2013 financial statements. The net assets of Shaw when purchased were \$50 million, which represents one third of Woodbank's net assets (capital employed) as at 31 March 2014; thus it represents a major investment for Woodbank and any analysis necessitates careful consideration of its impact.

Profitability

ROCE is considered by many analysts to be the most important profitability ratio. A ROCE of 12.0% in 2014, compared to 10.5% in 2013, represents a creditable 14.3% $(12.0 - 10.5)/10.5$ improvement in profitability. When ROCE is calculated excluding the contribution from Shaw, at 13.0%, it shows an even more favourable performance. Although this comparison (13.0% from 10.5%) is valid, it would seem to imply that the purchase of Shaw has had a detrimental effect on Woodbank's ROCE. However, caution is needed when interpreting this information as ROCE compares the return (profit for a period) to the capital employed (equivalent to net assets at a single point in time). In the case of Woodbank, the statement of profit or loss only includes three months' results from Shaw whereas the statement of financial position includes all of Shaw's net assets; this is a form of inconsistency. It would be fair to speculate that in future years, when a full year's results from Shaw are reported, the ROCE effect of Shaw will be favourable. Indeed, assuming a continuation of Shaw's current level of performance, profit in a full year could be \$20 million. On an investment of \$50 million, this represents a ROCE of 40% (based on the initial capital employed) which is much higher than Woodbank's pre-existing business.

The cause of the improvement in ROCE is revealed by consideration of the secondary profitability ratios: asset turnover and profit margins. For Woodbank this reveals a complicated picture. Woodbank's results, as reported, show that it is the increase in the profit before interest and tax margin (12·0% from 9·1%) which is responsible for the improvement in ROCE, as the asset turnover has actually decreased (1·0 times from 1·16 times) and gross profit is exactly the same in both years (at 22·0%). When the effect of the purchase of Shaw is excluded the position changes; the overall improvement in ROCE (13·0% from 10·5%) is caused by both an increase in profit margin (at the before interest and tax level, at 10·8% from 9·1%), despite a fall in gross profit (20·0% from 22·0%) and a very slight improvement in asset turnover (1·2 times from 1·16 times). Summarising, this means that the purchase of Shaw has improved Woodbank's overall profit margins, but caused a fall in asset turnover. Again, as with the ROCE, this is misleading because the calculation of asset turnover only includes three months' revenue from Shaw, but all of its net assets; when a full year of Shaw's results are reported, asset turnover will be much improved (assuming its three-months performance is continued).

Liquidity

The company's liquidity position, as measured by the current ratio, has fallen considerably in 2014 and is a cause for concern. At 1·67:1 in 2013, it was within the acceptable range (normally between 1·5:1 and 2·0:1); however, the 2014 ratio of 1·08:1 is very low, indeed it is more like what would be expected for the quick ratio (acid test). Without needing to calculate the component ratios of the current ratio (for inventory, receivables and payables), it can be seen from the statements of financial position that the main causes of the deterioration in the liquidity position are the reduction in the cash (bank) position and the dramatic increase in trade payables. The bank balance has fallen by \$4·5 million (5,000 – 500) and the trade payables have increased by \$8 million.

An analysis of the movement in the retained earnings shows that Woodbank paid a dividend of \$5·5 million (10,000 + 10,500 – 15,000) or 6·88 cents per share. It could be argued that during a period of expansion, with demands on cash flow, dividends could be suspended or heavily curtailed. Had no dividend been paid, the 2014 bank balance would be \$6·0 million and the current ratio would have been 1·3:1 ((27,000 + 5,500):25,000). This would be still on the low side, but much more reassuring to credit suppliers than the reported ratio of 1·08:1.

Gearing

The company has gone from a position of very modest gearing at 5·3% in 2013 to 36·7% in 2014. This has largely been caused by the issue of the additional 10% loan notes to finance the purchase of Shaw. Arguably, it might have been better if some of the finance had been raised from a share issue, but the level of gearing is still acceptable and the financing cost of 10% should be more than covered by the prospect of future high returns from Shaw, thus benefiting shareholders overall.

Conclusion

The overall operating performance of Woodbank has improved during the period (although the gross profit margin on sales other than those made by Shaw has fallen) and this should be even more marked next year when a full year's results from Shaw will be reported (assuming that Shaw can maintain its current performance). The changes in the financial position, particularly liquidity, are less favourable and call into question the current dividend policy. Gearing has increased substantially, due to the financing of the purchase of Shaw; however, it is still acceptable and has benefited shareholders. It is interesting to note that of the \$50 million purchase price, \$30 million of this is represented by goodwill. Although this may seem high, Shaw is certainly delivering in terms of generating revenue with good profit margins.

