## Chapter 17

## Solution 17.1

The limitations of ratio analysis are:

1. Accounting statements present a limited picture only of a business. The information included in the accounts does not cover all aspects of a business. For example human assets and inherent goodwill are excluded from the accounts.
2. Changes in a company's accounting policies and estimates can significantly distort any inter-firm comparisons and trend analysis.
3. Ratios are based upon past performance and hence historical data. Although they can indicate future trends there is no guarantee these forecasts will be correct.
4. Ratios can be misleading if used in isolation. It is important to use comparisons with past performance or a similar company in the same business sector. Any comparison must take into account changing economic conditions and the risk factors of the particular business.
5. Inflation and its effects can be ignored.
6. The key financial indicators do not highlight whether a company is over-dependant on one customer or one product line or one supplier. Other factors that increase the commercial/business risk associated with a company may also be missed.
7. Ratios are based on the figures in the financial accounts, which contain estimates with regard to items such as provisions, revaluation's, contingencies etc. Should any of these estimates be significantly incorrect the ratios will be misleading.

## Solution 17.2

## Outline the effect each of the following decisions would have on the return on capital employed ratio.

Increasing sales price will improve gross and net profit margins and as long as the price increase has does not adversely affect volume sales and the total asset turnover ration then operating profit should improve.

Paying off a long-term loan with cash in hand will ensure a business will have the effect of reducing loan interest and thus increasing profit and the return on capital employed. However management should assess whether redeeming a loan is the best option to take as they may be foregoing some very profitable investments that could ensure and even higher returns

Reducing fixed costs in the income statement will have a positive effect on the return on capital employed as long as these cost reduction do not deteriorate the quality of the product or service offered by the business. Should this happen then sales and profitability would be adversely affected.

Arranging an overdraft facility will have no effect on return on capital employed as it is only a facility arranged. However should a business use a overdraft facility excessively due to bad management of working capital then loan interest would increase and this would reduce the ROCE.

## Solution 17.3

The following factors, which provide a context from which to analyse the financial performance, should be considered.

The age of the business: Any young business is quite vulnerable to the many internal and external factors or shocks that can occur. Many young businesses are highly financed by debt and will be vulnerable to interest rate and exchange rate movements as they try to develop a brand name and reputation.

The size of the business: The larger the business, the less vulnerable it may be to external factors. Larger businesses may have diversified their investments and this again protects them or reduces their business risk.

The economic and political environment: The economy both local and global, inflation, exchange rates and interest rates all affect a business. In interpreting any financial statements one must take into account the prevailing economic and political circumstances. The effects of the September 11 terrorist attacks have to be taken into account when comparing a company's performance over the period 1999 to 2003. The effects of inflation must be taken into account when looking at a company's performance over a few years. For countries experiencing high inflation, any profit made could be wiped out in real terms.

Industry Trends: Technology innovation and the trends towards deregulation are just two examples of industry trends. In interpreting any financial statements one must be aware of the trends and pressures within the specific industry.

## Solution 17.4

Outline the factors that contribute to a fluctuating gross profit percentage.

A fluctuating gross profit percentage can be caused by;

| Reduction | Increase |
| :--- | :--- |
| Reduction in Selling Price | Increase in Selling Price |
| Increase in the cost price of stock <br> purchases | Reduction in cost Price of stock <br> purchases |
| Changes in the product sales mix with <br> the business selling a higher <br> proportion of goods with a lower <br> gross profit margin | Changes in the product sales mix with <br> the business selling a higher <br> proportion of goods with a higher <br> gross profit margin |
| Theft Cash Stock/Waste |  |

An increase in sales volume will lead to an increase in gross profit but NOT to increase in gross profit percentage.

