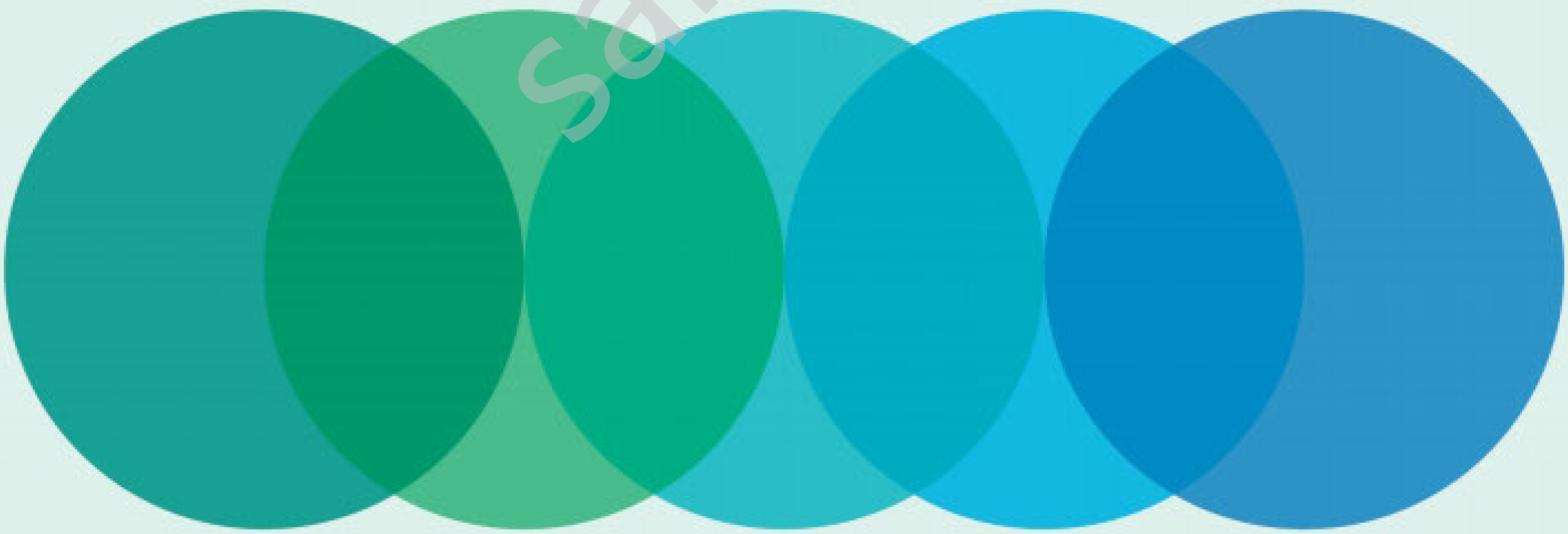
7TH EDITION

FINANCIAL ACCOUNTING

An Integrated Approach



Ken Trotman Elizabeth Carson Kate Morgan

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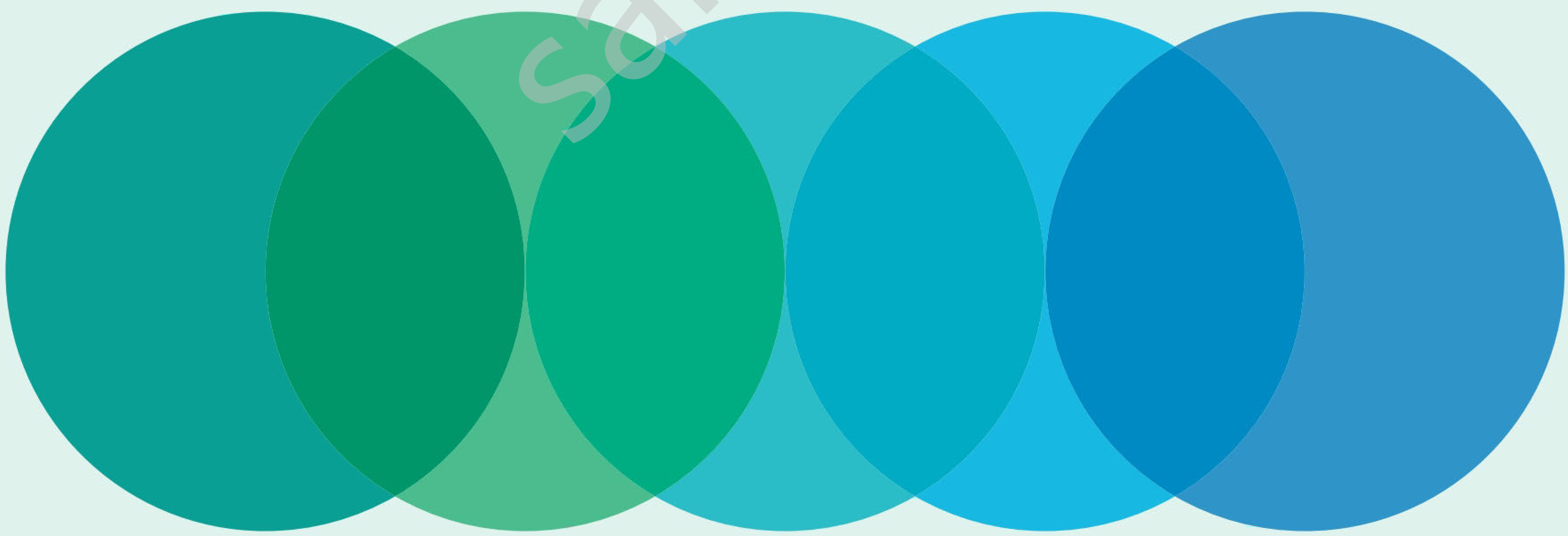

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CENGAGE

Financial Accounting: An integrated approach
7th Edition
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Typeset by MPS Limited

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Sixth edition published in 2016 by Cengage Learning Australia.

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National Library of Australia Cataloguing-in-Publication Data
ISBN: 9780170411028
A catalogue record for this book is available from the National Library of Australia.

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Printed in China by China Translation & Printing Services.
1 2 3 4 5 6 7 23 22 21 20 19

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sample

PREFACE

One question I have been frequently asked since writing the first edition of this book is: why write an introductory accounting textbook?

First, I have been involved in teaching introductory financial accounting for over 35 years. I enjoy trying to get across the introductory concepts. Second, I have been surprised at the differences between how introductory accounting is taught in most undergraduate programs and how it is taught in MBA courses in the United States and Australia. Thirty years ago there were good reasons for the differences, as most of our first-year undergraduate students were accounting majors. This is not the case today. Third, when I ask attendees at executive education programs what their accounting background is, many respond that they did first-year accounting 10-plus years ago but found it boring!

With this in mind, I tried to add to an undergraduate book some of the features that MBAs and executives seem to enjoy. We don't want our students returning in 10 years and suggesting our courses are boring! Talking about companies and relating the material to annual reports helps students to get interested.

