Chapter 12 Solutions

Question 12.1

a) Outline the main reasons why the operating profit margin of a hotel would increase from one year to the next

The operating profit margin will increase due to the following reasons:

1) An increase in the gross profit margin. This can be caused by the following

- An increase in selling price
- A reduction in the cost price of stock purchases
- Changes in the product sales mix with the business selling a higher proportion of goods with a higher gross profit margin.

2) A decrease in the expenses to sales ratio. This can be caused by the following

- A decrease in expenses without a similar decrease in sales.
- An increase in sales without a similar increase in expenses.

b) Outline the effect each of the following decisions would have on the return on capital employed ratio:

i. Increasing sales price. As long as there is no reduction in sales volume then sales and profit increase and thus ROCE increases.

ii. Paying off a long-term loan with cash in hand. This will have the effect of reducing the capital invested in the business as well as reducing loan interest thus ensuring a higher profit before tax. Thus ROCE should increase.

iii. Reducing fixed costs in the profit and loss account. This should have the effect of increasing profits and thus increasing ROCE.

iv. Arranging an overdraft facility. No effect

Question 12.2

a) Outline the objectives of performance evaluation

- To assess and ensure that management actions and decisions are in line with strategic objectives.
- To act as a motivational tool in providing a framework to guide and measure managers decisions.
- To help in improving decision-making across an organisation by ensuring that decisions are informed and based on key performance indicators.
- To provide timely, relevant information on areas needing management attention, thus acting as a control mechanism.
- To enable managers to understand the needs and expectations of the various stakeholders in an organisation.

b) Distinguish between inter-firm comparisons and benchmarking as a form of performance appraisal

Benchmarking is a continuing activity where a business or division seeks to copy or become like another successful business and achieve a similar level of success. It involves identifying a successful business or part of a business and using that business as a standard to follow. There are three principal approaches to benchmarking:

1. Competitor benchmarking is a process of comparing ones financial performance with that of direct competitors.

2. Process benchmarking where data is exchanged between companies with similar operating and administrative systems, with the objective of learning from one another and improving efficiencies.

3. Strategic benchmarking, which compares businesses that possess similar organisational structures and implement similar business strategies.

Inter-firm comparison is the process of comparing the performance of different companies, subsidiaries and investment centres. Performance is compared by preparing key accounting ratios to assess the businesses that are performing above average and those that are not. This can provide good control information for managers of poor performing companies to initiate appropriate measures to improve performance. For managers of companies performing above average, the challenge is to try and continue this performance level. To be informative and to ensure management receive realistic control information, inter-firm comparisons require that the comparative process only involves; businesses within the same sector, businesses of similar size, businesses that employ similar accounting policies.

Both benchmarking and inter-firm comparisons are extremely effective ways of appraising and improving the performance of a business. One of the key elements in both procedures is the preparation and interpretation of key financial performance measures.

Question 12.3

This question firstly requires the preparation of key financial performance indicators focusing on profitability and operating performance

	2000 x 100			
ROCE	120000	**1.67 %**	27,000 x 100	**6.75 %**
			400,000	
	2000 x 100			
Operating profit margin	40,000	**5 %**	27,000 x 100	**22.5 %**
			120,000	
	40,000			
Capital employed turnover	120,000	**€0.33**	120,000	**€0.30**
			400,000	
Gross profit	23,000 x 100	**57.5 %**	77,000 x 100	**64.17 %**
	40,000		120,000	
Labour costs to sales %	12,000 x 100	**30 %**	30,000 x 100	**25 %**
	40,000		120,000	
Overheads to sales %	9000 x 100	**22.5 %**	20,000 x 100	**16.67 %**
	40,000		120,000	
Sales mix Bar	10,000 x 100	**25 %**	40,000 x 100	**33.33 %**
	40,000		120,000	
Rest	30,000 x 100	**75 %**	80,000 x 100	**66.67 %**
	40,000		120,000	
Bar gross profit %	5,000 x 100	**50 %**	26,000 x 100	**65 %**
	10,000		40,000	
Rest gross profit %	18,000 x 100	**60 %**	51,000 x 100	**63.75 %**
	30,000		80,000	

In comparing the profitability and operating performance of both companies one must note that while both companies are operating in the same sector, Mulligans is significantly larger with 3 times the sales of Daly's and has net assets values (capital employed) 3.33 times greater than Dalys.

From a profitability perspective Mulligan's is generating operating profits of €27,000 compared to Daly's of €2,000. Much of this can be related to the relative size of the investment in both businesses. Mulligan's however does generate an average ROCE of 6.75% compared to Daly's return which is very poor at 1.67%.

Once can further analyse these ratios into their to component parts.

1. Capital employed turnover: Dalys perform better in this regard that Mulligans. Dalys is generating 0.33 cent per € invested in the business. This is 10% higher than the sales generated by Mulligans for its level of investment.
2. Operating profit margin: Mulligans completely out-perform Dalys in this regard. They generate an operating profit of €22.5 for every €100 sales whereas Dalys generate only €5.00 per €100 sales. This requires further analysis. The operating profit margin is influenced by two factors
    - Gross profit margin. Here Mulligans out-perform Daly's generating a gross profit of €64.17 per €100 of sales compared to Daly's of €57.5 per €100 sales. When analysing this further Mulligans generate a higher gross profit percentage in both the bar and restaurant. Daly's must investigate why its bar gross profit percentage is significantly lower than Mulligans This difference can be due to a number of reasons such as

        i. Mulligans charging a higher selling price.

        ii. Mulligans can gain higher trade discounts due to bulk buying of stocks.

        iii. Lack of cash and stock control in Daly's operations.

