3 Understanding results using ratios

Understanding and using ratios

Most operating results are presented in the form of profit and loss statements and balance sheets, both of which comprise a collection of totals taken from the book-keeping and accounting system. However, if we examine report totals alone their meaning and significance are not readily apparent. Therefore, in order to determine the consequence of operating results we can begin by identifying direct and understandable relationships between various key reported values, with the help of ratios.

Ratios are among the best known tools for assessing financial and operating results. A ratio expresses a mathematical relationship between one quantity and another. For example, if we wish to learn more about total food cost incurred over a financial period we can relate food cost of sales to food revenue because, among other things, food cost depends on the volume of sales.

As we shall see, ratios are relatively simple to calculate, but their interpretation demands a sound understanding of the particular business under review. Ratios point managers towards clues and symptoms of underlying operating conditions that would otherwise go undetected by observing their individual components alone. Thus, a working knowledge of ratios is important if we are to understand our business results.

Ratio analysis: a hotel example

In order to assist us in understanding how to calculate and interpret ratios we will use an example of the Garden House Hotel, the financial and operating results of which are given in Figures 3.1 and 3.2.

We can group ratios into distinct categories according to the type of information required. A common grouping is as follows:

- Liquidity ratios
- Debt management ratios
- Asset management ratios
- Profitability ratios
- Operating ratios

We will adopt the above categories of ratios to prepare a detailed ratio analysis and interpretation of the Garden House Hotel results.

Year 1	Year 2	
Fixed assets (net)	£	£
Freehold land and buildings	598,000	780,000
Equipment and furniture	140,000	200,000
China, glass, cutlery	25,000	20,000
763,000	1,000,000	
Current assets		
Food stock/inventory	5,000	13,000
Beverage stock/inventory	10,000	63,000
Debtors	24,000	129,000
Short-term investments	5,000	25,000
Cash in hand	101,000	4,000
145,000	234,000	
Total assets	£908,000	£1,234,000
Owners' equity		
Capital	436,000	551,000
Retained profit	82,000	209,000
518,000	760,000	
Longterm liabilities		
15% loan (secured on free-hold property – year 10)	240,000	240,000
Current liabilities		
Creditors and accruals	142,000	211,000
Bank overdraft	8,000	23,000
150,000	234,000	
Total liabilities and owners' equity	£908,000	£1,234,000

Figure 3.1: Garden House Hotel Balance sheet at 31 December

Rooms department:	£
Sales revenue	700,000
Payroll and related expenses	119,000
Other expenses	63,000
Total expenses	182,000
Department profit	518,000
Food and beverage department:	
Food revenue	400,000
Beverage revenue	300,000
Total revenue	700,000

Food cost	180,000
Beverage cost	100,000
Total cost	280,000
Gross profit	420,000
Payroll and related expenses	210,000
Other expenses	35,000
Total expenses	245,000
Department profit	175,000
Total dept. profits	693,000
Undistributed operating expenses:	
Admin & general	102,000
Marketing	23,000
Utilities	28,000
Property & maintenance	20,000
Total UOE	173,000
Gross operating profit (GOP)	520,000
Insurance & property rates/taxes	212,000
Depreciation of fixed assets	18,000
Loan interest	36,000
Total fixed charges	266,000
Net profit before tax	254,000
Tax (50%)	127,000
Net profit after tax	£127,000

Figure 3.2 Garden House Hotel Profit and loss statement for year to 31 December Year 2

Liquidity ratios

Liquidity ratios provide us with an indication of the shortterm solvency of a business, in other words the ability of a business to meet its immediate obligations.

Current ratio

The current ratio gives an overview of a firm's short-term liquidity (solvency) by showing the relationship between current assets and current liabilities as follows:

$$\text{Current ratio} = \frac{\text{Current assets at end of period}}{\text{Current liabilities at end of period}}$$

$$= \frac{£234{,}000}{£234{,}000}$$

$$= 1 : 1$$