With all of the above in mind, we set about incorporating the following in the book. First, we have tried to make clear to students the importance of accounting information by frequent reference to current material. Second, as companies are the most common business organisations in Australia today, we start by writing about companies, rather than spending many introductory chapters concentrating on sole traders. Third, to keep this book's material interesting and relevant, we have made frequent references to the content of annual reports. Students learn about real companies and can follow their performance in the newspapers or the share market if they wish. Fourth, we believe that the depth of technical knowledge in this book will challenge both accounting and non-accounting majors.

The first edition of this textbook was adapted from the second edition of the best-selling Canadian introductory financial accounting textbook of the same name written by Michael Gibbins. In the Australian edition, we have added eight chapters as well as reorienting the material towards the Australian context.

The most attractive features of the early editions have been retained: an easy-to-read style with a wealth of extracts from company annual reports, 'How's your understanding?' activity questions throughout each chapter, questions at the end of each chapter relating to real annual reports, as well as a set of cases with questions relating to the Woolworths Limited Annual Report 2017 (appendix at the end of the book).

Students should take advantage of the ancillary material that goes with this book, in particular the CourseMate website, which includes revision quizzes, practice questions, annotated weblinks and much interactive material. Also, the publisher has made available a suite of additional resources for instructors. Students may like to also obtain the accompanying Study Guide, which provides numerous additional questions.

