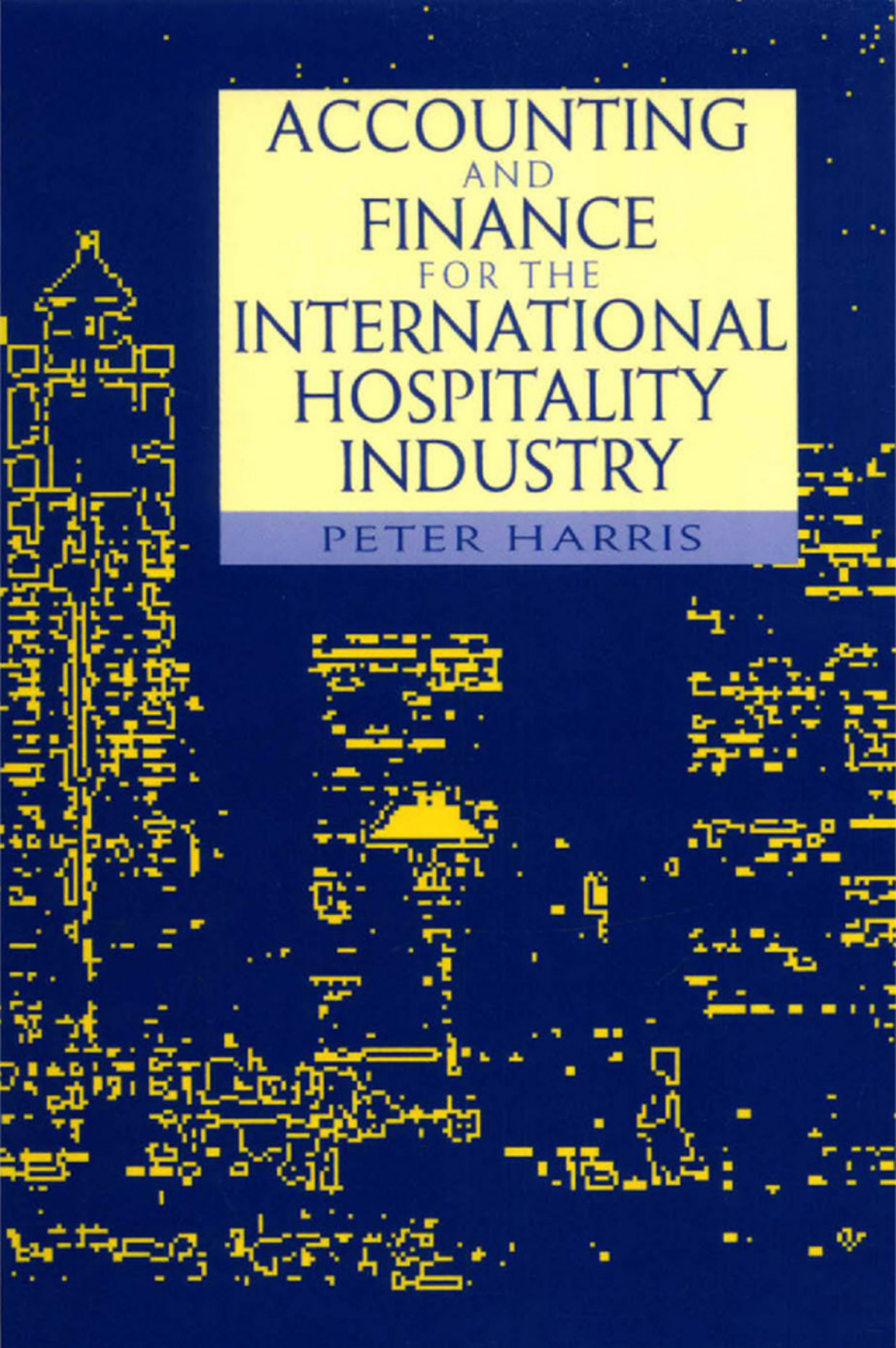
ACCOUNTING AND FINANCE FOR THE INTERNATIONAL HOSPITALITY INDUSTRY

PETER HARRIS



To Elaine and Samantha

Accounting and Finance for the International Hospitality Industry

Accounting and Finance for the International Hospitality Industry

Edited by
Peter J. Harris
Oxford Brookes University

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Preface

The main purpose of this book is to present new and interesting research and other findings and developments in the field of accounting and finance as it relates to the work of managing enterprises and organizations in the international hospitality industry. Although the focus is on hotels the content can readily be interpreted in a broader context. Many hospitality organizations contain hotel services components such as the provision of rooms, food and beverage facilities and, therefore, the examples and illustrations can be related to restaurants, licensed house management, hospital and university services, clubs and so on.

The content contains contributions from experienced researchers, university and college lecturers, practising accountants and consultants and senior managers associated with the international hospitality industry in the UK and abroad. The material is drawn from their own work and experience and relates directly to the management of hospitality undertakings.

Most books written for the hospitality industry tend to concentrate on the application of accounting and financial management in a theoretical context. In contrast, this work presents new findings and developments drawn from a combination of live fieldwork and practical experience. In this context it is anticipated that the readership will include: practising managers and financial controllers in hospitality organizations, professional accountants and consultants, postgraduate candidates studying for master's degrees in hospitality management and final-year undergraduate students of hospitality management who elect to take an accounting option.

The contents are arranged in four parts. The purpose of this is to provide a general structure by grouping similar kinds of areas together. However, it will be appreciated that some contributions could be judged to fall into one or more parts and, therefore, to some extent, the groupings are arbitrary.

Part I focuses on the analysis and evaluation of performance. Methods of analysing past financial and operating performance are considered together with an examination of approaches used to predict the potential failure of a business.

Part II places emphasis on matters of planning. Analytical methods and techniques are applied to cost and project planning and the assessment of

risk in terms of attaining projected revenues. Consideration is given to the development of a framework for financial planning and to the current and future management accounting practices of hotel groups.

Part III concentrates on the use of accounting and control information in relation to decision-making and human behaviour. This includes an investigation of a framework for management information needs and emerging developments in the use of information in marketing decisions.