## Solution 17.5

|  |  |  | 013 |  | 012 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PROFITABILITY |  |  |  |  |  |
| Gross profit margin | Gross profit $\times 100$ | £9,700 | 65.1\% | £8,174 | 64.9\% |
|  | Sales | £14,890 |  | £12,594 |  |
| Operating profit margin | Net profit (PBIT) $\times 100$ | £3,754 | 25.2\% | £2,908 | 23.1\% |
|  | sales | £14,890 |  | £12,594 |  |
| Expenses to sales | Expenses $\times 100$ | £5,946 | 39.9\% | £5,266 | 41.8\% |
|  | sales | £14,890 |  | £12,594 |  |
| ROCE | Net profit (PBIT) $\times 100$ | £3,754 | 18.0\% | £2,908 | 14.6\% |
|  | Capital Employed | £20,838 |  | £19,907 |  |
| ROOE | Net profit after I \& T $\times 100$ | £2,604 | 18.0\% | £1,738 | 14.0\% |
|  | Total equity | £14,491 |  | £12,387 |  |
| EFFICIENCY/USE OF ASSETS |  |  |  |  |  |
| N.C. asset turnover | Sales | £14,890 | 0.66 : 1 | £12,594 | $0.6: 1$ |
|  | Non-current assets | £22,393 |  | £20,902 |  |
| Capital employed turnover |  |  |  |  |  |
|  | Sales | £14,890 | 0.71 : 1 | £12,594 | 0.63: 1 |


|  | Total assets /Cap Employed | £20,838 |  | £19,907 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Inventory Turnover | Cost of Sales | £5,190 | 22.9 times | £4,420 | 12.6times |
|  | Average stock | 227 |  | 350 |  |
| Inventory days | Average stock $\times 365$ | $227 \times 365$ | 16 days | $350 \times 365$ | 28.9 days |
|  | Cost of sales | £5,190 |  | £4,420 |  |
| Debtors days | Accounts receivable $\times 365$ | £56 | 1.4 days | £85 | 2.5 days |
|  | Credit sales | £14,890 |  | £12,594 |  |
| Creditors days | Accounts payable $\times 365$ | $\underline{£ 290}$ | 20.4 days | £420 | 34.7days |
|  | Credit purchases | £5,190 |  | £4,420 |  |
| LIQUIDITY |  |  |  |  |  |
| Current ratio | Current Assets | £320 | 0.17 : 1 | $\underline{\mathrm{f}} \mathbf{7 2 5}$ | $0.4: 1$ |
|  | Current Liabilities | £1,875 |  | £1,720 |  |
| Quick-acid test ratio | Current Assets - Stock | $\underline{£ 93}$ | 0.05 : 1 | $£ 375$ | 0.21 : 1 |
|  | Current Liabilities | £1,875 |  | £1,720 |  |
| CAPITAL STRUCTURE |  |  |  |  |  |
| Gearing | Fixed interest debt | £6,347 | 0.44 : 1 | £7,520 | 0.61 : 1 |
|  | Shareholders funds | £14,491 |  | £12,387 |  |
| Interest cover | Net profit (PBIT) | £3,754 | 6.7 : 1 | £2,908 | 4.47 : 1 |
|  | Interest | £560 |  | £650 |  |

## Commentary on Yocomana Hotels Ltd should include

## Introduction

This question requires an analysis of the performance of the business between 2012 and 2013 under the headings of profitability, liquidity, management's use of assets and financial risk. From an initial scan of the business it seems that 2013 was a good trading year for Yocomana hotels with sales and operating profits increasing significantly allowing the company to increase its dividends to shareholders and continue to reinvest in the business. Long-term debt has decreased significantly with equity increasing.

## Profitability

Overall sales increased in 2013 by 18\% with operating profits increasing by $29 \%$. This is reflected in an increased ROCE of $18 \%$ up from $14.6 \%$ in 2002. These are all excellent results. On further analysis the increase in the ROCE has occurred due to a combination of an increased operating profit margin (up 2\%) and management achieving a higher capital employed turnover (. 63 in 2012 to .71 in 2013).

Focusing on the profit margins the reason for the $2 \%$ increase is due in the main to a reduction in the expenses to sales \% both administration and selling expenses. Administration and selling expenses increased by $12 \%$ and $13 \%$ respectively however sales increased by $18 \%$ thus reducing the expense to sales ratios. To analyse these expenses one would need a break-down of expense items however as hotels have high fixed costs it is normal that as sales increase the expenses to sales percentage will decrease. Overall the operating margin ratios are reasonable in comparison to norms within the hotel sector. Management however should be mindful of the increase in expenses and identify the drivers of these increases and assess their added value if any.

In 2012 the business generated 63 cent per $€$ invested in the company. This increased to 71 cent per $€$ an increase of $12.7 \%$. This increase in turnover has not come at the expense of reducing prices, which would be reflected in reduced gross profit percentages. In fact the gross profit margin has increased slightly. Overall the profitability performance is excellent however management should be mindful of the increased expenses.