We trust that you will enjoy the book.

Ken Trotman

Guide to the text

As you read this text you will find a number of features in every chapter to enhance your study of financial accounting, helping you to understand how the theory is applied in the real world.

CHAPTER-OPENING FEATURES


Introduction to financial accounting 1

ON COMPLETION OF THIS CHAPTER, YOU SHOULD BE ABLE TO:

- LO1 describe the basic purpose of financial accounting (1.1, 1.2)
- LO2 identify the users of accounting information and the decisions they make that require accounting information (1.3)
- LO3 identify the people who are involved in financial accounting (1.4)
- LO4 describe how accrual accounting differs from cash accounting (1.5)
- LO5 explain the basic contents of the three key financial statements and describe the purpose of each statement (1.6)
- LO6 describe the basic principles and assumptions of accounting (1.7, 1.8)
- LO7 explain why accounting is important (1.9).

CHAPTER OVERVIEW

Accounting has been described as the 'language of business'. It provides managers within organisations and those outside the organisation (e.g. investors and creditors) with information about the financial performance and financial position of the business. Regardless of what type of career you pursue, accounting information will have important effects on you.

This chapter introduces you to financial accounting and illustrates some useful accounting concepts and techniques. It outlines a way of thinking about financial accounting that will be important to your career, whether you become an accountant or a user of accounting in business or in other walks of life. We believe that every manager is a user of accounting information but some managers use accounting information better than others. You are introduced to the social setting of financial accounting and some of the people involved. Financial accounting is complex and requires sound judgement because it attempts to serve the needs of all these people, not all of whom necessarily see things the same way. You are then introduced to one of the cornerstones of how financial accounting works: accrual accounting, the broad framework within which financial accounting reports are prepared. You are also introduced to the three key financial statements and the basic financial statement assumptions.

1

The learning objectives and chapter overview give you a clear sense of what topics each chapter will cover and what you should be able to do after reading the chapter.

FEATURES WITHIN CHAPTERS

HOW'S YOUR UNDERSTANDING?

How's your understanding activity questions throughout each chapter help you to reinforce your understanding of key concepts as you progress through the text, providing you with the opportunity to reflect on and revise important material.

HOW'S YOUR UNDERSTANDING?

2A Which of the following items would be classified an asset in the balance sheet:

- Cash at bank
- Accounts receivable
- Accounts payable
- Buildings
- Retained profits?

FOR YOUR INTEREST

For your interest sections present intriguing insights into the accounting profession and bring a unique perspective to the concepts covered in each chapter.

FOR YOUR INTEREST

While we have GAAP, it is very important to consider the need to fit the accounting to the circumstances of the particular accounting entity. However, if you always changed everything to suit each organisation, there would be no standards left and no comparability to other organisations. If every course in the university used a unique grading system, you couldn't compare how you did in different courses, or compute a grade-point average. Here, very briefly, are three examples of accounting difficulties that face accountants and managers.

- The ABC, as well as channels Nine, Ten and Seven, have national TV networks in Australia. The ABC is publicly owned, largely financed by the government of Australia, and is not generally supposed to be trying to make a profit, while

A REAL CASE

A real case boxes contain real-world examples of accounting scenarios that help you put the theory into practice.