Part IV examines issues concerned with financial managers and with the financial management of hospitality organizations. It also examines the financial implications of hotel management contracts from the European and North American perspectives.

Notwithstanding the classification or grouping of the material presented here, the range of topics brings together a rich fund of knowledge and experience from contributors who operate internationally throughout the world. Without their generosity and commitment to the sharing and dissemination of information, a book of this kind would not be possible; a debt of gratitude is owed to them all.

Acknowledgement is also due to a number of my colleagues who have eased the production of the final publication: Sue Wilkins for collating and standardizing the text; Tom Anstey and Chris Murphy for help with reading material off disks; Liz Drewett for word-processing; and to my other colleagues for their support and tolerance throughout the preparation of the manuscript. Finally, thanks go to Jacquie Shanahan of Butterworth-Heinemann who as usual has been considerate and supportive throughout.

As always, my single wish is that the reader finds the content to be of practical use.

Peter Harris
Editor

Contributors

Raymond Schmidgall received his BBA degree in accounting from Evangel College in 1967. He received his MBA in 1969 and PhD in 1980, both in accounting, from Michigan State University. In 1973 he received his CPA from the State of Michigan.

His industrial experience includes three years of public accounting for international and statewide firms. In addition, he was financial controller for the American Hotel and Motel Association's (AH&MA's) Education Institute for two years.

Professor Schmidgall has authored four textbooks on hospitality accounting and finance. In addition, he has published articles in *Lodging, Club Management, Bottomline, The Consultant, Restaurant Business* and the *Cornell Hotel and Restaurant Administration Quarterly*. His current research is being conducted in the areas of accounting for bartered transactions and small-business financing.

Dr Schmidgall is Secretary of the Association of Hospitality Financial Management Educators, a member of the AH&MA's financial management committee, chairperson of the International Association of Hospitality Accountants communications committee; he serves on the editorial board of the Council on Hotel, Restaurant and Institutional Education's (CHRIE's) *Hospitality Research Journal*, and is treasurer of International CHRIE, and a member of several professional accounting associations.

Debra Adams is a senior lecturer in Accounting in the Department of Service Industries at Bournemouth University, UK. A graduate of Dorset Institute (now Bournemouth University), she holds a BSc in catering administration and is a qualified member of the Chartered Institute of Management Accountants. She joined Forte hotels as an accounting trainee in 1985, holding management accounting positions in the hotels division and in the Ring & Brymer contract catering division. She has published several articles and case studies in hospitality accounting, and has been external examiner for the Hotel, Catering and Institutional Management Association (HCIMA) and for the British Association of Hotel Accountants (BAHA). Her current activities include chairmanship of the BAHA Education Committee and the preparation of a new text in hospitality accounting.

Elisa S. Moncarz is Professor of Hospitality Accounting and Finance in the School of Hospitality Management at Florida International University in Miami, Florida. Born in Havana, Cuba, she spent 10 years in New York, where she received degrees in public accountancy and became a certified public accountant. She has extensive auditing, Securities and Exchange Commission (SEC) and tax experience that includes over six years with the international Certified Public Accountants (CPA) firm which is now Ernst & Young. She has co-authored two textbooks on accounting and finance and has written numerous articles published in the *FIU Hospitality Review, International Journal of Hospitality Management, Bottom Line* and the *Cornell, Hotel and Restaurant Administration Quarterly*. She has served as consultant and speaker for several organizations in the USA and Latin America. Her current research interests include the areas of operational analysis, restructuring and financial failure in the hospitality industry.

Richard N. Kron, president of Kron Hospitality Consulting, Inc., has managed and/or consulted with hotel operators throughout the USA, the Caribbean, South America and Japan, including Hyatt, Marriott, Hilton International, Sheraton, Sonesta, Holiday Inn, Ritz-Carlton and numerous non-affiliated hotels. He was a manager of Pannell Kerr Forster's Management Advisory Services division from 1986 to 1991. He also managed hotels and restaurants for 16 years prior to receiving an MSc degree in hotel and food service management from Florida International University. His extensive operations and consulting experience has given him expertise in the performance of operational analyses of hospitality firms.

Past speaking engagements include the Caribbean Hotel Association annual conferences, International Association of Hospitality Accountants, Florida International University and Florida Restaurant Association. His current interests include the development of hotel control systems and management operational reviews for hotels and resorts.

Angela Maher is a lecturer in human resource management for the hospitality industry in the School of Hotel and Catering Management at Oxford Brookes University. She contributes to a wide range of courses at undergraduate, postgraduate and HCIMA levels within the school and has also lectured at the Institute for Tourism Studies in Malta. Her research interests are in a number of areas related to human resource management and accountancy and, more specifically, she is concerned with investigating ways to account for the value of human resources. She holds a BA from Oxford Brookes University and is currently working towards the completion

of a PhD on the latter subject and has presented a conference paper on some of the initial research findings. Other areas of interest include equal opportunities in employment, Japanese management styles and trade unions in the hospitality industry.

Peter Harris is principal lecturer in accounting and programme director of the master's degree in international hotel management at Oxford Brookes University. He was trained in the hospitality industry and held management positions in hotels, restaurants and banqueting operations. He has published a number of books and articles on hospitality accounting and has carried out numerous consultancy assignments for leading hotel organizations in the UK and abroad. He is director of the BAHA programme of continuing professional education and a visiting professor at the Institut de Management Hotelier International (Cornell University-l'Ecole Supérieure de Sciences Economiques et Commerciales) programme in France.

Geoff Parkinson is managing director of BDO Hospitality Consulting and a partner with BDO Stoy Hayward, a leading firm of consultants and accountants. He graduated from the University of Surrey in hotel and catering administration and subsequently qualified as a chartered accountant, since which time he has specialized in providing consulting advice to clients planning investments in the hotel, tourism and leisure sectors. He has travelled extensively during his career in consulting, has authored a number of publications on the financial aspects of the sector and is a frequent lecturer and conference speaker.