## Managements use of assets

Management use assets to generate sales. Assets by their nature also generate expenses thus management must ensure sales exceed expenses and by a sufficient margin to satisfy the needs of investors. As mentioned earlier Yocomana's non-current and total asset (capital employed turnover) turnover ratios have both increased reflecting their success in generating increased sales. This success is reflected in the higher return on capital ratios. For hotels, investment in current assets is quite low. The debtor's collection period of between 1 and 3 days reflects the cash nature of the business. The stock turnover ratio has increased reflecting the increase sales as well as reducing stock levels. The creditor payment period has decreased due in the main to reduced creditors. None of these ratios are cause for concern.

## Liquidity

The liquidity ratios assess the ability of a business to pay its debts on time. This is measured through the current and the quick ratios. The current ratio assesses the ability of a business to pay its debts over a 6-12 month period. The quick ratio is a worst case scenario assessing a company's ability to pay its current liabilities out of its current assets immediately. The company's ratios in 2012 reflect the norm for the sector however these ratios have deteriorated in 2013 and should be monitored and improved over 2014. It should be noted that the company's cash levels have decreased rapidly. In 2012 the company had a negative net cash position of $€ 540,000$ whereas at the end of 2013 this increased to a negative figure of $€ 1,110,000$.

Financial Risk/ capital structure
The gearing ratio measures the level of debt to equity for a business. A company with too high a level of debt would be considered highly geared and thus would create concern regarding its ability to meet the conditions of the debt especially in an economic downturn. In the case of Yocomana Hotels Ltd the company would be considered low geared with long-term debt falling from its 2012 level. The debt to equity ratio fell from $61 \%$ in 2012 to $44 \%$ in 2013. Thus the company has a strong balance sheet and this is reflected in the interest cover ratio going from 4.5 times to 6.7 times in 2013.

## Conclusion

Overall the business has performed very well while at the same time reducing its debt levels. The two points of concern relate to the increase in expenses and the liquidity ratios, which need to be investigated and monitored.

## Solution 17.6

## PROFITABILITY

Gross profit margin

Operating margin
Expenses to sales

ROCE

Rooe

EFFICIENCY

| N.C. asset turnover | $\frac{\text { Sales }}{\text { Non-current assets }}$ |
| :--- | :--- |
| Cap Employ turnover | $\frac{\text { Sales }}{\text { Capital employed }}$ |
| Inventory Turnover | $\frac{\text { Cost of Sales }}{\text { Average stock }}$ |
| Inventory days | $\frac{\text { Average stock } \times 365}{\text { Cost of sales }}$ |
| Debtors days | $\frac{\text { Accounts Receivable } \times 365}{\text { Credit sales }}$ |
| Creditors days | $\frac{\text { Accounts payable } \times 365}{\text { Credit purchases }}$ |
| LIQUIDITY | $\frac{\text { Current Assets }}{\text { Current Liabilities }}$ |
| Current ratio | $\frac{\text { Current Assets - Stock }}{\text { Current Liabilities }}$ |
| Quick-acid test ratio | Fixed interest debt |
| CAPITAL STRUCTURE | $\frac{\text { Net profit (PBIT) }}{\text { Interest }}$ |
| Interest cover |  |

Dunne Group

| $\begin{aligned} & £ 11,577 \\ & £ 17,589 \end{aligned}$ | 65.8\% | $\begin{aligned} & £ 9,862 \\ & £ 15,222 \end{aligned}$ | 64.8\% |
| :---: | :---: | :---: | :---: |
| £4,967 | 28.2\% | £4,139 | 27.2\% |
| £17,589 |  | £15,222 |  |
| £6,610 | 37.6\% | £5,723 | 37.6\% |
| $£ 17,589$ |  | £15,222 |  |
| £4,967 | 17.82\% | £4,139 | 20.62\% |
| £27,864 |  | £20,077 |  |
| £3,021 | 19.2\% | £2,972 | 23.67\% |
| £15,739 |  | £12,557 |  |
| £17,589 | $0.586: 1$ | £15,222 | 0.716: 1 |
| £30,017 |  | £21,250 |  |
| £17,589 | 0.63: 1 | £15,222 | 0.76: 1 |
| £27,864 |  | £20,077 |  |
| £6,012 | 26.5times | £5,360 | 19.9times |
| 227 |  | 270 |  |
| $\underline{227}$ | 13.8 days | $\underline{270}$ | 18.4 days |
| £6,012 |  | £5,360 |  |
| $£ 60$ | 1.2 days | £56 | 1.3 days |
| £17,589 |  | £15,222 |  |
| $\underline{£ 290}$ | 17.6 days | $\underline{£} 300$ | 20.4 days |
| £6,012 |  | £5,360 |  |
| $£ 320$ | 0.13: 1 | $\underline{¢} 708$ | 0.37 : 1 |
| £2,473 |  | $£ 1,881$ |  |
| £93 | 0.04: 1 | £438 | $0.23: 1$ |
| £2,473 |  | £1,881 |  |
| $£ 12,125$ | 0.77: 1 | £7,520 | 0.6:1 |
| £15,739 |  | £12,557 |  |
| £4,967 | 5.38: 1 | £4,139 | 11.63 : 1 |
| £923 |  | £356 |  |