    - Expenses to sales ratios. Mulligans have lower labour costs and overheads as a percentage of sales. Total labour and overhead expenses for Mulligans are 2.5 times higher than Dalys however Mulligans are generating three times the level of sales. Thus their costs to sales percentages are lower.

Overall while Dalys is efficient in generating more sales per € invested in the business however it is poor is extracting a reasonable profit from those sales. The problems are focused on the lower gross profit margin for the Bar as well as the higher labour and overhead costs. Management must investigate these areas with the overall objective of generating more profit per € sales.

Question 12.4

	2005	2004
Operating profit margin	10%	12%
Capital employed (total asset)	€950,000	€930,000
Number of tourists per annum	2,000	2,100
Average price per person per tour	€500	€550
Revenue per seat available	€350	€440
Direct costs as a percentage of sales	50%	48%
Labour costs as a percentage of sales	30%	28%
Overheads as a percentage of sales	10%	12%
Number of employees	300	280

From the data given, ROCE has fallen from 14.9 per cent to 10.5 per cent, a fall of 4.4 per cent. The first step is to break the ROCE into its two component parts, capital employed turnover and operating profit. The operating profit is given in the question however capital employed turnover must be calculated.

Calculation of capital employed turnover

		2005 **€**		**2004** **€**
Sales	(2000 x €500)	1,000,000	(2100 x €555)	1,555,000
Capital employed		950,000		930,000
Capital employed turnover		1.05		1.242

The capital employed turnover ratios have fallen from 1.242 in 2004 to 1.05 in 2005. Thus the business is generating less sales per € invested in the business. This is also reflected in the reduced number of tourists which fell by 4.76% (100/2100). This is despite the average price per tour falling by 10%.

The operating profit margin fell from 12 per cent to 10 per cent. From the data given, the main reasons for this fall are:

- The company not maintaining its average price per tour of €550. This price fell by 10% to €500. Management must ascertain why this has occurred and assess how to rectify the situation. Also the average price per seat fell by 20.5% suggesting that the volume of tours did not increase in reaction to the reduced price per tour.

- Direct costs as a percentage of sales increased by 2%. As sales volume falls it is expected that there would be some fall in direct costs. Management must investigate this increase and ascertain is it due to the reduced sales or a lack of control over costs.

- Labour costs as a percentage of sales has increased by 2%. This is also in conjunction with an increase in the number of employees of 7.2% (20/280). Management must ascertain what category of labour has increase and question the value from this increase especially in the light of falling sales. Again falling sales can ensure an increased labour costs to sales %. Management must ascertain whether this is a significant part of this increase.

- The overheads to sales percentage has decreased from 12% to 10%. Management must investigate this reduction and ascertain what category of overhead has fallen. Overheads are mainly fixed costs and thus they are not expected to fall as sales volume falls. Thus this 2% represents a real saving and management must assess where this saving has occurred and assess its long-term impact.

Question 12.5

Next Group plc

		2004		2003	
PROFITABILITY					
Gross profit margin	Gross profit x 100 Sales	£754 £2,516	29.9%	£655 £2,203	29.7%
Net profit margin	Net profit (PBIT) x 100 sales	£371 £2,516	14.7%	£302 £2,203	13.7%
Expenses to sales	Expenses x 100 sales	£383 £2,516	15.2%	£353 £2,203	16.0%
ROCE	Net profit (PBIT) x 100 Capital Employed	£371 £592	62.6%	£302 £331	91.0%
ROOE	Net profit after I & T x 100 Shareholders funds	£245 £221	111.0%	£211 £275	76.5%
EFFICIENCY					
Fixed asset turnover	Sales Fixed assets	£2,516 £459	5.5 : 1	£2,203 £402	5.5 : 1
Total asset turnover	Sales Total assets	£2,516 £592	4.25 : 1	£2,203 £331	6.6 : 1
Stock Turnover	Cost of Sales Average stock	£1,763 249.2	7.1 times	£1,548 200.25	7.7 times
Stock days	Average stock x 365 Cost of sales	249.2 £1,763	51.6 days	200.25 £1,548	47.2 days
Debtors days	Trade debtors x 365 Credit sales	£303 £2,516	44 days	£248 £2,203	41.1 days
Creditors days	Trade creditors x 365 Credit purchases	£132 £1,791	26.9 days	£108 £1,617	24.4 days
LIQUIDITY					
Current ratio	Current Assets Current Liabilities	£710 £577	1.2 : 1	£595 £665	0.9 : 1
Quick-acid test ratio	Current Assets - Stock Current Liabilities	£447 £577	0.8 : 1	£360 £665	0.5 : 1
RISK					
Gearing	Fixed interest debt Shareholders funds	£371 £221	1.68 : 1	£56 £275	0.20 : 1
Interest cover	Net profit (PBIT) Interest	£371 £17	21.4 : 1	£302 £0.3	1005 : 1
INVESTMENT					
Earnings per share	NP after I & T & pref dividend Number of shares	£245 266.3	0.921 (92.1 cent)	£211 306.2	0.687 (68.7 cent)
Dividend cover	Profit available for dividend Dividends paid and proposed	£245 £89	2.7 times	£211 £86	2.4 times

Question 12.6

Outline the operating ratios and performance measures that are specific to *either* the retail or hospitality sector

RETAIL

There are a number of operating ratios specific to the retail sector, that assist in assessing the performance of a retail outlet.