Paul Fitz-John had professional accountancy practice experience whilst qualifying as a chartered accountant. This was followed by 20 years' commercial experience in retail and distribution companies, broken by a year on the full-time MBA programme at Cranfield University. His commercial experience included five years as group financial director of the largest distributor of catering equipment in the UK.

For the last 10 years he has been a principal lecturer in financial management and management accounting at Bournemouth University, specializing in the hospitality and retail industries. He teaches extensively on undergraduate and postgraduate programmes and is a visiting lecturer on the BAHA Continuing Professional Education programme at Oxford Brookes University.

Paul Collier is a senior lecturer at the University of Exeter and an academic fellow of the Institute of Chartered Accountants in England and Wales.

Following his degree in management at the University of Aston in Birmingham, he worked with Touche Ross & Co., chartered accountants, for 10 years, specializing in computer auditing. Subsequently, he has lectured first at the Aston University Management Centre and then at the University of Exeter. His research interests have included: international financial management especially focusing on the management of currency risk by multinational companies in the UK and US; the implications of information technology for accountants and accountancy education; computer fraud and abuse through the Woolwich Centre for Computer Crime Research; and corporate governance research into the role of audit committees. His research output has appeared in a number of monographs, and academic and professional journals including *Accounting and Business Research, Policy and Society, Artificial Intelligence Review, Journal of Information Technology, Accounting Education, Managerial Auditing Journal, Accountancy and Management Accounting.*

Alan Gregory is Professor of Accounting and Finance, University of Glasgow. He has worked as a management accountant in industry, before taking up an academic career. After initially teaching professional accountancy students, he completed an MSc in accounting and finance at the London School of Economics, and lectured at Brighton Polytechnic, City Polytechnic, the University of Exeter, before joining Glasgow.

His research interests have included divisional manager performance evaluation, investment appraisal, acquisitions and mergers, and stock market efficiency. His research papers have been published in journals which include the *Economic Journal, Accounting and Business Research, Journal of Business Finance* and *Accounting and Journal of Business Law.* He is the author of *Valuing Companies* (Woodhead-Faulkner) and his research interest in this area is continuing with an Institute of Chartered Accountants of England and Wales (ICAEW) Research Board-funded project which is investigating the valuation practices of professional accounting firms.

Tracy A. Jones is senior lecturer in the department of leisure management, Cheltenham and Gloucester College of Higher Education, UK.

She worked in various sectors of the industry before returning to college to complete her HCIMA qualification. As part of this course she was awarded the Greene, Bellfield-Smith Award for achieving the highest marks nationally in the finance examination. She remained at Oxford Polytechnic (now Oxford Brookes University) and completed a BSc (Hons) in hotel and catering management.

Between 1987 and 1990 she was a post-graduate teaching assistant in the School of Hotel and Catering Management, Oxford Polytechnic, where she was awarded an MPhil degree for her research into the financial and operating information needs of managers in hotel companies.

In 1990 she joined Cheltenham and Gloucester College of Higher Education. Her main teaching areas are finance and accounting, within the hospitality programmes in the department.

Jacqueline Brander Brown is an associate of the Institute of Chartered Accountants in England and Wales and of the British Association of Hotel Accountants, having spent some eight years as an accountant, both in professional practice and as a financial controller with De Vere Hotels. She is currently a senior lecturer in the department of accounting and finance at the Manchester Metropolitan University, where she is the Departmental Research Coordinator and also has responsibilities for developing the management accounting elements of all three years of the undergraduate degree. Her research interests include the design of effective management accounting and control systems, particularly with regard to the needs of service industries and she is in the process of completing a PhD programme at Oxford Brookes University.

Nina J. Downie is a lecturer in operations management in the School of Hotel and Catering Management at Oxford Brookes University. She returned to education following extensive managerial experience in hotels and restaurants. Having successfully completed a BSc Hons degree at Oxford Brookes University as a mature student, she also attained membership of the Chartered Institute of Marketing. Her research interests focus on the use of accounting information for management decision-making in hotels. She has worked with a number of organizations, including the Savoy Hotel Group and the Institute for Tourism at Bourgas, Bulgaria.

Cathy Burgess qualified in hospitality management at Leeds Polytechnic (now Leeds Metropolitan University) and then joined EMI Hotels, which later became Thistle Hotels, as a management trainee. She spent 13 years in various operational and financial management positions within the hotel and catering industry, latterly as a financial controller. In 1989 she was appointed senior lecturer in accounting at Oxford Brookes University, teaching financial management to degree and master's students, and was course director of the master's degree in hotel and catering management. She maintains close links with industry through research and consultancy

and as a Council and Education Committee Member of the British Association of Hotel Accountants. Her current research interests include investigating the factors relating to the success of international hotel groups.

Ian Graham is a native of Edinburgh, Scotland and currently lives in Waterloo, Belgium. He is a graduate in hotel and catering administration from the University of Surrey, and qualified as a chartered accountant during training periods with Horwath Consulting and Peat Marwick Mitchell (now KPMG).

He is a finance director with 20 years' experience in the hotel industry throughout Europe, Middle East, Africa and the Indian subcontinent, including periods living in Togo, Syria, Jordan, England, Scotland and Germany, before taking up his present position. His experience encompasses joint ventures, capital expenditure appraisals, information technology systems development and management, franchise and management contract administration, project cost management, strategic planning, budgeting and forecasting, multicurrency treasury and tax management, and many aspects of financial reporting to USA, UK and European standards.

Howard Field is director of International Hotel & Leisure Associates Ltd., independent advisers to the hotel and leisure industry, and managing director of FM Recruitment, specialist financial management recruitment consultants for the sector. Advisory assignments have included acting as chief executive of UK hotel-owning partnerships involving Sheraton, Marriott and Holiday Inn operations in the UK and France.

He is chairman of the International Committee of the British Association of Hotel Accountants, of which he is an honorary fellow, a founding member and past treasurer. He is visiting lecturer at Oxford Brookes University and London South Bank University, specializing in the subject of hotel management contacts for undergraduates and postgraduates.