## Commentary on Dunne Group verses Gibson Hotels should include

## Introduction.

In comparing the performance of these two companies it must be pointed out that both companies are in the same business sector - the hotel industry with both companies having a similar portfolio of hotels mainly 3 and 4 star. However it is clear from the balance sheet that the Dunne Group are a larger company as their non-current assets are $41 \%$ greater than Gibson Hotels and their net assets (FA +CA-CL) are 39\% greater. One should however ask the question when was the last time either company revalued their assets. It may be that Gibson revalued recently and that could explain the significant difference in asset levels. This information would be available in the annual report. However ignoring revaluations, is terms of the level of sales and profits the Dunne Group should out-perform Gibson Hotel as it has greater capacity.

## Profitability and management efficiency

Dunne's sales are $15.5 \%$ greater than Gibsons with operating profit $20 \%$ greater. This is as it should be based on the greater capacity of Dunnes. However when one compares their ROCE and ROOE ratios Gibson is performing better with a ROCE and ROOE of $20.62 \%$ and $23.7 \%$ respectively. These are excellent returns and would entice any potential investor. Dunne's returns are also quite good in comparison to norms within the sector at $17.83 \%$ and $19.2 \%$. Further analysis into the ROCE tell us that the main reason why Gibson Hotels are performing better than the Dunne group is that it is generating more sales per $€$ invested in the business. The total asset turnover is 0.758 for Gibson as against 0.631 for Dunne. The fixed assets turnover is also significantly higher that Dunnes at 0.716 compared to 0.586 . Thus overall Gibson Hotels is a more efficient business in generating sales for the level of assets that it has.
In terms of profitability the Dunne Group performs slightly better than Gibson with a GP\% of $66 \%$ as against $65 \%$ for Gibson and this also translates to an operating profit percentage of $28 \%$ as against $27 \%$ for Gibson. The expenses to sales $\%$ are the same for both companies.
In summary Gibson Hotels is generating a greater return that the Dunne Group and this is due the company generating more sales per $€$ invested in the business that Dunnes. This could be due to the fact that the company has a lower pricing policy which may reflect in the lower GP\% for Gibson. If this is the strategy (reduce prices to stimulate demand) then it is working compared to Dunnes profitability performance. Overall it must be said that both companies are generating excellent returns for their shareholder taking into account the average returns for the industry at below $12 \%$.

## Liquidity

In terms of liquidity Gibson Hotels is performing a lot better than the Dunne Group. Gibson has a lot of cash on the balance sheet (maybe too much) and its current and quick ratios are very much normal for the industry at .38 and .23 respectively. Thus one can safely say that the Gibson Hotels is quite solvent. However the Dunne group has significantly poorer liquidity ratios which are well below the industry average (0.4) of
0.13 and .038 for the current and quick ratios. Although the hotel industry is predominantly a cash business these ratios would be a concern especially with the company in overdraft to the tune of $€ 145,000$. This situation needs to be monitored and improved.

## Capital structure /financial risk

The debt to equity ratio measures the capital structure of a business i.e. the extent the business is financed by debt compared to equity. This requires a balancing act from the financial manager as debt financing in the long-term is cheaper however it is also riskier and should the business hit hard times, loans and their interest must be paid whereas equity dividends can be deferred. In this situation both companies are low geared (mainly financed through equity) with Gibson Hotels gearing at $60 \%$ and the Dunne Group at $77 \%$. This is also reflected in the safe level of interest cover at 11.6 times for Gibson and 5.4 times for Dunne.

## Conclusion

Overall both companies are performing very well with excellent returns on capital. Gibson would be seen to be a more efficient company overall with better profitability and liquidity indicators, lower gearing and higher interest cover ratios. The main area of concern for the Dunne Group is their liquidity ratios, which are very poor and need to be monitored.