A REAL CASE

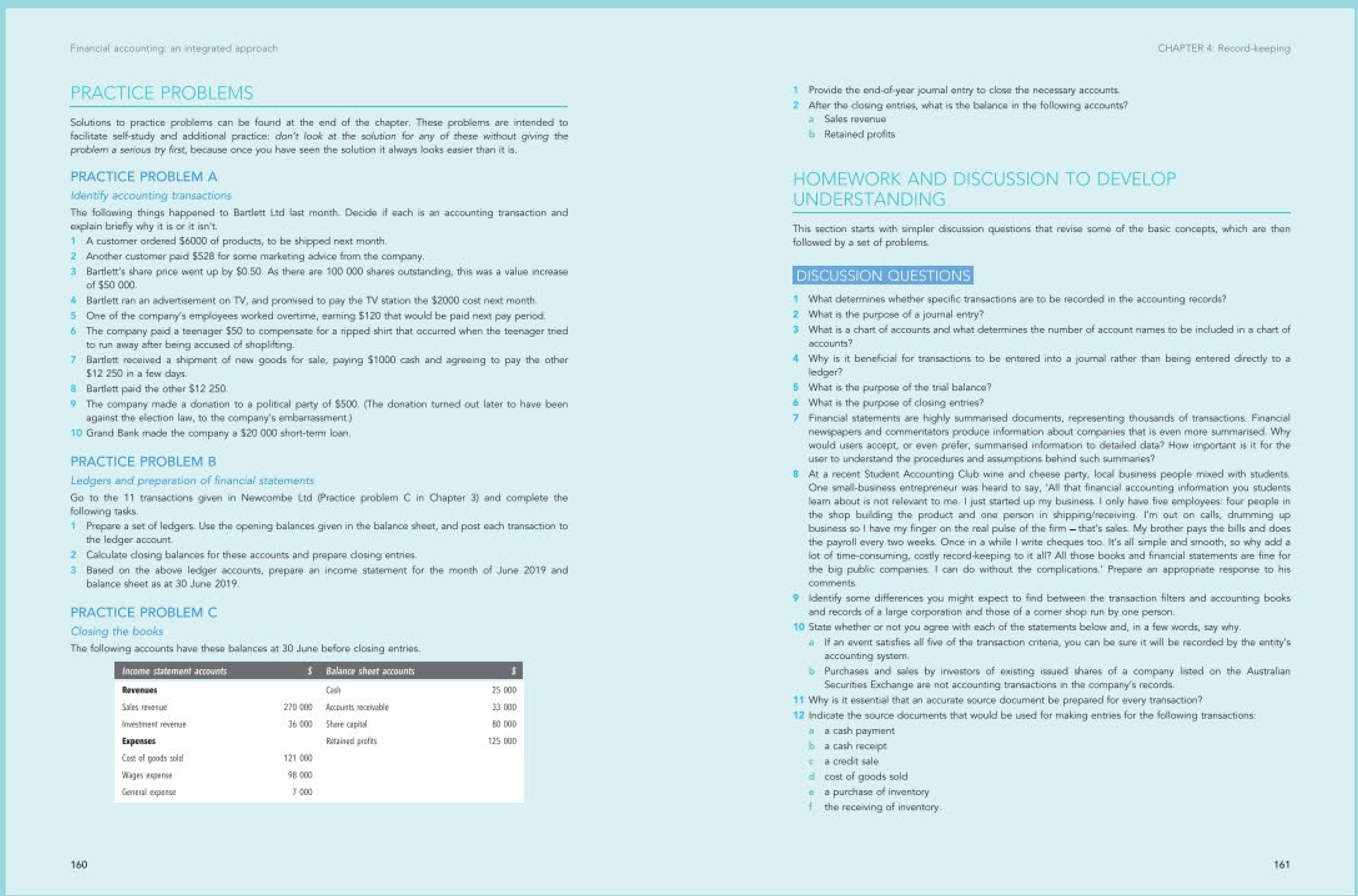
Mike, a junior auditor, was assigned to do a surprise count of the cash on hand at a local clothing shop. The cash counted was short compared with what was expected, based on the auditor's projections of cash from sales and bank deposit records. Mike was accused by the shop's accounting clerk of stealing the cash himself while counting it, and he had to call the police and insist that they search him and so demonstrate that he had not stolen it.

It turned out that the accounting clerk had been stealing cash and covering up the thefts by changing the sales records: a classic case of poor internal control through lack of segregation of duties, because the clerk had access to

END-OF-CHAPTER FEATURES

At the end of each chapter you'll find several tools to help you to review, practise and extend your knowledge of the key learning outcomes.

- Practice problems give you the opportunity to test your knowledge and consolidate your learning.
- The homework and discussion to develop understanding section provides you with discussion questions, problems, and cases to help you with your revision.
- Solutions to the practice problems and How's your understanding questions facilitate self-study and additional practice.



Financial accounting: an integrated approach

PRACTICE PROBLEMS

Solutions to practice problems can be found at the end of the chapter. These problems are intended to facilitate self-study and additional practice: *don't look at the solution for any of these without giving the problem a serious try first,* because once you have seen the solution it always looks easier than it is.