He qualified as a chartered accountant in 1965, since when positions held include hotel unit financial controllerships with UK and international groups; consultant with Horwath UK; vice-president – finance with Commonwealth Holiday Inns of Canada in their European division, and group financial controller with the Savoy Hotel Group.

Paul Beals is a professor and director of the Statler hotel management programme at Canisius College, the first American undergraduate programme to create a course of study to prepare asset managers for the hotel industry. He holds master's and doctorate degrees in hotel adminis-

tration from Cornell University and has served as executive editor of *The Cornell Hotel and Restaurant Administration Quarterly* and as director of the Institut de Management Hotelier International, a joint graduate-level programme between Cornell's Hotel School and l'Ecole Supérieure de Sciences Economiques et Commerciales (ESSEC), one of France's most prestigious business schools. His publications, primarily in the area of hotel development, have appeared in the *Journal of Real Estate Finance, Real Estate Review, The Cornell Hotel and Restaurant Administration Quarterly* and *L'Hôtel Revue*. A member of Phi Beta Kappa and the Council on Hotel, Restaurant and Institutional Education, he is currently a contributing editor to *Hospitality and Tourism Educator* and the *International Journal of Contemporary Hospitality Management*.

Frank Croston is managing director of Pannell Kerr Forster Associates (PKFA), responsible for the direction of the hotel and leisure consultancy in Europe, the Middle East and Africa. Frank has been with PKFA since 1983.

Having graduated in hotel and catering Administration, he pursued a career within the financial side of the industry. Prior to joining PKFA, Frank worked for Grand Metropolitan and Caledonian Hotel Management in the UK and Africa respectively.

His current role involves responsibility for the direction of a wide range of consultancy services offered to the hotel and leisure industry, and he has directed assignments in more than 50 countries. He has undertaken a number of strategic development reviews for international hotel groups, and has led several assignments to prepare comprehensive operations policies and procedures manuals. In addition, he has addressed numerous industry conferences and seminars and has been invited by several hotel groups to address internal management meetings.

As well as being a fellow of the HCIMA, Frank is currently vice-chairman of the British Association of Hotel Accountants.

Part I Financial Analysis

1 Performance measures used in hotel companies

Raymond S. Schmidgall

Introduction

The overall objective of hotel companies is to provide satisfaction for their stakeholders. The stakeholders vary from guests, to employees (including management), to owners, to suppliers, to financial lenders, to the community where the hotel is located. Each stakeholder group seeks different 'rewards' from the hotel companies. First, the hotel guest often seeks quality services at a reasonable price. The services include but are not limited to food, beverages and lodging. The employees of the hotel companies seek monetary rewards including wages and fringe benefits, as well as non-financial rewards such as promotions and recognition. Management's desires are similar to employees; however, they often include additional financial rewards such as capital in the employer's company stock. Other stakeholders include the community in which the hotel is located and creditors including lenders of funds on both a long and short-term basis to the hotel. The community desires the hotel to be a credit to its environment and to 'serve' the area. Suppliers desire to receive cash payments for their services on a timely basis while lenders seek the repayment of their funds, including interest. Finally, the owners who take the ultimate risk seek a fair return on their investment. This return takes two forms: first, dividends from the hotel to the owners are the return on their capital investment. The second reward is the increase in the value of the owners' investment. This reward is easily measured by hotel companies whose capital stock is trade on stock exchanges such as the New York Stock Exchange, the London Stock Exchange or the Tokyo Stock Exchange.

In order for a hotel company to meet the desires of its stockholders (owners) the hotel must generate profits, that is revenue must exceed expenses. In essence this is the bottom line if the overall objective of a hotel company is to be satisfied. This chapter discusses performance measures used in hotel companies to determine and help ensure the achievement of the desired net income of a hotel company. First, the three major financial statements are presented and illustrated, followed by financial ratios used to reduce the statements to indicators of success.

Financial statements

The three major financial statements include the balance sheet, the income statement, and the statement of cash flows. These statements are prepared at the end of the accounting period and are based on generally accepted accounting principles.[1]

The balance sheet, illustrated in Figure 1.1, reflects assets and claims to assets of the hypothetical Mayfair Hotel. Assets simply are items of value to the hotel company. The first claims to assets are by the creditors and these claims are referred to as liabilities. The claims which must be paid within a relatively short period of time are labelled as current liabilities while other obligations of the hotel company at the balance sheet date are long-term liabilities. The residual claims to assets are by the owners and are revealed in the owners' equity section of the balance sheet. The claims to the assets equal the assets; thus this is the reason why this financial statement is called the balance sheet.

Assets are classified as current, investments, and property and equipment, as shown in Figure 1.1. The balance sheet is a static statement as it is prepared as of a given date, the last day of the accounting period. This statement reflects the accounting equation of assets equal liabilities plus owners' equity. The balance sheet of the Mayfair Hotel reveals assets of $1,176,300 and liabilities and owners' equity for the same amount on December 31, 19X2.

The financial statement which reflects operations of the Mayfair Hotel is the income statement, as illustrated in Figure 1.2. The income statement includes both revenues (sales) and expenses. The income statement illustrated in this chapter contains considerable detail and reflects activity by areas of responsibility. The top section of the income statement contains the revenue, payroll and related costs, other direct expenses, and departmental income of the rooms department and indicates departmental income of $605,000 for 19X2. The second section reflects the operations of the food and beverage department. The top portion of the income statement down to