## Solution 17.7

Choose 12 ratios from the following

| PROFITABILITY <br> Gross profit margin | $\frac{\text { Gross profit }}{\text { Sales }} \times 100$ | 2013 |  | 2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  | $\underline{£ 7,461}$ | 73.8\% | £8,186 | 74.7\% |
|  |  | £10,100 |  | £10,952 |  |
| Operating margin | $\frac{\text { Operating profit (PBIT) }}{\text { salec }} \times 100$ | $\frac{£ 3,184}{£ 10,100}$ | 31.5\% | $\frac{£ 3,315}{£ 10,952}$ | 30.27\% |
| Expenses to sales | $\frac{\text { Expenses }}{\text { sales }} \times 100$ | $\underline{£ 4,277}$ | 42.3\% | £4,871 | 44.4\% |
|  |  | £10,100 |  | £10,952 |  |
| ROCE | Net profit (PBIT) $\times 100$ Capital Employed | £3,184 | 22.67\% | £3,315 | 24.7\% |
|  |  | £14,047 |  | £13,414 |  |
| ROOE | NP after I \& T <br> Total equity | $\underline{£ 2,316}$ | 29.9\% | £2,307 | 35.97\% |
|  |  | £7,747 |  | £6,414 |  |
| LIQUIDITY |  |  |  |  |  |
| Current ratio | Current Assets | $\underline{£ 491}$ | 0.465: 1 | $\underline{£ 517}$ | 0.487 : 1 |
|  | Current Liabilities | £1,055 |  | £1,060 |  |
| Quick-acid test ratio | Current Assets - Stock Current Liabilities | £196 | 0.185: 1 | $\underline{£ 217}$ | 0.204 : 1 |
|  |  | £1,055 |  | £1,060 |  |

## EFFICIENCY/USE OF ASSETS

| N.C. asset turnover | Sales <br> Non current assets | $\begin{aligned} & £ 10,100 \\ & £ 14,408 \end{aligned}$ | 0.7 : 1 | $\begin{aligned} & £ 10,952 \\ & £ 13,600 \end{aligned}$ | 0.805: 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Capital employed turnover | Sales <br> Capital employed | $\frac{£ 10,100}{£ 14,047}$ | 0.719 : 1 | $\begin{aligned} & £ 10,952 \\ & £ 13,414 \end{aligned}$ | 0.816: 1 |
| Inventory Turnover | Cost of Sales <br> Average stock | $\frac{£ 2,639}{295}$ | 8.95 times | $\frac{£ 2,766}{300}$ | 9.22 times |
| Inventory days | $\frac{\text { Average stock }}{\text { Cost of sales }} \times 365$ | $\frac{295}{£ 2,639}$ | 40.8 days | $\frac{300}{£ 2,766}$ | 39.6 days |
| Debtors days | $\frac{\text { Accounts receivable }}{\text { Credit sales }} \times 365$ | $\frac{£ 160}{£ 10,100}$ | 5.78 days | $\frac{£ 175}{£ 10,952}$ | 5.83 days |
| Creditors days | $\frac{\text { Accounts payable }}{\text { Credit purchases }} \times 365$ | $\frac{£ 300}{£ 2,639}$ | 41.5 days | $\frac{£ 351}{£ 2,766}$ | 46 days |
| CAPITAL STRUCTURE |  |  |  |  |  |
| Gearing | Fixed interest debt Shareholders funds | $\begin{aligned} & \underline{£ 6,300} \\ & £ 7,747 \end{aligned}$ | 0.81: 1 | $\begin{aligned} & £ 7,000 \\ & £ 6,414 \end{aligned}$ | 1.09: 1 |
| Interest cover | Net profit (PBIT) Interest | $\begin{aligned} & £ 3,184 \\ & £ 500 \end{aligned}$ | 6.37 : 1 | $\frac{£ 3,315}{£ 552}$ | 6.0: 1 |
| INVESTMENT <br> Earnings per share | PP after I \& T \& pref dividend Number of shares | $\frac{£ 2,316}{6,000}$ | $\begin{aligned} & 0.386 \text { cent) } \\ & \text { (38.6 } \end{aligned}$ | $\frac{£ 2,307}{6000}$ | $\begin{aligned} & 0.384 \\ & \text { (38.4 cent) } \end{aligned}$ |
| Price earnings ratio (P/E) | Market price of share EPS | $\frac{170 \text { cent }}{38.6 \text { cent }}$ | 4.04 times | $\frac{200 \text { cent }}{38.4 \text { cent }}$ | 5.2 times |
| Dividend cover | Profit available to pay dividend Dividends paid and proposed | $\frac{£ 2,316}{£ 400}$ | 5.8 times | $\frac{£ 2,307}{£ 554}$ | 4.16 times |
| Dividend yield | Dividend per share x 100 <br> Market price per share | $\frac{6.66}{170}$ | 3.9\% | $\frac{9.2}{200}$ | 4.6\% |

The Report to Directors should include the following points.