PRACTICE PROBLEM A

Identify accounting transactions

The following things happened to Bartlett Ltd last month. Decide if each is an accounting transaction and explain briefly why it is or it isn't.

1 A customer ordered $6000 of products, to be shipped next month.
2 Another customer paid $528 for some marketing advice from the company.
3 Bartlett's share price went up by $0.50. As there are 100 000 shares outstanding, this was a value increase of $50 000.
4 Bartlett ran an advertisement on TV, and promised to pay the TV station the $2000 cost next month.
5 One of the company's employees worked overtime, earning $120 that would be paid next pay period.
6 The company paid a teenager $50 to compensate for a ripped shirt that occurred when the teenager tried to run away after being accused of shoplifting.
7 Bartlett received a shipment of new goods for sale, paying $1000 cash and agreeing to pay the other $12 250 in a few days.
8 Bartlett paid the other $12 250.
9 The company made a donation to a political party of $500. (The donation turned out later to have been against the election law, to the company's embarrassment.)
10 Grand Bank made the company a $20 000 short-term loan.

PRACTICE PROBLEM B

Ledgers and preparation of financial statements

Go to the 11 transactions given in Newcombe Ltd (Practice problem C in Chapter 3) and complete the following tasks.

1 Prepare a set of ledgers. Use the opening balances given in the balance sheet, and post each transaction to the ledger account.
2 Calculate closing balances for these accounts and prepare closing entries.
3 Based on the above ledger accounts, prepare an income statement for the month of June 2019 and balance sheet as at 30 June 2019.

PRACTICE PROBLEM C

Closing the books

The following accounts have these balances at 30 June before closing entries.

Income statement accounts	$	*Balance sheet accounts*	$
Revenues		Cash	25 000
Sales revenue	270 000	Accounts receivable	33 000
Investment revenue	36 000	Share capital	80 000
Expenses		Retained profits	125 000
Cost of goods sold	121 000		
Wages expense	98 000		
General expense	7 000		

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CHAPTER 4: Record-keeping

1 Provide the end-of-year journal entry to close the necessary accounts.
2 After the closing entries, what is the balance in the following accounts?
a Sales revenue
b Retained profits

HOMEWORK AND DISCUSSION TO DEVELOP UNDERSTANDING

This section starts with simpler discussion questions that revise some of the basic concepts, which are then followed by a set of problems.

DISCUSSION QUESTIONS

1 What determines whether specific transactions are to be recorded in the accounting records?
2 What is the purpose of a journal entry?
3 What is a chart of accounts and what determines the number of account names to be included in a chart of accounts?
4 Why is it beneficial for transactions to be entered into a journal rather than being entered directly to a ledger?
5 What is the purpose of the trial balance?
6 What is the purpose of closing entries?
7 Financial statements are highly summarised documents, representing thousands of transactions. Financial newspapers and commentators produce information about companies that is even more summarised. Why would users accept, or even prefer, summarised information to detailed data? How important is it for the user to understand the procedures and assumptions behind such summaries?
8 At a recent Student Accounting Club wine and cheese party, local business people mixed with students. One small-business entrepreneur was heard to say, 'All that financial accounting information you students learn about is not relevant to me. I just started up my business. I only have five employees: four people in the shop building the product and one person in shipping/receiving. I'm out on calls, drumming up business so I have my finger on the real pulse of the firm – that's sales. My brother pays the bills and does the payroll every two weeks. Once in a while I write cheques too. It's all simple and smooth, so why add a lot of time-consuming, costly record-keeping to it all? All those books and financial statements are fine for the big public companies. I can do without the complications.' Prepare an appropriate response to his comments.
9 Identify some differences you might expect to find between the transaction filters and accounting books and records of a large corporation and those of a corner shop run by one person.
10 State whether or not you agree with each of the statements below and, in a few words, say why.
a If an event satisfies all five of the transaction criteria, you can be sure it will be recorded by the entity's accounting system.
b Purchases and sales by investors of existing issued shares of a company listed on the Australian Securities Exchange are not accounting transactions in the company's records.
11 Why is it essential that an accurate source document be prepared for every transaction?
12 Indicate the source documents that would be used for making entries for the following transactions:
a a cash payment
b a cash receipt
c a credit sale
d cost of goods sold
e a purchase of inventory
f the receiving of inventory.