Ratio	Formula	Use
Sales per square foot	Sales revenue / Sales floor area	This ratio is particularly useful in assessing the performance of different branches.
Operating profit per square foot	Operating profit / Sales floor area	Useful in assessing the profitability of different branches.
Sales per checkout	Sales revenue / Number of checkouts	Useful in assessing if the retail outlet has an acceptable number of checkouts.
Sales per assistant	Sales revenue / Number of staff	Useful in judging labour productivity.
Stock turnover	Cost of sales / Average stock	An important measure in establishing how effective an organisation is in managing stock and converting stock into cash.

HOSPITALITY

The hospitality sector has a number of key ratios or measurements that are important in comparing performance within the industry.

Name	Calculation	Meaning / Use / Interpretation
Occupancy ratios		
1	Rooms occupied / Rooms available x 100	Where a hotel has 100 rooms of which 65 are occupied, then the occupancy ratio is 65 per cent. The ratio is important when comparing the performance of a hotel from year to year or in an inter-firm comparative analysis. Its main criticism is that it does not take into account price per room, as this has a direct effect on the occupancy levels of a hotel.
2	Number of guests / Guest capacity x 100	This occupancy ratio measures guest capacity to the number of guests staying in the hotel. It is considered to be more accurate that 1 above as it takes into account the possibility that some double rooms could be sold as single.

3	Actual room revenue x 100 Potential room revenue	This is known as room sales potential and takes into account the lowering of prices to boost occupancy. Thus a hotel with a high occupancy level could have a low room sales potential due to the lowering of prices to boost occupancy.
Average room rate (ARR)	Annual room revenue Rooms occupied x 365	This ratio measures the relationship between room sales and the number of rooms occupied. It gives an average room sales rate.
Revenue per available room **(Revpar)**	Annual rooms revenue Rooms available x 365 or ARR x Occupancy rate	Both formulae will calculate Revpar which is considered a more important ratio than the ARR as it takes into account the occupancy levels of a hotel. For example, a guest house of 10 rooms with an average occupancy of 70 per cent, achieves, on average, daily sales of €700. The ARR equals €100 (€700 ÷ 7). Revpar equals €100 x 70 per cent = €70 or alternatively this could be calculated as €700 ÷ 10 = €70. A hotel may have a high ARR and a low Revpar due to the company not achieving its occupancy rates in part due to the high ARR.
Average rate per guest	Room revenue Number of guests	This gives the average rate per guest staying in the hotel and again is essential in interpreting any occupancy ratios, as the rate may fall in order to boost room sales.
Average spend	Sales Number of covers	This is a useful ratio for restaurants as it calculates the average spend per cover / customer. This can be done separately for

		lunch and dinner (a la carte) menus. It is an important ratio in terms of budgeting and planning.
Sales mix	Rooms revenue x 100 Total hotel revenue Food revenue x 100 Total hotel revenue Bar revenue x 100 Total hotel revenue	This tells us the percentage of total sales that is made up from room revenue, restaurant revenue, bar revenue and any other revenue streams a hotel may have.
Total sales per room **Sales per seat** **Sales per employee** **Operating profit per employee**	Total hotel revenue Room sales Total restaurant revenue No. of seats Total sales No. of employees	These ratios are generally used to spot trends in hotel or restaurant revenue. They make up part of the performance statistics for the business and can be quite useful in measuring performance and forecasting sales.

	Operating profit No. of employees	
Labour costs as a percentage of sales	Labour costs x 100 Sales	This indicates the extent to which revenue is being absorbed by staff costs. As labour costs are mostly fixed, this ratio will fall as the business experiences an increase in sales. The ratio will increase as sales fall.

Ratios such as occupancy rates, average spend, revenue per available room (revpar) and average room rate (ARR) can help explain changes in asset turnover and profit margin ratios and thus help explain a fluctuating ROCE. These ratios provide management with more relevant information to inform decision-making.

Question 12.7

a) Calculate the above financial indicators for 2006

ROCE		*(1636/15520 x100)*			**10.5%**
Operating profit margin		(*1636/5950 x 100)*			**27.5%**
Gross profit %					**76.3%**
Capital employed turnover		*(5950/15520)*			**0.3833763**
	Rooms		**Restaurant**	**Bar**	
Sales revenue	€2,950		€1,800	€1,200	
Sales mix	0.50		0.30	0.20	
Occupancy					**76%**
ARR	(*2950000/365 x 76)*				**€106.34**
Rooms Revenue per available room			*106.34 x 76%*		**€80.81**
Total sales per room available		(*5950000/100)*			**€59,500**
Total cost per available room		*(1410 + 2330+574/100)*			**€43,140**
Departmental expenses as a % sales		*(574/5950 x 100)*			**9.6%**
Labour costs as a percentage of sales		*1750+430/5,950*			**36.64%**
Departmental contribution as a percentage of total contribution					
Rooms					**64.55%**
Restaurant					**23.35%**
Bar					**12.10%**
Undistributed operating expenses as % of sales		*(2330/5950 * 100)*			**39.16%**
Total sales per employee					**€132222.22**
Operating profit per employee					**€36355.56**

b) Evaluate the performance of the hotel in comparison to the budget target

The Cahirsiveen house hotel has had a good year in 2006 when comparing against its budget targets. Overall sales exceeded budget by 9.2%. Operating profit exceeded target by 20% (1636-1362.5/1362.5) and actual ROCE was 10.5% compared to the budget target of 8.75%