- 4 (a) The requirements of FRS 16 *Property, Plant and Equipment* may, in part, offer a solution to the director's concerns. FRS 16 allows (but does not require) entities to revalue their property, plant and equipment to fair value; however, it imposes conditions where an entity chooses to do this. First, where an item of property, plant and equipment is revalued under the revaluation model of FRS 16, the whole class of assets to which it belongs must also be revalued. This is to prevent what is known as 'cherry picking' where an entity might only wish to revalue items which have increased in value and leave other items at their (depreciated) cost. Second, where an item of property, plant and equipment has been revalued, its valuation (fair value) must be kept up-to-date. In practice, this means that, where the carrying amount of the asset differs significantly from its fair value, a (new) revaluation should be carried out. Even if there are no significant changes, assets should still be subject to a revaluation every three to five years.

A revaluation surplus (gain) should be credited to a revaluation surplus (reserve) whereas a revaluation deficit (loss) should be expensed immediately (assuming, in both cases, no previous revaluation of the asset has taken place). A surplus on one asset cannot be used to offset a deficit on a different asset (even in the same class of asset).

Subsequent to a revaluation, the asset should be depreciated based on its revalued amount (less any estimated residual value) over its estimated remaining useful life, which should be reviewed annually irrespective of whether it has been revalued.

An entity may choose to transfer annually an amount of the revaluation surplus relating to a revalued asset to retained earnings corresponding to the 'excess' depreciation caused by an upwards revaluation. Alternatively, it may transfer all of the relevant surplus at the time of the asset's disposal.

The effect of this, on Enca's financial statements, is that its statement of financial position will be strengthened by reflecting the fair value of its property, plant and equipment. However, the downside (from the director's perspective) is that the depreciation charge will actually increase (as it will be based on the higher fair value) and profits will be lower than using the cost model. Although the director may not be happy with the higher depreciation, it is conceptually correct. The director has misunderstood the purpose of depreciation; it is not meant to reflect the change (increase in this case) in the value of an asset, but rather the cost of using up part of the asset's remaining life.

(b) (i) Delta – Extracts from statement of profit or loss (see workings):

	\$'000
Year ended 31 March 2013	
Plant impairment loss	20,000
Plant depreciation (32,000 + 22,400)	54,400
Year ended 31 March 2014	
Loss on sale	8,000
Plant depreciation (32,000 + 26,000)	58,000

(ii) Delta – Extracts from statement of financial position (see workings):

	\$'000
As at 31 March 2013	
Property, plant and equipment (128,000 + 89,600)	217,600
Revaluation surplus	
Revaluation of item B (1 April 2012)	32,000
Transfer to retained earnings (32,000/5 years)	(6,400)
Balance at 31 March 2013	<u>25,600</u>
As at 31 March 2014	
Property, plant and equipment (item A only)	96,000
Revaluation surplus	
Balance at 1 April 2013	25,600
Transfer to retained earnings (asset now sold)	(25,600)
Balance at 31 March 2014	<u>nil</u>

Workings (figures in brackets in \$'000)

	Item A \$'000	Item B \$'000
Carrying amounts at 31 March 2012	180,000	80,000
Balance = loss to statement of profit or loss	<u>(20,000)</u>	
Balance = gain to revaluation surplus		32,000
Revaluation on 1 April 2012	160,000	112,000
Depreciation year ended 31 March 2013 (160,000/5 years)	<u>(32,000)</u>	<u>(22,400)</u> (112,000/5 years)
Carrying amount at 31 March 2013	128,000	89,600
Subsequent expenditure capitalised on 1 April 2013	<u>nil</u>	<u>14,400</u>
		104,000
Depreciation year ended 31 March 2014 (unchanged)	<u>(32,000)</u>	<u>(26,000)</u> (104,000/4 years)
		78,000
Sale proceeds on 31 March 2014		<u>(70,000)</u>
Loss on sale		<u>(8,000)</u>
Carrying amount at 31 March 2014	<u>96,000</u>	<u>nil</u>