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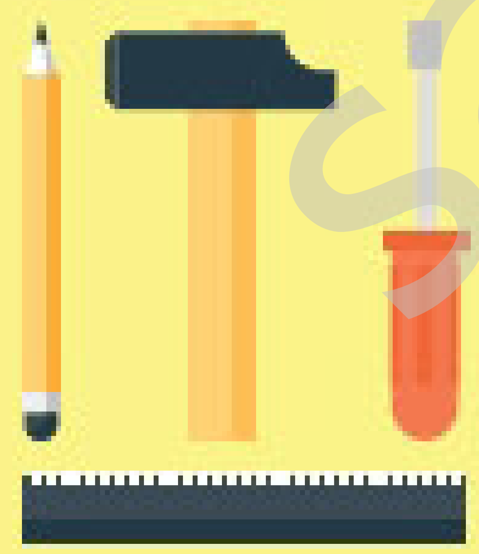
Guide to the online resources

FOR THE INSTRUCTOR

Cengage is pleased to provide you with a selection of resources that will help you prepare your lectures and assessments. These teaching tools are accessible via cengage.com.au/instructors for Australia or cengage.co.nz/instructors for New Zealand.

SOLUTIONS MANUAL

The solutions manual provides solutions to discussion questions, end-of-chapter problems and case questions.

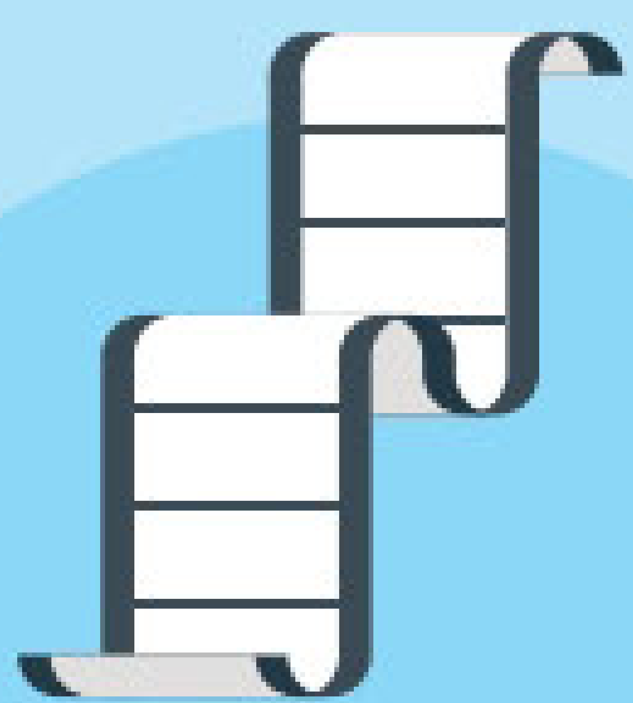


WORD-BASED TEST BANK

This bank of questions has been developed in conjunction with the text for creating quizzes, tests and exams for your students. Deliver these through your LMS and in your classroom.

POWERPOINT PRESENTATIONS

Use the chapter-by-chapter PowerPoint presentations to enhance your lecture presentations and handouts by reinforcing the key principles of your subject.