The ROCE increased due to two factors

a) The hotel generating more sales and this was reflected in a higher capital employed turnover figure which was 0.38 exceeding the target of 0.35. Thus for every € invested in the business the company is generating €0.38 in sales. This is a good performance as hotel industry average tends to average around 0.33. This performance is also reflected in the higher occupancy levels as well as higher sales per available room.

b) The company's actual operating profit margin for 2006 was 27.5% exceeding the budget target of 25%. Thus as well as generating more sales the company is achieving higher profits on those sales. The operating profit margin increased due to two reasons.

- The company achieving a higher gross profit percentage of 76% compared to the budget target of 75%. This is due to the following
  - The company achieving a higher ARR and REVPAR than budget
  - A change in the sales mix where room sales increased as a proportion of total sales. Budgeted rooms sales as a percentage of total sales was 46%, actual rooms sales as a percentage of total sales reached 50%. As room sales generate higher gross profit margins the overall gross profit and gross profit percentage will increase. This is also reflected in the department contribution percentage which reached 64% compared to the budget target of 60% for accommodation.
- The company expenses to sales percentage fell compared to budget. Undistributed operating expenses were budgeted at 41% of sales. The actual figure was 39.16%. Most of these expenses would be classified as fixed costs and thus would not be expected to vary in proportion to sales. Thus if sales increase significantly the expenses to sales percentage should fall. Thus we can say this fall the expenses to sales is due to increased sales rather than reduced expenses. Other department expenses were budgeted at 9% of sales whereas the actual figure amounted to 9.6%.

The following profit statement illustrates the differences between budget and actual figures

	Budget	**Actual**	**Difference**
Sales	100%	100%	
Cost of sales	25%	23.70%	
Gross profit	75%	76.30%	1.30%
Departmental expenses	9%	9.60%	-0.60%
Undistributed operating expenses	41%	39.16%	1.84%
Net profit	25%	27.54%	2.54%

- From the ratios one will notice that total labour costs as a percentage of sales was budgeted at 35% whereas actual was 36.5%. Management should investigate this variance, assess the causes and monitor this expenses item. One will notice that the actual figure for total cost per available room (€43,140) exceeds the budget figure (€40,875) by €2,265 or 5.5%. This is mainly due to the labour costs as discussed above.

Overall management and the owners must be quite happy with the profitability and operating performance of the business. One can see that sales and profit per employee are significantly better than the budget targets and this is reflected in higher profit margins and return on capital. Management however should question the setting of the budget targets and assess if too much slack was introduced to ensure the target was more easily achieved.

Question 12.8

a) Calculate key accounting and operating ratios for Gibson Resorts plc for the years 2003 and 2004 under the headings of profitability and efficiency. You are required to include in your calculations efficiency / operating ratios unique to the hotel sector

PROFITABILITY RATIOS

		2003		**2004**
GROSS PROFIT MARGIN	(3438/4584) x 100	**75%**	(4440/6250)x 100	**71%**
NET PROFIT MARGIN	(1383/4584) x 100	**30.17%**	(1501/6254) x 100	**24.**
TOTAL EXPENSES / SALES %	(2055/4584 x 100)	**44.83%**	(2939/6254) x 100	**47%**
ADMIN EXP /SALES %	(155/4584) x 100	**3.38%**	(175/6254) x 100	**2.80%**
PROPERTY EXP	(650/4584) x 100	**14.18%**	(1100/6254) x 100	**17.59%**
WAGES AND SALARIES	(1050/4584) x 100	**22.91%**	(1414/6254) x 100	**22.61%**
SELLING / EXPENSES%	(200/4584) x 100	**4.36%**	(250/ 6254) x 100	**4%**
INTEREST COVER	(1383/322)	**4.3 times**	(1501/384)	**3.91 times**
ROOE	(1061/ 3258)x 100	**32.57%**	(1117/4621) x 100	**24.18%**
ROCE	(1383/7858) x 100	**17.60%**	(1501/9421) x 100	**15.94%**
%INCREASE /DECREASE IN SALES				**36%**
%INCREASE / DECREASE IN G.P.				**29%**
%INCREASE / DECREASE IN N.P.				**9%**
%INCREASE IN WAGES AND SALARIES				**35%**
%INCREASE IN ADM EXP				**13%**
%INCREASE IN PROPERTY COSTS				**69%**
%INCREASE IN SELLING EXP				**43%**
Cost per employee	(2055+1146/300)	**10.67**	(2939+1814/280)	**16.97**
Profit per employee	(1383/300)	**4.61**	(1501/280)	**5.36**
Sales per employee	(4584/300)	**15.28**	(6254/280)	**22.33**
Average room rate	(3,438,000/ 85 x 365)	**€110.81**	(3440,000/92x365)	**€102.44**
Occupancy		**71%**		**76.67%**
REVPAR	(110.81 x 71%)	**€78.67**	(102.44 x 76.67%)	**€78.54**