Figure 1.1 Balance sheets

Balance sheets
Mayfair Hotel
December 31, 19X0, 19X1, 19X2

Assets	**19X0**	**19X1**	**19X2**
Current assets:			
Cash	$ 17,000	$ 18,000	$ 21,000
Marketable securities	81,000	81,000	81,000
Accounts receivable (net)	100,000	90,000	140,000
Inventories	17,000	20,000	18,000
Prepaid expenses	13,000	12,000	14,000
Total current assets	228,000	221,000	274,000
Investments	22,000	35,000	104,000
Property and equipment:			
Land	78,500	78,500	78,500
Buildings	800,000	840,000	870,000
Furniture and equipment	170,000	170,000	172,000
	1,048,500	1,088,500	1,120,500
Less:			
Accumulated depreciation	260,000	300,000	345,000
China, glassware, silver, linen, and uniforms	11,500	20,500	22,800
Total property and equipment	800,000	809,000	798,300
Total assets	$1,050,000	$1,065,000	$1,176,300
Liabilities and owners' equity			
Current liabilities:			
Accounts payable	$ 60,000	$ 53,500	$ 71,000
Accrued income taxes	30,000	32,000	34,000
Accrued expenses	70,000	85,200	85,000
Current portion of long-term debt	25,000	21,500	24,000
Total current liabilities	185,000	192,200	214,000
Long-term debt:			
Mortgage payable	375,000	375,000	400,000
Deferred income taxes	40,000	42,800	45,000
Total long-term debt	415,000	417,800	445,000
Total liabilities	600,000	610,000	659,000
Owners' equity:			
Common stock	55,000	55,000	55,000
Paid-in capital in excess of par	110,000	110,000	110,000
Retained earnings	285,000	290,000	352,300
Total owners' equity	450,000	455,000	517,300
Total liabilities and owners' equity	$1,050,000	$1,065,000	$1,176,300

Figure 1.2 Income statements

Income statements
Mayfair Hotel
For the years ended December 31, 19X1 and 19X2

	19X1	19X2
Total revenues	$1,300,000	$1,352,000
Rooms:		
Revenue	$ 780,000	$ 810,000
Payroll and related costs	135,000	145,000
Other direct expenses	62,500	60,000
Departmental income	582,500	605,000
Food and beverages:		
Revenue	430,000	445,000
Cost of sales	142,000	148,000
Payroll and related costs	175,000	180,000
Other direct expenses	43,400	45,000
Departmental income	69,600	72,000
Telephone:		
Revenue	40,000	42,000
Cost of sales	30,000	31,000
Payroll and related costs	10,000	10,500
Other direct expenses	5,000	4,500
Departmental income	(5,000)	(4,000)
Rentals and other income	50,000	55,000
Total operated departments income	697,100	728,000
Undistributed operating expenses:		
Administrative & general	105,000	108,500
Marketing	51,500	55,000
Property operation & maintenance	65,250	67,500
Energy costs	80,250	81,500
Total undistributed operating expenses	302,000	312,500
Income before fixed charges and management fees	395,100	415,500
Management fees	65,000	66,000
Rent	20,000	20,000
Property taxes	20,000	24,000
Insurance	5,500	6,000
Interest	54,000	60,000
Depreciation	60,000	61,000
Income before income taxes	170,600	178,500
Income taxes	51,180	53,550
Net income	$ 119,420	$ 124,950

'total operated departments income' reflects activities of the profit centres, that is areas of activity that generate revenue and incur expenses resulting in profit (labelled as income in this illustration).

The next section of the income statement contains the operating overhead expenses and is labelled 'undistributed operating expenses.' This section is often divided into four lines including administrative and general, marketing, property operation and maintenance, and energy costs. Additional lines are provided for human resources, data processing, guest transportation, and entertainment for large hotels which have separate departments for these areas of responsibility. In general, these areas of responsibility are referred to as service centres since their objective is to provide services to other departments of the hotel. A detailed schedule is generally prepared for each profit and service centre and should contain sufficient detail to allow the department head to monitor expenses and revenues properly, if any, of their department.

The difference between income from the profit centres and the undistributed operating expenses is 'income before fixed charges and management fees' (sometimes referred to as gross operating profit – GOP). Expenses subtracted from this figure are based for the most part on decisions of the board of directors rather than management. The board decides whether to use a management company or hire managers as employees. The board determines the size of the hotel and its equipment which will be depreciated and how it is financed, which results in interest expense when funds are borrowed. Other fixed charges, such as fire insurance and property taxes, relate to the property and equipment. Thus, fixed charges are often referred to as capacity overhead. Income taxes based on income before taxes are subtracted to determine the hotel's bottom line.

The income statement illustrated in this chapter is prepared for internal purposes, that is, to be used by the general manager and department heads.[2] A much more abbreviated statement is prepared for outsiders such as creditors and even stockholders. The income statement is a dynamic statement as it covers a period of time. In relation to the balance sheet, the results of operations are recorded as a change in owners' equity on the balance sheet at the end of the accounting period.

The third and final statement to be discussed is the statement of cash flows. This statement reflects the cash flows of the hotel company for a period of time. The three major sections of this statement reflect cash flows from operating, investing and financing activities. The statement of cash flows is illustrated in Figure 1.3, again using the hypothetical Mayfair Hotel. The operating activities show the reconciliation of net income for the accounting period to cash flows from operations. The first item shown in this

section is net income followed by items to determine cash flow from operations such as depreciation and so on. The net cash flow from operating activities for 19X2 is $157,450.

Figure 1.3 Statement of cash flow

Statement of cash flow
Mayfair Hotel
December 31, 19X1 and 19X2

	19X1	19X2
Net cash flow from operating activities		
Net income	$ 119,420	$ 124,950
Non-cash expenses included in income:		
Depreciation	60,000	61,000
Deferred income taxes	2,800	2,200
Changes in non-cash current accounts:		
Accounts receivable	10,000	(50,000)
Inventories	(3,000)	2,000
Prepaid expenses	1,000	(2,000)
Accounts payable	(6,500)	17,500
Accrued income taxes	2,000	2,000
Accrued expenses	15,200	(200)
Net cash flow from operating activities	200,920	157,450
Net cash flow from investing activities:		
Purchase of property and equipment	(69,000)	(50,300)
Purchase of investments	(13,000)	(69,000)
Net cash flow from investing activities	(82,000)	(119,300)
Net cash flow from financing activities:		
Dividends paid	(114,420)	(62,650)
Proceeds from long-term debt	21,500	49,000
Payment of long-term debt	(25,000)	(21,500)
Net cash flow from financing activities	(117,920)	(35,150)
Net increase in cash	1,000	3,000
Cash – beginning of year	17,000	18,000
Cash – end of year	$ 18,000	$ 21,000

The investing activities of a hotel company generally include both the sale and purchase of investments and property and equipment. The Mayfair had limited investing activities during 19X1 and 19X2 as it did not sell any investments or property and equipment. It did make purchases in each year, including $119,300 during 19X2.