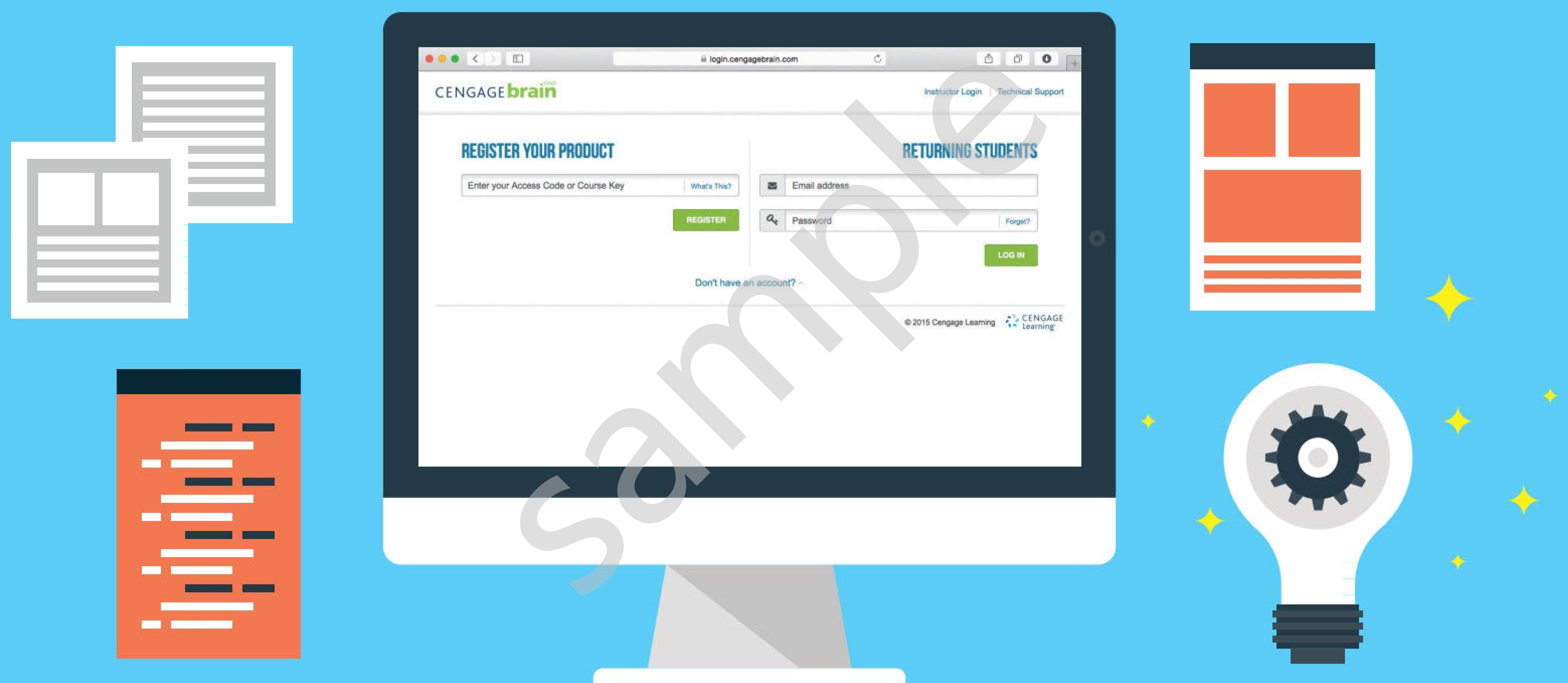


ARTWORK FROM THE TEXT

Add the digital files of graphs, pictures and flowcharts into your course management system, use them within student handouts or copy them into lecture presentations.

FOR THE STUDENT

New copies of this text come with an access code that gives you a 12-month subscription to the CourseMate Express website. Visit **http://login.cengagebrain.com** and login using the code card.



CourseMateExpress

The CourseMate Express website includes:

- revision quizzes
- glossary and flashcards
- and much more!

CENGAGE brain .com

ALSO AVAILABLE

Available separately is an introductory Management Accounting eBook that helps you build a fully integrated understanding of financial accounting and management accounting. You can buy the Management Accounting eBook direct from CengageBrain.

ABOUT THE AUTHORS

Ken Trotman is Scientia Professor in the School of Accounting at UNSW Sydney. He is a Fellow of both CPA Australia and Chartered Accountants Australia and New Zealand. Ken's major research interests include examining the processing of information by users of accounting reports and auditors, and the factors that affect the quality of their decisions. He has received a number of major awards from the American Accounting Association including Outstanding Educator Award by the Audit Section, the Notable Contribution to the Auditing Literature Award, and Notable (Lifetime) Contribution Award in Behavioral Accounting Literature. He is a former president of the AFAANZ, a former Coopers & Lybrand visiting research professor and Director of Research for the audit section of the American Accounting Association. He has over 35 years of university teaching experience. In addition to teaching at UNSW, he has taught at the University of Illinois at Urbana–Champaign, Cornell University and the University of Michigan. He has extensive consulting experience and has conducted many executive training programs in both the private and public sectors. He has published widely in Australian and international research journals and was inducted into the Australian Accounting Hall of Fame in 2011.