ASSET UTILISATION RATIOS / EFFICIENCY RATIOS

TOTAL ASSET TURNOVER	(4584/ 7858)	0.583	(6254/9421)	0.664
FIXED ASSET TURNOVER	(4584/ 8503)	0.539	(6254/ 10190)	0.614
STOCK TURNOVER		38.22 days		33.61 days
	(1146/120)	9.55 times	(1814/167)	10.86 times
DEBTORS COLLECTION PERIOD	(25/4584 x 365)	1.99 days	(32/6254 x 365)	1.87days
CREDITOR PAYMENT PERIOD	(340/1146 x 365)	108.29 days	(290/1814 x 365)	58.36 days

b) From the information available to you including the ratios calculated in part (a) of the question, write a report to the directors of Gibson Resorts plc on their operating performance for 2004

Overall Gibson resorts Ltd has had a very good year. Sales have increased by 36% with operating profit increasing by 9% however the ROOE and ROCE while excellent have fallen from that achieved in 2003. This report will concentrate on the operating performance of the company focusing on profitability and asset utilization indicators.

Profitability and asset utilisation

With sales and profits increasing significantly the big question is why are the return on investment ratios (ROCE ROOE) falling. Part of this fall can be related to the property revaluation however this only accounts for part of the decrease. The ROCE and ROOE excluding the property revaluation would be 16.82% and 27% respectively. The ROCE can be analysed into its two component parts namely capital employed turnover and operating profit margin. It can be seen that while capital employed turnover has increased the operating profit margin has fallen.

- Capital employed turnover: This ratio was 0.583 in 2003 and has increased to 0.701 in 2004. The company is achieving a higher level of sales per € invested in the business. This is also evidenced by the increased occupancy of the hotel as well as the percentage increase in sales of 36%. The capital employed turnover ratio would have been higher (0.733) except for the fact that the company revalued its property assets. Overall management will be pleased with this performance level
- Operating profit margin: The company is not achieving the same level of profit per € sales in 2004 as it did in 2003 and this is the main reason for the fall in ROCE and ROOE. The business was generating €30 for every €100 sales in 2003. This figure has now dropped to €24, a drop of 6%. The operating profit will fall due to two reasons
    - A fall in the gross profit %. The gross profit percentage fell by 4% (75% - 71%). This can be caused by a number of factors.
        - A decrease in the average room rate. The average room rate fell from €110 in 2003 to €102 in 2004. REVPAR showed no significant difference between the years due to the fact that occupancy increased and was to some extend boosted by the lower ARR.
        - An increase in the cost price of materials – food beverages and the direct costs associated with accommodation.
        - Changes to the sales mix where more profitable product items make up a lower percentage of total sales. In 2004 accommodation, the most profit item within a hotels sales mix, fell as a percentage of total sales (55%) compared to 2003 (75%).
    - Increases in the expenses to sales percentage. Ultimately expenses have increase by 43% with the major increases occurring in property expenses (69%) and wages and salaries (35%). The expense to sales ration increased 2% between 203 and 2004. These increases are further evidenced by the increase in cost per employee which was €10,670 in 2003 and €16,970 in 2004. Management need to take a zero based approach to costs and question the activities that drive these costs and the added value created by these cost additions. Interest cover has decreased slightly mainly due to the increased loans and the interest there-on.

In terms of asset utilization the business is generating more sales per € invested in the business. This is reflected in the higher capital employed turnover ratio, fixed asset turnover ratio and related occupancy rate and stock turnover. The debtors collection period is steady although this ratio needs to be calculated based on credit sales not total sales. There is also an improvement in the creditor payment period where the company is taking less time to pay its trade creditors.

Overall the company is generating greater levels of sales and profits have increased. The company needs to focus on pricing to maximized sales and profits as well as controlling costs.

Solution 12.9

a) Calculate the above financial indicators for 2006

ROCE		*(1590/20760 x100)*			**7.7%**
Operating profit margin		*(1590/7300 x 100)*			**21.78%**
Capital employed turnover		*(7300/20760)*			**0.35**
	France	**Italy**	**Andorra**		
Sales revenue	€2,100	€1,800	€3,400		
Sales mix	28.77%	24.65%	46.57%		
Actual packages sold					**9,700**
Average price per package	(7300,000/ 9700)				**€752.58**
Labour costs as a % sales		*(1750+900/7300) x 100*			**36.3%**
Direct costs as a percentage of sales					
France		*(1350/2100) x 100*			**64.29%**
Italy		*(1245/ 1800) x 100*			**69.17%**
Andorra		*(1034/3400) x 100*			**30.44%**
Undistributed operating expenses as % of sales		*(2080/7300 100)*			**28.5%**
Total sales per employee		*(7300,000/80)*			**€91,250**
Operating profit per employee		*(1,590,000/80)*			**€19,875**
Interest cover		*(1590/560)*			**2.84**

b) Write a report on profitability and operating performance of Terri's Tours in comparison to the budget targets set

Overall Terri's Tours made an operating profit of €1,590,000 for the year. This was down 20% on the budget target of €1,986,525. Actual sales revenue was 8.1% less than the target for the year and this is reflected in an actual ROCE of 7.7% compared to the budget target of 8.75%. In analysing the fall in ROCE one must break-down the ROCE into its two component parts namely capital employed turnover and operating profit margin.