## Profitability and managements efficiency

- Turnover and operating profit has decreased by $7.8 \%$ and $4 \%$ respectively between 2012 and 2013.
- ROCE has fallen from $24.7 \%$ to $22.6 \%$. The returns are excellent but the fall would be of concern
- The ROOE has also fallen but at $29 \%$ is still an excellent return for equity shareholders
- When one breaks down the ROCE into its component parts there is a slight increase in the operating profit margin (30.2\%-31.5\%) and a fall in the capital employed turnover (0.82-0.72)
- The operating profit percentage has increased despite a fall in the gross profit percentage of $1 \%$. The reason for the increase has been the fall in the expenses to sales $\%$ which fell $2 \%$. This fall in gross profit percentage could be due to
- The company not achieving its target selling price possibly due to greater competition or a fall in demand for the holiday products on offer. This fall in demand could be due to external factors such as airline safety, terrorism etc.
- The company not achieving its target sales mix and is thus selling more of its lower margin products.
- Suppliers of accommodation increasing their prices.
- A decrease in the expenses to sales percentage (44.4\% to 42.3\%) This is mainly due to a reduction of $19 \%$ in the sales and distribution expenses. Administration expenses also fell by $4 \%$.A greater break down of expenses is required to identify where the saving were made.
- 
- The capital employed turnover ratio has decreased from 0.82 to 0.72 per $€$ invested in the business. This reflects the fall in sales turnover. The company is now only generating 72 cent in sales per $€$ invested in the business. This reflects a falling demand caused by possibly greater competition or a reluctance to travel for a wide range of reasons.
- As this company has a low investment in current assets the inventory and accoutns receivable/debtors turnover ratios are not significant and there are no significant changes in these indicators.


## Liquidity

- The cash flow of the company has deteriorated going from a negative cash position of $€ 260,000$ in 2012 to an negative position of $€ 370,000$ in 2013. This is a negative cash flow of $€ 110,000$.
- The current and quick ratios have not changes significantly and are in line with norms for the hospitality and tourism sectors.


## Capital structure

- The company was considered neutral geared with a debt to equity ratio of $109 \%$ in 2012. However this has come down to $81 \%$ in 2013.
- The interest cover ratios are quite high at over 6 times in both years. Most financial institutions require a interest cover rate of 3 times thus the company has no issues in servicing its current debt levels


## Investor

- The EPS of the company has remained steady of the period although share price has fallen $15 \%$ from $€ 2.00$ to $€ 1.70$. The P/E ratio is quite low at 5.2 times in 2012 and based on the current share price of $€ 1.70$ has fallen to 4 times. The P/E reflects the low level of confidence the market has in the company's ability to maintain current returns. It also could reflect the markets concern for the sector as a whole. As the travel tourism and
hospitality sectors are very sensitive to external factors such as terrorism, oil prices etc. it would be important to assess if other companies within the sector are experiencing abnormally low P/E's.
- Dividend cover is has increased from steady at 4 times to 5.6 times telling us the company is paying out less dividend per share and hence the yield has fallen. The market may judge this however to be a prudent move with more profits retained in the business during times of uncertainty


## Conclusion

Overall the key indicators for this company suggest it has been a good year with excellent returns of capital recorded although they are significantly reduced from 2012 levels. The liquidity situation is stable and gearing has improved with the debt to equity ratio recorded at a reasonable level of $80 \%$ in 2013. The company's share price is down $15 \%$ and the company stands on a low $\mathrm{P} / \mathrm{E}$ rating reflecting the lack of confidence the market has at present in the company. It is important to set this performance in context as it could explain the reasons for this poor performance. The questions that are crucial to ask are 'is this a blip or a trend' and 'does it relate to the sector as a whole of just the company'.

