

Interpretation of consolidated financial statements –

F7 for exams in September 2016, December 2016,

March 2017 and June 2017

There are additional issues to be considered when calculating and analysing ratios based on consolidated financial statements. These are non-controlling interest, goodwill and the investment in associate. It is also necessary to consider the effects of consolidation adjustments. These matter because they may distort a ratio, and it may be necessary to strip out such adjustments in order to see the picture more clearly.

For illustration purposes we will use the amended consolidated financial statements of a company called Hydan which has one subsidiary, Systan, and for our purposes, one associate.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS FOR THE YEAR ENDED 30 JUNE 20X5

	\$'000
Revenue	103,200
Cost of sales	(77,500)
Gross profit	25,700
Operating expenses	(20,175)
Interest receivable	150
Finance costs	(420)
Share of profit of associates	250
Profit before tax	5,505
Income tax expense	(3,200)
Profit for the year	<u>2,305</u>
Profit attributable to:	
Owners of the parent	1,755
Non-controlling interest	<u>550</u>
	<u>2,305</u>

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 20X5

	\$'000
<i>Non-current assets</i>	
Property, plant and equipment	28,800
Goodwill	3,025
Investment in associate	1,200
Current assets	24,000
<i>Total assets</i>	<u>57,025</u>
<i>Equity and liabilities</i>	
Equity attributable to owners of the parent	
Ordinary shares of \$1 each	10,000
Share premium	5,000
Retained earnings	<u>17,675</u>
	32,675
Non-controlling interest	<u>4,050</u>
	36,725
<i>Non-current liabilities</i>	
7% bank loan	6,000
Current liabilities	<u>14,300</u>
<i>Total equity and liabilities</i>	<u>57,025</u>

Profitability ratios

Return on capital employed and return on equity could be calculated either including or excluding non-controlling interest. Non-controlling interest is **normally included**. The key point is that both parts of the ratio should be consistent.

Hydan's ROE will be calculated as:

$$\frac{\text{Profit (including attributable to NCI)}}{\text{Shareholders' equity}} = \frac{2,305}{36,725} = 6.28\%$$

If we wanted to isolate the return generated by the parent company shareholders the ratio would be:

$$\frac{\text{Profit attributable to the owners of the parent}}{\text{Shareholders' equity excluding NCI}} = \frac{1,755}{32,675} = 5.37\%$$

We can see from this that the NCI, and therefore the subsidiary, has a higher rate of return than the parent company.

Profit attributable to the owners of the parent includes the group share of the **associate's profit**. In calculating ROE the intention is to measure the return generated by the group and its shares in its associates.

In the case of **ROCE**, the ratio based on the consolidated financial statements will be:

$$\frac{\text{Profit before interest, tax, investment income and share of profit of associate}}{\text{Equity + long-term debt minus investment in associate}} = \frac{5,525^*}{41,525^{**}} = 13.3\%$$

*5,505 – 150 + 420 – 250

**36,725 + 6,000 – 1,200

Note that for ROCE we **exclude** the share of associate's profit from the numerator so we must exclude the investment in associate from the denominator.

In order to arrive at an ROCE that reflects the return on capital contributed solely by the parent company shareholders, we would need to see the subsidiary financial statements so that we could attribute interest charges and tax to the NCI. In this case we do not have those available.

The ROCE based on the consolidated financial statements can be sub-analysed into net profit % and asset turnover.

If we had calculated ROCE based solely on the return attributable to owners of the parent, we would not be able to perform this sub-analysis. This is because we are not able from the consolidated financial statements to apportion sales revenue between the group and the non-controlling interest.

When calculating group net profit %, 'share of profit of associates' should be excluded. This is because sales revenue will not include any revenue contributed by associates. Otherwise, the ratio would be distorted by the results of a company that is not part of the group.

Gearing

Hydan's gearing (debt/equity) is $(6,000/36,725) = 16\%$. In calculating gearing we include NCI as part of equity. This is because the debt shown in a consolidated statement of financial position includes 100% of the debt of the subsidiary.

The inclusion of NCI increases equity and so reduces the ratio, but the inclusion of any subsidiary debt will have increased the ratio so, depending on the level of subsidiary debt, the consolidation process can have either a positive or a negative effect on gearing.

If the acquisition has been funded by a share exchange, this will have increased share capital and premium, so increasing equity and reducing gearing.

One issue that must be considered in relation to gearing is the degree to which consolidated financial statements mask the results of individual companies. A company such as Hydan could itself have a high gearing ratio, but the inclusion of a couple of subsidiaries with low gearing and healthy earnings, plus the addition of NCI, could bring the consolidated gearing right down. In practice, lenders will be aware of this, so any institution lending to Hydan will want sight of its individual financial statements.