- Capital employed turnover:

Capital employed turnover is 0.35 for both the budget and actual performance. This reflects the fact that the company is generating the same level of sales per € invested in the business. However actual sales in packages fell 1% and actual sales revenue fell 8.1%. This suggests that the level of investment in the business fell during the year where possible the company sold off some of its assets thus explaining to some extent the reason for a lower sales volume. It also tells us that the main reason for the reduction in ROCE is due to a reduced operating profit margin.

- Operating profit margin:

The company achieved an operating profit margin of 21.8% compared to the target set at 25%. The following are the main reasons for this.

- The company set a target average price per package of €810 however it only achieved a price of €753. Management need to assess the reasons for this and ascertain whether this was common across the sector due to for example levels of competition or other external factors. Did management try to boost sales volume by reducing the price??

- The company sold less packages for Andorra its high profit location thus reducing the overall operating profit margin as Andorra has a lower direct cost to sales percentage compared to France and Italy.

- Overall costs increased as a percentage of sales. Total operating costs as a percentage of sales for 2006 was 78.2% compared to the budget target of 75%. Labour costs as a percentage of sales was 36% in 2006 compared to the budget target of 32%. Overall direct costs as a percentage of sales increased with the more significant increases occurring for France(64% compared to budget of 60% and Andorra (30% compared to the budget target of 25%) Operating expenses as a percentage of sales for 2006 was 28.5% compared to the target of 27%.

- Overall the sales and operating profit per employee fell compared to the budget targets. Although the company was only 1% short of its budget target for packages sold it did not achieve its target prices. Operating costs as a percentage of sales increased in the main due to the increasing sales revenue figures. This is also true of the direct costs for both France and Andorra.

Before any further investigations the company must re-assess the reasonableness of its budget targets especially the average price per package set in the budget. This should be compared to previous years average prices achieved and management should try and assess where there any particular factors or random events that lead to the company not achieving its target prices.

Solution 12.10

a) Calculate 12 key ratios for each company for the year ended 31 December 2004, under the headings of; profitability, efficiency, operations, liquidity and gearing

		Faraway €000s		Getaway €000s	
Profitability					
Return on Capital employed	Operating profit / Capital employed	7,350 / 51,230	**14.3%**	6,100 / 34,680	**17.6%**
Operating margin	Operating profit / Turnover	7,350 / 25,250	**29.1%**	6,100 / 19,280	**31.6%**
Return on Equity	Prof before tax / Cap and reserves	5,990 / 30,830	**19.4%**	5,050 / 19,480	**25.9%**
Gross Profit Margin	Gross Profit / Turnover	18,880 / 25,250	**74.8%**	14,640 / 19,280	**75.9%**
Property exp %	Property expenses / Turnover	2,080 / 25,250	**8.2%**	1,550 / 19,280	**8.0%**
or					
Wages and Sal %	Wages and sal exp / Turnover	7,550 / 25,250	**29.9%**	5,380 / 19,280	**27.9%**
Efficiency					
Capital employed turnover	Turnover / Capital empl	25,250 / 51,230	**0.493**	19,280 / 34,680	**0.556**
or					
Fixed asset turnover	Turnover / Fixed assets at NBV	25,250 / 51,130	**0.494**	19,280 / 35,150	**0.549**
Debtor Days	Debtors x 365 / Sales	2,100 / 25,250	**30.4**	1,280 / 19,280	**24.2**
Liquidity					
Acid test	Current assets less stock / Current liabilities	2,760 / 4,110	**0.67**	2,130 / 3,640	**0.59**
Gearing					
Debt to equity	Long-term loans / Capital and reserves	20,400 / 30,830	**0.66**	15,200 / 19,480	**0.78**
Interest Cover	Operating profit / Interest charge	7,350 / 1,360	**5.4**	6,100 / 1,050	**5.8**
Operations					
Sales Mix - Rooms	Rooms revenue / Total revenue	14,800 / 25,250	**58.6%**	14,300 / 19,280	**74.2%**
Occupancy rate	Rooms occupied / Rooms available	350 / 490	**71.4%**	320 / 410	**78.0%**
Aver room rate achieved (daily)	Rooms revenue x 1000 / Rooms occupied x 365	14,800 / 127,750	**€ 115.9**	14,300 / 116,800	**€ 122.4**
or					
Rev per available room (daily)	Rooms revenue x 1000 / Rooms avail x 365	14,800 / 178,850	**€ 82.8**	14,300 / 149,650	**€ 95.6**

Annual revenue per employee	Total revenue x 1000 / No. of employees	25,250 / 450	**€ 56,111**	19,280 / 310	**€ 62,194**
or					
Operating profit per employee	Oper profit x 1000 / No. of empl	7,350 / 450	**€ 16,333**	6,100 / 310	**€ 19,677**

b) From the information available to you, including the ratios calculated in part (a) of the question, write a report comparing the performance of the two companies for 2004

Comments on Performance of Faraway and Getaway for 2004

Based on the return on capital employed, the primary measure of performance, Getaway was the more successful company, with a high return of 17.6% compared to 14.3% for Faraway. There were two main factors causing this.