## Solution 17.8

| Schedule of ratios |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013 |
| Profitability: |  |  |  |  |  |
|  | \% | \% | \% | \% | \% |
| ROCE | 4.793 | 5.30 | 6.817 | 8.129 | 9.120 |
| ROOE | 3.597 | 5.043 | 7.814 | 9.648 | 12.93 |
| ROOE (after tax) | 3.132 | 4.434 | 7.145 | 7.888 | 10.31 |
| Operating margin | 24.49 | 15.25 | 18.07 | 21.12 | 24.43 |
| Expenses to Sales | 75.51 | 84.74 | 81.93 | 78.87 | 75.56 |
| \% annual changes in Turnover |  | 107.41 | 23.03 | 19.32 | 17.00 |
| Rate of overall turnover increase over 5 years | 3.56 times |  |  |  |  |
| \% annual change in operating profit |  | 29.208 | 45.69 | 39.49 | 35.31 |
| Rate of overall operating profit increase over 5 years | 3.55 times |  |  |  |  |
| Management use of assets |  |  |  |  |  |
| Cap employed turnover | 0.195 | 0.341 | 0.377 | 0.384 | 0.373 |


| Non-current asset turnover | 0.175 | 0.322 | 0.338 | 0.373 | 0.356 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Liquidity |  |  |  |  |  |
| Current ratio | 0.240 | 0.263 | 0.196 | 0.760 | 0.635 |
| Quick Ratio | 0.201 | 0.215 | 0.164 | 0.731 | 0.611 |
| Capital Structure |  |  |  |  |  |
| Gearing | 0.274 | 0.299 | 0.404 | 0.293 | 0.445 |
| Interest cover | 2.40 | 3.66 | 5.34 | 11.43 | 47 |

## The following are the Key points in evaluating the performance of Lowery's hotel and leisure Group between 2009 and 2013.

## Profitability and management efficiency

- Turnover and operating profit has increased 3.5 times over the 5 year period representing a very successful period for the company.
- Earnings per share has also increased 3.55 times over the period.
- The ROCE was quite low in 2009 but increased to a respectable $9.12 \%$ in 2013. The ROOE (before tax) increased to $12 \%$ for 2013. In evaluating these returns it must be borne in mind the high capital intensive nature of the hotel sector and the fact that these assets are frequently revalued which dilute the return on capital ratios.
- The main reasons for the increase in ROCE over the period were
- Improving operating margins, which were $24 \%$ in 2009 but subsequently fell to $15 \%$ in 2010 and then increased to $24 \%$ by 2013. More information is required to identify if this is due to increases in the gross profit percentage or a reduction in the expenses to sales \%. However it is probably due to a mixture of both.
- Capital employed turnover rates doubled between 2009 and 2013 with the biggest increase occurring in 2010
- The non-current asset turnover ratios and trends are very similar to the capital employed turnover trends which is not surprising given the fact that investment in current assets in the hotel sector is quite low and this is more than financed through current liabilities.
- The company has over the period significantly increased its investment in hotels and bed capacity. The investment in non-current assets has increased by $75 \%$ over the period and while increasing its capacity it is also increasing sales per $€$ invested.


## Liquidity

The liquidity ratios have improved over the period. In 2009 the current and quick ratios stood at 0.24 and 0.20 respectively which is below the norm for the hotel sector. However these increased to .63 and .61 respectively in 2013 which is slightly higher than the norm. There are no details in the question on cash position and cash flow.

Capital structure
Over the period Lowery's Hotel and Leisure group would be considered low geared with a debt to equity ratio ranging from $27 \%$ in 2000 to $44.5 \%$ in 2013. This is very good considering the expansion program the company has had to finance over the period. This expansion has been mainly financed through equity share issues and retained profits. While debt has increased by $€ 30$ million, non-current assets have increased by $€ 70$ million.

The interest cover was quite low at 2.4 times in 2009 however due to the reduction in interest charges (reduction in interest rates) and increased profits the ratio went to a high of 47 times. It may be that part of this interest has been capitalized however there is no doubt that the company is low geared and would be considered to have very low financial risk.

## Conclusion

Overall Lowery's has expanded at an average rate of $19 \%$ per annum in terms of assets and is well positioned in terms of taking advantage of the increased demand for its services. Sales, operating profits and earnings have increased 3.5 times over the period with non-current assets increasing by $75 \%$. The company has remained low geared and financed the major part of its expansion through retained profits and share issues. The company should now try and maximize their operating profits and increase the return to equity shareholders.