The financing activities section of this statement reflects receipt and disbursements of funds related to long-term debt and equity financing. The net cash outflow for the Mayfair was $35,150 for 19X2.

The change in cash for the period as shown on the statement of cash flows of $3,000 for 19X2 for the Mayfair Hotel is the difference between cash at the beginning of 19X2 ($18,000) and the end of 19X2 ($21,000), as reflected on the balance sheets of the Mayfair Hotel.

Analysis of financial statements

The financial statements contain considerable information. However, to reduce them to a few meaningful numbers, ratios are used. Ratios are simply a comparison of two numbers to yield a result. For example, the division of current assets by current liabilities results in a ratio called the current ratio.

Financial ratios are generally classified into five categories as follows:

- Liquidity.
- Solvency.
- Activity.
- Profitability.
- Operating.

Each class of ratios allows the analyst to determine the 'success' in some way of the hotel. Liquidity ratios measure a hotel's ability to pay its bills as they become due and the most commonly calculated liquidity ratio is the current ratio, mentioned above.

The solvency ratios measure the hotel's ability to pay its bills in the long run. This class of ratios includes ratios based on balance sheet numbers, such as the debt–equity ratio and ratios based on the income statement such as the fixed-charge coverage ratio. These ratios will be explained later.

The activity ratios measure management's use of the hotel's assets. Two common activity ratios are the paid occupancy percentage and property and equipment turnover. Paid occupancy compares the number of rooms sold for the period to the number of rooms available. It is not a financial ratio; however, it is calculated on a daily basis by most hoteliers as an indicator of room sales success. The property and equipment turnover ratio compares

revenue of the hotel from the income statement, to the property and equipment of the hotel as shown on the balance sheet.

The profitability ratios, most meaningful to owners, show the hotel company's ability to generate profits. Since this is one of the major objectives of most hotels these ratios are generally the most frequently calculated for owners. Profitability ratios to be discussed in greater detail in this chapter include profit margin, earnings per share and return on owners' equity.

The final class of ratios are the operating ratios, which reflect the results of operations. These measures of success are used most frequently by management and include the average daily rate (ADR), cost of labour percentage, cost of food percentage and operating efficiency ratio. A combination of the paid occupancy percentage and the ADR is revpar (see section on operating ratios, below). All these operating ratios will be discussed and their calculation illustrated in this chapter.

Perceptions of US lodging industry general managers and financial executives have been measured regarding the usefulness of financial ratios (Schmidgall, 1988, 1989). Members of each group through a mail survey were asked to reflect their perceptions of various users regarding the usefulness of ratios. The users included general managers, corporate (office) executives, owners and bankers. The overall results were as follows:

Both GMs and financial executives perceive the following:

- GMs find operating and activity ratios more useful than other user groups.
- Owners find profitability ratios more useful than other users.
- Corporate executives find liquidity ratios more useful than other user groups.

In regard to solvency ratios, the perceptions of GMs and financial executives differed. Financial executives believe bankers find this group of ratios most useful, while GMs perceive that owners find solvency ratios more useful than other groups.

Another way to view the results of this research is which class of ratios is perceived as most useful to each of the four user groups. The two separate research surveys of GMs and lodging financial executives yielded the same results, as follows:

- GMs find operating ratios to be the most useful class of ratios.
- Corporate executives place the most importance on profitability ratios.
- Bankers find solvency ratios to be the most useful class of ratios.
- Owners find profitability ratios to be most useful.

The most useful ratios from each class of ratios as perceived by these respondents will be briefly described, including the formula for each and the ratio will be calculated using information for the hypothetical Mayfair Hotel.

Liquidity ratios

The current ratio measures the ability of a hotel company to pay its bills in the short term and is determined by dividing current assets by current liabilities.

Both numbers come from the balance sheet, thus this ratio reflects the hotel's ability to pay its bills at a point in time.

For the Mayfair Hotel the current ratio of 19X2 was 1.28:1. This ratio should be compared to ratios for prior periods and also to the hotel's plan. The current ratio for 19X1 was 1.15:1; thus, the current ratio has increased, which suggests that the Mayfair has greater liquidity at the end of 19X2 than 19X1.

Another liquidity ratio of note is the operating cash flows to current liabilities ratio. The operating cash flow is shown on the statement of cash flows. This liquidity ratio may be preferred to the current ratio since it uses figures covering a period of time and includes a cash flow number. Bills are paid as they come due with cash rather than simply current assets, which is used in the current ratio. For the Mayfair Hotel this ratio is 77.5 per cent for 19X2 and 106.5 per cent for 19X1. The ratio is determined by using an average for current liabilities. The change reflects a reduced ability in 19X2 to pay bills as they become due compared to 19X1. This result contradicts the change suggested by the current ratio. Even so, the ratio for both years is relatively high so users should have little concern regarding Mayfair's liquidity.

Solvency ratios

A major solvency ratio is the debt–equity ratio. This ratio is computed by simply dividing total liabilities by total owners' equity. Both figures come from the balance sheet so, like the current ratio, this ratio is determined at a point in time. This ratio reflects the capital structure of the firm by revealing the ratio of debt to owners' equity. In essence, it shows the amount of debt for each dollar of equity.

For the Mayfair Hotel, the debt–equity ratio was 1.27:1 for 19X2 compared to 1.34:1 for 19X1. This reflects a decrease in debt relative to equity and suggests the Mayfair is slightly less risky as an investment.