Getaway's operating margin on sales was 31.6% compared to 29.1% for Faraway. Getaway's higher margins were due to relatively lower costs, higher room rates, and rooms revenue being a higher proportion of total revenue (see operating ratios below).

In addition, Getaway was more efficient than Faraway in generating turnover from assets employed, at 0.556 times, compared to 0.493 for Faraway.

The difference in the pre-tax return on equity was considerable, with Getaway earning 25.9% compared to 19.4% for Faraway. These are higher than the ROCE above. Getaway's return on its capital of 17.6% was greater than the interest rate payable on its long-term loans debt of 6.9% (1,050/15,200), and this boosted its return on equity. Faraway's return on its capital of 14.3% was also greater than the interest rate payable on its loans, of 6.7% (1,360/20,400)

Getaway's gross margin of 75.9% was greater than Faraway's, for the same reasons as the operating margin. Getaway's payroll costs of 28% of turnover compared to 30% for Faraway, while its property costs amounted to 8% of turnover compared to 8.2% for Faraway. Getaway was more efficient in these areas, enhancing its margins.

Getaway generated a higher level of sales from its fixed assets, at 0.549 compared to 0.494 for Faraway. It also exercised tighter credit control, with a debtor collection period of 24 days, compared to 30 days for Faraway.

However Getaway was in a weaker liquidity situation at the year-end. Its acid test ratio of 0.59 was lower than Faraway's ratio of 0.67. However both ratios are adequate for a hospitality business.

In the area of gearing, Getaway was more highly geared. It had a somewhat high debt to equity ratio of 0.78, compared to 0.66 for Faraway. However Getaway had a

slightly higher interest cover of 4.2, compared to 4.0 for Faraway. These ratios are adequate and neither company should have difficulty in meeting interest payments.

Operating Data show that the more profitable rooms revenue as a percent of total revenue was 74%

for Getaway and 59% for Gresham.

Getaway's rooms occupancy rate was a high 78% compared to 71% for Faraway. These were above average occupancy rates for the hotel industry in 2004. Getaway achieved a higher average room rate of €122 per night, compared to €116 for Faraway. Its revenue per available room was €95.6 compared to €82.80 for Faraway.

Getaway's employees are more efficient. Annual sales revenue per employee was €62,194 for Getaway, 11% higher than the €56,111 for Faraway. Getaway's operating profit per employee was 21% higher than Faraway's, at €19,677 compared to €16,333.

In conclusion, overall in 2004, Getaway did better than Faraway based on profitability, efficiency and operations, but was not as good in liquidity.

Solution 12.11

Analyse and compare the operating performance of both hotel groups under the headings of profitability, asset utilisation, operating performance, liquidity and capital structure. Your report should outline where and how each company could generate efficiencies and improve returns due to this inter-firm comparison and benchmarking exercise

The approach to this question is firstly prepare Key ratios for both companies under the headings of profitability, asset utilisation, operating performance, liquidity and capital structure and then to prepare a report summarising your analysis.

		Dunne		Gibson
Profitabilty		%		%
GROSS PROFIT MARGIN	*(9862/15,222) x 100*	**64.78**	*(11577/17589) x 100*	**65.82**
NET PROFIT MARGIN	*(4139/15222) x 100*	**27.19**	*(4967/17589) x 100*	**28.24**
EXPENSES / SALES %	*(5723/15222)x 100*	**37.59**	*(6610/17589) x 100*	**37.58**
ADMIN EXP /SALES %	*(3125/15222) x 100*	**20.52**	*(3598/17589) x 100*	**20.46**
SELLING / EXPENSES%	*(2598/15222)x 100*	**17**	*(3012/17589) x 100*	**17**
ROOE	*(3783/12557)x 100*	**30.13**	*(4044/ 15739) x 100*	**25.69**
ROCE	*(4139/20077)x 100*	**20.62**	*(4967/ 27863) x 100*	**17.83**
% difference in sales				**0.16**
% difference in Gross profit				**0.17**
% difference in operating profit				**0.20**
Asset Utilisation				
TOTAL ASSET TURNOVER	*(15222/20077)*	**0.758**	*(17589/27863)*	**0.631**
FIXED ASSET TURNOVER	*(15222/21250)*	**0.716**	*(17589/30017)*	**0.586**
STOCK TURNOVER (days)	*(270/5360) x 365*	**18.39**	*(227/6012) x 365*	**13.78**
DEBTORS COLLECTION PERIOD	*(56/15222) x 365*	**1.34**	*(60/17589) x 365*	**1.25**
CREDITOR PAYMENT PERIOD	*(300/5360) x 365*	**20.43**	*(290/6012) x 365*	**17.61**
Operating ratios				
OCCUPANCY	(263/350)x 100	**75%**	*(280/400) x 100*	**70%**
	15,222 x 65%		*17589 x 62%*	
ARR	*263x 365*	**€103**	*280 x 365*	€115
REVPAR	*€103 x 75%*	**€77**	*€115 x 70%*	**€80.00**