## Solution 17.9



| P/E ratio (based curr yr earn) | Mark val per share | 1,042 | 11.7 | $\underline{5,470}$ | 13.3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earnings per share | 89.0 |  | 411.4 |  |
| Div per share in $€ c$ | Ord dividends paid | $\underline{27}$ | 14.6 | 680 | 306.8 |
|  | Aver no. ord shares | 185 |  | 222 |  |
| Div payout \% | Ord div paid | $\underline{27}$ | 16\% | 680 | 75\% |
|  | Profit aft tax and pref. | 165 |  | 912 |  |
| Dividend Yield | Div per share | 14.6 | 1.41\% | 306.8 | 5.61\% |
|  | Mark val per share | 1,042 |  | 5,470 |  |
| Total return per share | $\frac{\text { Div + close val - open val }}{\text { Open value }}$ | $\frac{-444.4}{1.501}$ | -29.6\% | $\frac{-93.2}{-07}$ | -1.6\% |
| Solmelia Accor | $\begin{aligned} & (15+1042-1501) / 1501 \\ & (307+5470-5870) / 5870 \end{aligned}$ |  |  |  |  |

4(b) Comments on Performance of Solmelia and Accor for 2007

Accor is by far the larger company. Its revenue of $€ 8,121$ million was 6.0 times Solmelia's $€ 1,351$ million, and its capital employed of $€ 4,318$ million was 1.9 times Solmelia's $€ 2,296$ million.

Based on the return on capital employed, the primary accounting measure of performance, Accor was the more successful company. Its return was an exceptional $23 \%$ compared to a more normal $10.3 \%$ for Solmelia. There were two main factors causing this.

Accor's operating margin of $14.9 \%$ was lower than Solmelia's $17.5 \%$. Solmelia's higher margin was due to relatively lower costs and higher prices.

However Accor was much more efficient in generating revenue from assets employed, with a turnover of capital employed of 1.88 compared to only 0.59 for Solmelia.

Similarly, the difference in pre-tax return on equity, a primary indicator of accounting profitability for the shareholders, was considerable. Accor earned a very high $30.5 \%$ compared to $17.4 \%$ for Solmelia. These were higher than the ROCE above. Accor's return on its capital of $23 \%$ was greater than the interest rate payable on its debt of $23 \%(64 / 278)$ and this boosted its return on equity. Solmelia's return on its capital of $10.3 \%$ was also greater than the interest rate payable on its debt of $5.5 \%(58 / 1,050)$.

In the area of financial gearing, Accor has much lower gearing. It had a very low net debt to equity ratio of only $7 \%$ compared to a high $102 \%$ for Solmelia. It had a very high interest cover of 18.9 compared to an adequate 4.1 for Solmelia. Neither company should have difficulty meeting its interest payments.

Accor's cash from operating activities as a percent of profit after tax was $155 \%$ compared to $211 \%$ for Solmelia. Hence Solmelia's profits are of a higher quality as they bring in much more cash than the accruals-based "paper" profit in the income statement.

Accor's cash from operations as a percent of net debt was 509\%. Hence only 0.2 years (100/509) of 2007 cash profits would enable the company to repay its debt. Solmelia's operating cash was $33 \%$ of its debt. Hence 3 years (100/33) of cash profits would be required to repay its debt.

The price-earnings ratio at 31 December 2007, based on that year's profit, was an average 13.3 for Accor, compared to 11.7 Solmelia. Hence the stock market is less pessimistic about Accor's future performance.

The dividend payout as a percent of profit was a high $75 \%$ for Accor but only $16 \%$ for Solmelia. The norm in Europe is some 40\%. The dividend yield was 5.6\% for Accor compared to only 1.4\% for Solmelia.

However based on the company's share price performance, 2007 was not a good year, and Accor did much better than Solmelia. Accor's share price decreased during the year from 5,870 to 5,470 cents, a fall of $7 \%$. This was due to reduced confidence in the company's future prospects. However Solmelia's share price decreased by $31 \%$ from 1,501 cents to 1,042 cents.

Hence the total return per share (dividends +/- change in price) was a negative $1.6 \%$ for Accor compared to a negative 30\% for Solmelia.

Overall in 2007, Accor's accounting ratios were better than Solmelia's. Its share price also fell by a much smaller larger amount. Solmelia needs to improve its profitability and reduce its debt, which should lead to a recovery in its share price and price-earnings ratio.