- 5 (i) Changing the classification of an item of expense is an example of a change in accounting policy, in accordance with FRS 8 *Accounting Policies, Changes in Accounting Estimates and Errors*. Such a change should only be made where it is required by an FRS or where it would lead to the information in the financial statements being more reliable and relevant. It may be that this change does represent an example of the latter, although it is arguable that amortised development costs should continue to be included in cost of sales as amortisation only occurs when the benefits from the related project(s) come on-stream. If it is accepted that this change does constitute a change of accounting policy, then the proposed treatment by the directors is acceptable; however, the comparative results for the year ended 31 March 2013 must be restated as if the new policy had always been applied (known as retrospective application).
- (ii) The two provisions must be calculated on different bases because FRS 37 *Provisions, Contingent Liabilities and Contingent Assets* distinguishes between a single obligation (the court case) and a large population of items (the product warranty claims).

For the court case the most probable single likely outcome is normally considered to be the best estimate of the liability, i.e. \$4 million. This is particularly the case as the possible outcomes are either side of this amount. The \$4 million will be an expense for the year ended 31 March 2014 and recognised as a provision.

The provision for the product warranty claims should be calculated on an expected value basis at \$3.4 million (((75% x nil) + (20% x \$25) + (10% x \$120)) x 200,000 units). This will also be an expense for the year ended 31 March 2014 and recognised as a current liability (it is a one-year warranty scheme) in the statement of financial position as at 31 March 2014.

- (iii) Government grants related to non-current assets should be credited to the statement of profit or loss over the life of the asset to which they relate, not in accordance with the schedule of any potential repayment. The directors' proposed treatment is implying that the government grant is a liability which decreases over four years. This is not correct as there would only be a liability if the directors intended to sell the related plant, which they do not. Thus in the year ended 31 March 2014, \$800,000 (8 million/10 years) should be credited to the statement of profit or loss and \$7.2 million should be shown as deferred income (\$800,000 current and \$6.4 million non-current) in the statement of financial position.

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.

	<i>Marks</i>
1 (a) consolidated goodwill	6
(b) Consolidated statement of profit or loss and other comprehensive income	
revenue	2
cost of sales	4
distribution costs	$\frac{1}{2}$
administrative expenses	$1\frac{1}{2}$
investment income: associate	2
other	2
finance costs	$1\frac{1}{2}$
income tax expense	1
other comprehensive income	$1\frac{1}{2}$
non-controlling interest in profit for year	2
non-controlling interest in other comprehensive income	1
	19
Total for question	25
2 (a) Statement of profit or loss	
revenue	1
cost of sales	2
distribution costs	$\frac{1}{2}$
administrative expenses	$\frac{1}{2}$
operating income agency sales	1
finance costs	$1\frac{1}{2}$
income tax expense	$1\frac{1}{2}$
	8
(b) Statement of changes in equity	
balances b/f	2
rights issue	1
5% loan note: equity component	1
dividends paid	$1\frac{1}{2}$
profit for the year	$\frac{1}{2}$
	6
(c) Statement of financial position	
property, plant and equipment	$1\frac{1}{2}$
inventory	$\frac{1}{2}$
trade receivables	$\frac{1}{2}$
deferred tax	1
5% loan note	$1\frac{1}{2}$
trade payables	$1\frac{1}{2}$
bank overdraft	$\frac{1}{2}$
current tax	1
	8
(d) Basic earnings per share	
theoretical ex-rights fair value	1
calculation of weighted average number of shares	$1\frac{1}{2}$
calculation of EPS using profit per statement of profit or loss	$\frac{1}{2}$
	3
Total for question	25

		<i>Marks</i>
3	(a) (i) and (ii) 1 mark per ratio	10
	(b) 1 mark per relevant point to maximum	15
Total for question		25
4	(a) 1 mark per valid point	maximum 5
	(b) (i) Statement of profit or loss extracts	
	year ended 31 March 2013	3
	year ended 31 March 2014	2
		5
	(ii) Statement of financial position extracts	
	as at 31 March 2013	3
	as at 31 March 2014	2
		5
Total for question		15
5	(i) changing expense classification is an example of a change in accounting policy	1
	must be required by FRS or improve reliability/relevance	1
	discuss and conclude that the proposed treatment may be permitted	1
	if change must restate previous year's financial statements	1
	maximum	3
	(ii) provision for damages at \$4 million	2
	provision for product warranty claim at \$3·4 million	2
		4
	(iii) government grant is not a liability (do not use repayment schedule)	1
	government grant credited over life of the asset at \$800,000 per annum	1
	\$7·2 million deferred income in statement of financial position	1
		3
Total for question		10