SALE PER EMPLOYEE	*(15222/ 300)*	**€50,740**	*(17589 / 350)*	**€50,254**
OPERATING PROFIT PER EMPLOYEE	*(4139/300)*	**€13,797**	*(4967 / 350)*	**€14,191**

Liquidity ratios

CURRENT RATIO	*(708/1881)*	**0.38**	*(320/2473)*	**0.13**
ACID TEST RATIO	*(438/1881)*	**0.233**	*(93/2473)*	**0.038**

Capital structure

DEBT /CAPITAL EMPLOYED	*(7520/20077)x 100*	**37.46**	*(12125/27863) x 100*	**43.51**
DEBT/ EQUITY CAPITAL	*(7520/12557)x 100*	**59.88**	*(12125/15739) x 100*	**77.04**
INTEREST COVER	(4139/356)	**11.63**	*(4967/923)*	**5.38**

The Dunne and Gibson Hotel groups

Financial performance comparative analysis

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 4star.However it is clear from the balance sheet that the Gibson group are a larger company with a greater number of rooms and hotels. Their fixed assets are 41% greater than Dunnes and their net assets/capital employed (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. However ignoring revaluations, is terms of the level of sales and profits Gibson should perform better than Dunnes as it has greater capacity and thus opportunity. Both companies have initiated this benchmarking/ inter-firm comparative analysis in the hope of learning from each other and achieving efficiencies. There are three principle approaches to benchmarking:

1. Competitor benchmarking is a process of comparing ones financial performance with that of direct competitors. For example the annual report of New Look Plc, a clothing retail chain for 2002/03, shows how their cost of sales percentage decreased by 2%. This was credited in the main to efficiencies caused by benchmarking against better businesses in the sector.
2. Process benchmarking, where data is exchanged between companies with similar operating and administrative systems, with the objective of learning from one another and improving efficiencies.
3. Strategic benchmarking, which compares businesses that possess similar organisational structures and implement similar business strategies.

Inter-firm comparison is the process of comparing the performance of different companies, subsidiaries and investment centres. Performance is compared by preparing key accounting ratios to

assess the businesses that are performing above average and those that are not. This can provide good control information for managers of poor performing companies to initiate appropriate measures to improve performance. For managers of companies performing above average, the challenge is to try and continue this performance level. To be informative, and to ensure management receive realistic control information, inter-firm comparisons require that the comparative process only involves

1. Businesses within the same sectors
2. Businesses of similar size
3. Business that employ similar accounting policies

As both companies generally meet these criteria this benchmarking exercise should prove informative and valuable to both.

Profitability and management efficiency

Gibson's sales are 16% greater than Dunne with operating profit 20% greater. This is as it should be based on the greater capacity of Gibsons. However when one compares their ROCE and ROOE Dunne is performing better with a ROCE and ROOE of 20.62% and 30.13%. These are excellent returns and would entice any potential investor. Gibson hotels are also achieving good returns at 17.83% (ROCE) and 25.69% (ROOE). Further analysis into the ROCE tell us that the main reason why Dunne is performing better that Gibson is that it is generating more sales per € invested in the business. The total asset turnover is 0.758 for Dunne as against 0.671 for Gibson. The fixed assets turnover is also significantly higher for Dunne at 0.716 compared to 0.586. These figures also reflect a higher occupancy achieved by Dunne at 75% compared to Gibsons 70% Thus overall Dunne is a more efficient business in generating sales for the level of assets that it has.

In terms of profitability Gibson performs slightly better that Dunne with a GP% of 66% as against 65% for Dunne. The reasons for this are reflected in the operating ratios where Gibson achieves a higher ARR and REVPAR. Also for Gibson 65% of total sales is rooms revenue compared to 62% for Dunne's. The higher gross profit margin for Gibson translates into a higher operating profit percentage as the expenses to sales percentage for both companies is the same.

In summary Dunne is overall generating a greater return on capital than Gibson and this is due the company generating more sales per € invested in the business that Gibson. This is due to the fact that the company has a lower pricing policy (lower ARR and REVPAR), which are reflected in the lower GP% for Dunne's. If this is the strategy (to reduce prices to stimulate demand) then it is working. Although Gibson is achieving higher margins it is not generating enough sales for the level of assets it employs compared to Dunne. 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 below12%.

Liquidity

In terms of liquidity Dunne is performing a lot better that Gibson. Dunne 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 Dunne group is a solvent company. The Gibson group has significantly poorer liquidity ratios of 0.13 and .038, which are well below the industry average. Although the hotel industry is predominantly a cash business these ratios would worry any manager or investor and especially with the company in overdraft to the tune of €145,000. This situation needs to be monitored and improved.

Capital gearing

The capital rearing ratios measurers 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, loan interest must be paid whereas equity dividends can be deferred. In this situation both companies are low geared (mainly financed through equity) with Dunne's gearing at 60% and Gibson's at 77%. This is also reflected in the safe level of interest cover at 11.6 times for Dunne and 5.4 times for Gibson.

Conclusion

Overall both companies are performing very well with excellent returns on capital. Dunne would be seen to be a more efficient company overall with superior return on capital ratios. For Gibson the benchmarking process should help improve the liquidity situation and more importantly the company should reflect on its existing strategy and possibly begin to be more flexible with prices to achieve greater occupancy rates and a higher rate of sales per capital employed.