Solvency

The current ratio based on Hydan's consolidated financial statements is $(24,000/14,300) = 1.68:1$

We don't have the information needed to produce the quick ratio.

Group current assets and current liabilities are shown after the elimination of any intragroup balances. Exclusion of intragroup transactions and balances can lead to the removal of large amounts. Large organisations have considerable amounts owed to and from group companies. We can't see any of this from the consolidated ratio.

The consolidated current ratio is also not that meaningful to creditors, who are interested in the ability of the individual company which owes them money to pay its debts. One of the group companies could be insolvent – we can't see that from the consolidated ratio.

The degree to which the consolidated current ratio gives a faithful representation of the solvency of the group companies depends on the degree of deviation of the individual ratios from the group ratio.

Hydan has one subsidiary, Systan. If we knew that Hydan itself had a current ratio of 1.58:1 and Systan had a current ratio of 1.79:1, we could assume that a group ratio of 1.68:1 gave a fair representation.

The deviation from 1.68 would be as follows:

$$\frac{(1.58 - 1.68) + (1.79 - 1.68) / 2}{1.68} = \frac{(0.1 + 0.11) / 2}{1.68} = \frac{0.11}{1.68} = 0.07$$

0.07 is closer to zero than one, making the group ratio of 1.68 reliable.

If, however, Hydan had a current ratio of 0.58 and Systan had a current ratio of 2.79, still giving a group ratio of 1.68, the deviation would be as follows:

$$\frac{(0.58 - 1.68) + (2.79 - 1.68) / 2}{1.68} = \frac{(1.1 + 1.11) / 2}{1.68} = \frac{1.11}{1.68} = 0.66$$

0.66 is closer to one than zero making the group ratio in this case unreliable. Simply put, the difference between 0.58 and 2.79 is so great that the average of 1.68 is not sufficiently meaningful.

Where there is no access to the individual company financial statements, the consolidated current ratio should be treated with caution.

Other issues:

Goodwill

Goodwill often appears in the consolidated statement of financial position. The existence of goodwill increases assets and shareholders' equity and so affects a number of ratios.

The increase in shareholders' equity will act to reduce both ROCE and ROE. Impairment losses on goodwill will reduce profits, also negatively impacting ROCE and ROE.

EPS

Earnings per share is regarded as an important measure of profitability, and is a component of the P/E ratio. For measurement against other companies, EPS is only useful if measured against other companies with the same number of shares. Where there are differing numbers of shares, the P/E ratio is a more useful means of comparison.

The trend of EPS measured over time is a useful indicator but can be distorted in the case of consolidated financial statements where an acquisition has taken place funded by a share exchange.

Other investor ratios

Other investor ratios such as dividends per share are less meaningful when applied to consolidated financial statements. Investors own shares in individual companies and receive dividends on the basis of the results of the individual company, not the group.

Dividend cover is also inapplicable, as the dividend has to be covered from the earnings of the individual company, not the group.

Consolidated vs individual financial statements

Some consolidation adjustments will lead to the recognition of additional assets. For instance, a subsidiary may have an internally-generated customer list which it does not recognise in its own financial statements. A value may be placed upon this at acquisition and it will then be recognised in the consolidated financial statements as an intangible asset. This increases assets and shareholder's equity, depressing consolidated ROCE and ROE. As the intangible asset is amortised, this will negatively impact earnings.

It is worth noting that the individual financial statements of companies in a group can also be misleading, as they are subject to intercompany transactions which may be undertaken for a variety of reasons.

Transfer pricing is one issue. Goods may have been supplied on favourable terms to another group company – or they can be supplied at inflated prices. The purpose can be simply to transfer funds from one company to another.

A subsidiary may obtain head office services free of charge – or at an inflated charge.

Loans may be advanced at non-commercial rates.

All of these issues are **resolved upon consolidation** as the entries will be eliminated, along with any resulting unrealised profit. So in some cases, the consolidated financial statements and ratios based on the consolidated financial statements, may give a more faithful representation of the financial situation of the companies in the group.

Change in group structure

When comparing financial statements year-on-year, the effect of any change in group structure must be considered. In particular, if a group has disposed of a subsidiary in the previous year, the results of the subsidiary disposed of need to be separated out in order to make any comparison meaningful. The application of IFRS 5 *Non-current assets held for sale and discontinued operations* makes it possible to separate out the results of continuing and discontinued operations. This is important for analysts as discontinued operations will not be contributing to future performance and non-current assets held for sale will be disposed of in the near future.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of BPP Learning Media Ltd.

The contents of this book are intended as a guide and not professional advice. Although every effort has been made to ensure that the contents of this book are correct at the time of going to press, BPP Learning Media makes no warranty that the information in this book is accurate or complete and accept no liability for any loss or damage suffered by any person acting or refraining from acting as a result of the material in this book.