A second solvency ratio which users of financial statements find useful is the fixed-charge coverage ratio. This ratio is a measure of solvency from the income statement perspective. The fixed-charge coverage ratio is computed by dividing earnings before interest, depreciation and lease expense (lease

expense is often referred to simply as rent in the income statement) by the sum of interest and lease expenses. It reveals the number of times interest and lease expenses could be paid by a hotel company. For the Mayfair Hotel the fixed-charge coverage ratio was 3.99 times for 19X2 and 4.12 times for 19X1. This difference reflects a slightly reduced ability of the Mayfair to pay its lease and interest expenses in 19X2 compared to 19X1. So from a balance sheet perspective, the Mayfair's solvency position as revealed by the debt–equity ratio is slightly improved in 19X2 over 19X1 and the reverse is the case from the income statement perspective.

Activity ratios

Two activity ratios are suggested for determining operating performance of a hotel. First, the paid occupancy percentage is determined by dividing the number of rooms sold by rooms available. This seems straightforward until one considers the number for the denominator of the ratio. Which rooms are available? Are out-of-order rooms, complimentary rooms and rooms under renovation considered to be available? Many hotel companies calculate this ratio differently from each other. Probably the most important consideration is that the approach used should be followed consistently and the user should compare the results to the standard calculated in the same way.

Figure 1.4 Mayfair Hotel - other information

Other information

	19X1	19X2
Rooms sold	20,500	21,000
Shares of common stock outstanding	55,000	55,000
Food covers	55,500	56,000

Figure 1.4 contains information in addition to the financial statements of the Mayfair Hotel. It is assumed that 80 rooms on the average were available each day for the Mayfair. Therefore, 29 200 rooms were available for sale during 19X1 and 19X2 based on 365 days in each year.

The paid occupancy percentages for the Mayfair for 19X2 and 19X1 were 71.92 and 70.2 per cent, respectively. The increase in 19X2 over 19X1 suggests better utilization of the hotel's guest rooms. However, a note of caution is sounded as paid occupancy percentage only reflects rooms sold. Management should obtain a reasonable rate and still control expenses for the hotel to be successful!

The property and equipment turnover ratio compares the revenue generated by the hotel to the average amount of property and equipment of the hotel. Generally, the higher the turnover, the better the utilization of the property and equipment. The average is calculated simply by adding the beginning and ending amounts of property and equipment, net of depreciation, and dividing by two. For the Mayfair Hotel, the property and equipment turnovers were 1.22 times for both 19X2 and 19X2. A variation of this ratio is to use average total assets. This measure determines management's ability to use all of the assets in generating revenues.

Profitability ratios

Profits are a major objective of virtually all hotel companies. However, the bottom line by itself is somewhat meaningless. Comparing it to related numbers results in more meaningful information. The three profitability ratios suggested are profit margin, earnings per share and return on owners' equity.

Profit margin is determined by dividing net income by total revenues. This ratio simply reflects the percentage of net income compared to revenue.

Revenues are crucial; however, the bottom line reflects management's ability also to control expenses. For the Mayfair Hotel the profit margin was 9.24 per cent in 19X2 and 9.19 per cent in 19X1. Thus, the profit margin increased slightly from 19X1 to 19X2.

Earnings per share (EPS) are determined by dividing net income by the average number of shares of common stock outstanding during the accounting period. If a hotel company has other types of capital stock, such as preferred stock, the net income figure must be adjusted to reflect dividend payments to preferred stockholders. In the illustration used throughout this chapter, we assume the Mayfair Hotel has issued only common stock and that the average number of shares outstanding during 19X1 and 19X2 equal 55,000, as shown in Figure 1.4. Therefore, the EPS was $2.27 and $2.17, for 19X2 and 19X1, respectively. This increase of $0.10 is welcomed both by management and especially by the owners. Owners may desire to compare the EPS to the market price of their stock to determine the ratio of the two. Certainly, to the extent increased earnings lead to increased dividends and/or increased market price of their stock, owners are pleased and management will appear to be satisfying the owners!

The final profitability ratio to be discussed is the return on owners' equity (ROE). This ratio uses net income from the income statement and owners' equity from the balance sheet. Since a flow figure is used from the income statement, the average of owners' equity must be used and, like the average

for property and equipment, it is determined simply by summing the beginning and ending of the appropriate account(s) (in this case the balances of owners' equity) and dividing the sum by two.

For the Mayfair Hotel, the ROE for 19X2 and 19X1 was 25.70 per cent and 26.39 per cent, respectively. This reflects a minor decrease, but both ratios are relatively high. A note of caution needs to be sounded for this ratio. The ROE for a hotel company may be higher than what an individual investor would achieve by owning the stock of this company. This is the case when the market value of a share of stock at which the investor purchased the stock exceeds the book value of a share of stock as reflected on the books of the hotel company. Thus, the value of the ratio is tempered by this reality.

Operating ratios

Since Chapter 3 of this book is devoted to operational analysis, only five measures of hotel operations are briefly discussed and illustrated. The five ratios are the ADR, revpar, cost of labour percentage, cost of food percentage and the operating efficiency ratio.

The ADR simply reflects the average price a hotel room is sold for. Generally, a hotel determines the ADR across all types of guest rooms sold inclusive of singles, doubles, suites, and so on. The ADR is determined by dividing room revenue by the number of rooms sold.

The Mayfair Hotel's ADR for 19X2 and 19X1, based on the information in Figures 1.2 and 1.4, were $38.57 and $38.05, respectively. These results reflect an increase of $0.52 in the ADR. As with all ratios, especially operating ratios how does this compare to the plan? A $0.52 increase is excellent if only an amount somewhat below $0.52, such as $0.40 increase was planned; however, $0.52 is poor compared to a planned increase somewhat in excess of $0.52, such as $1.00.

A combination of the ADR and the paid occupancy percentage is revenue per available room or simply revpar. This single ratio overcomes the weaknesses of using the ADR and paid occupancy percentage individually. A hotel may have a high paid occupancy percentage by sacrificing rate or a high ADR by sacrificing occupancy. Revpar is determined either by multiplying the paid occupancy percentage by ADR or by dividing room revenues by the number of available rooms. The revpar for the Mayfair Hotel was $27.74 for 19X2 and $26.71 for 19X1. The increase in revpar was by $1.03 or 3.86 per cent of the revpar for 19X1.

Often the largest expense of a hotel company is payroll and related costs including payroll taxes and fringe benefits. Therefore, the ability to control labour is often key to managing successful hotel operations.

As a control technique, this ratio should not only be determined for the entire hotel but for each profit centre. The labour cost percentage is calculated for the operation as a whole by dividing the total labour costs by total revenues.

The Mayfair Hotel's cost of labour percentage for 19X1 and 19X2 is calculated for the rooms department only for illustration purposes. The rooms labour cost percentage was 17.9 per cent for 19X2 and 17.3 per cent for 19X1. Thus, the labour costs of this department have increased relative to room revenues. Management should also compare these results to the targeted room department labour costs, as reflected in the operating budget for each year.

The cost of food expense is often one of the major expenses of a food operation; therefore, management must exercise maximum care to control this expense. A common approach is to monitor the cost of food sold by comparing it to food revenue, resulting in the cost of food sold percentage.

The cost of food sold percentage for the Mayfair Hotel was 33.26 per cent in 19X2 and 33.02 per cent in 19X1, resulting in an increase of 0.24 percentage points. As with other operating ratios, the cost of food sold percentage must be compared with the budgeted figure. However, management must be careful not to overemphasize this ratio. Even though a low cost of food sold percentage is desirable, it should not be pursued to the extent of curbing gross profits from food operations.

Briefly, consider two extremes. Assume that a foodservice operator can sell spaghetti for $6.00 a meal with a related food cost of $2.00, resulting in a cost of food percentage of 33.3 per cent. Alternatively, consider that this same food service operator could sell steak with all the works for $15.00 and a related food costs of $7.50. The cost of food percentage for this entrée would be 50 per cent. If only one meal is sold, which is preferred? If all other costs are the same, the steak should be sold even though the cost of food percentage is 50 per cent for the steak compared to 33.3 per cent for spaghetti. Why then sell steak? Simply put, the steak provides gross profit (sales–cost of sales) of $7.50 compared to a gross profit of $4.00 for spaghetti![3]

Finally, the operating efficiency ratio should be computed as a measure of the overall performance of unit-level management. Earlier in the chapter, where the details of the income statement were presented, it was noted that expenses following 'income before fixed charges and management fees' were the primary responsibility of the board of directors as the expenses following this figure related to decisions of the board. All revenues and expenses above this number are considered to be hotel management's responsibility.

Therefore, the operating efficiency ratio is computed by dividing income

before fixed charges and management fees by total revenue. The results suggest the percentage of each revenue dollar that is available to cover management fees, fixed charges, income taxes and to yield a profit.

For the Mayfair Hotel, the operating efficiency ratio was 30.73 per cent and 30.39 per cent for 19X2 and 19X1, respectively. The increase of 0.34 percentage points suggests that overall management has marginally improved the efficiency of the hotel.

Limitations

The ratios suggested to measure success of the hotel operation and to be used for control purposes have limited usefulness in themselves. They should always be compared to a standard. The ideal standard is the plan (budget) for the accounting period. Other comparisons may be made to previous periods and hotel industry averages. Care should be used when interpreting a comparison to hotel industry averages as the industry figures are simply averages, not standards or ideals.

The ratios are merely indicators and management when using ratios for control purposes must take corrective action to guide the hotel company to the desired result when the ratio differs from the standard.

The user of ratios must be careful when using ratios to compare the activities of two or more companies. Accounting procedures may differ between the companies resulting in different figures by themselves. In addition, the mix of activities of each operation may be different. For example, in the USA the operating activities of the Marriott Corporation differ dramatically from Hilton Hotels Corporation. Hilton relies to a large extent on casino operations while Marriott has no gaming operations. The difference in activities results in differences in resources and thus many ratios.

Finally, ratios are often computed using historical figures. These figures are based on generally accepted accounting principles (GAAP) which do not purport to show market values. Thus, the results depending on the differences between recorded values per GAAP and market values may be significant.

The key word when using ratios is caution. Use the ratios carefully to measure the success of the hotel company!

Summary

The overall objective of a hotel company is to satisfy the desires of its stakeholders. In order to meet these desires a firm must generate profits. The operating activities, the resources and claims against resources, and the cash flows of the hotel company are reflected in financial statements which serve as scoreboards to indicate how the hotel company is performing. These

statements contain large amounts of financial information which are analysed to determine the extent of success. The comparison of related numbers yielding a single number is the essence of ratio analysis.

Figure 1.5 List of ratios

Current ratio	=	$\frac{\text{Current assets}}{\text{Current liabilities}}$
Operating cash flows to current liabilities	=	$\frac{\text{Operating cash flows}}{\text{Average current liabilities}}$
Debt-equity ratio	=	$\frac{\text{Total debt}}{\text{Owners' equity}}$
Fixed-charge coverage ratio	=	$\frac{\text{Earnings before interest, depreciation and lease expenses}}{\text{Interest and lease expenses}}$
Paid occupancy percentage	=	$\frac{\text{Rooms sold}}{\text{Rooms available}}$
Property and equipment turnover	=	$\frac{\text{Total revenues}}{\text{Average property and equipment}}$
Profit margin	=	$\frac{\text{Net income}}{\text{Total revenues}}$
Earnings per share	=	$\frac{\text{Net income}}{\text{Average common shares outstanding}}$
Return on owners' equity	=	$\frac{\text{Net income}}{\text{Average owners' equity}}$
Average daily rate (ADR)	=	$\frac{\text{Room revenues}}{\text{Number of rooms sold}}$
REVPAR	=	Paid occupancy percentage x ADR
Cost of labour percentage	=	$\frac{\text{Payroll and related costs}}{\text{Total revenue}}$
Cost of food sold percentage	=	$\frac{\text{Cost of food sold}}{\text{Food revenue}}$
Operating efficiency ratio	=	$\frac{\text{Income before fixed charges and management fees}}{\text{Total revenues}}$

Ratios may be classified into the five categories of liquidity, solvency, activity, profitability and operating. Different users of financial information