Elizabeth Carson is a Professor in financial accounting and auditing at UNSW Sydney. Elizabeth's research interests include economics of global and national audit markets, industry specialisation by auditors and audit reporting. Her PhD investigating global audit firm networks and global industry specialisation by audit firms was awarded the American Accounting Association Auditing Section Outstanding Dissertation Award in 2008. Her work has appeared in leading academic journals including *The Accounting Review, Auditing: A Journal of Practice* and *Theory and Accounting and Finance*. Elizabeth teaches at postgraduate level in financial accounting and auditing, as well as supervising research students in the Honours, MPhil and PhD programs. She received the Pearson Education Accounting Lecturer of the Year award for her development of the 'Accounting: A User Perspective' subject in the Masters of Commerce program. Prior to joining academia, she worked with Pricewaterhouse Coopers (PwC) and is qualified as a chartered accountant. She presently holds the role of Associate Dean Research at UNSW.

Kate Morgan is a sessional lecturer in the School of Accounting, UNSW Sydney, teaching the core financial accounting subject in the Masters of Professional Accounting Program. She has extensive experience in the teaching of introductory financial accounting including design and question setting. She has designed accounting materials for undergraduate and masters programs in both face-to-face and online settings including MBA face-to-face and online programs. Kate developed material for the first edition of this book, has regularly updated material through many editions and has now joined the team as an author. Prior to returning to the university she held senior management positions specialising in project and program management, accounting and information systems design.

ACKNOWLEDGEMENTS

The completion of this book was only achieved with the help of many individuals. My greatest thanks go to my former colleague, the late Gordon Howitt. Over 40 years ago Gordon inspired my interest in accounting. He taught me first-year accounting and subsequently as a staff member provided me with guidance and support. Without his help I could not have written this book. During the first edition he encouraged me, regularly checked on progress, continually read drafts, provided many questions, authored the solutions manual and generally offered friendship and support. This support continued with the reviewing of the second edition. For 50 years he made an outstanding contribution to accounting education at UNSW. I certainly have never met a more dedicated accounting teacher. It has been a privilege to work with him and we all miss his inspiration.

My original co-author Mike Gibbins was kind enough to invite me to adapt his original Canadian textbook. Mike has an outstanding reputation as a researcher and I liked his version of the book so much that I decided to take on the task of co-author. Mike has now retired after a very distinguished career as one of the world's leading accounting researchers and a truly outstanding teacher. Professor Elizabeth Carson took over as co-author, has provided me with many helpful suggestions on previous editions of the book and has helped to reshape many parts of the latest editions of the book. Our latest co-author, Kate Morgan, has contributed to the book across numerous editions and now takes on a more extensive role.

My life has been made much easier with the help of some very capable research assistants. Staff at UNSW and some other universities have been generous in providing me with material. Michael Pennisi provided material on GST and material on subsidiary ledgers, now in Chapter 8. Athol Carrington and Gordon Howitt provided me with some material in Chapter 5, as well as numerous questions, and Malcolm Miller with some material in Chapter 7. Rosina Mladenovic provided some material for Chapters 9 and 10 as well as numerous comments on the book. Gerry Galley wrote substantial sections of Chapter 11. Noel Harding provided material for Chapter 7. Chapter 17 was largely written by Andrew Trotman with excellent inputs from Tanya Fiedler, Sarah Adams and Hien Hoang as well as advice from Roger Simnett and Patricia Strong. Questions were also provided by Kevin Clarke, Victoria Clout, Claudia Gormily, Dean Hanlon, Noel Harding, Cameron Hooper, Andrew Jackson, Helen Kang, Jeffrey Knapp, Chris Poullaos, Patricia Strong and Per Tronnes. Other useful comments were provided by present and ex-UNSW staff including Kar Ming Chong, Robert Czernkowski, Neil Fargher, Roger Gibson, Wendy Green, Noel Harding, Andrew Jackson, Amna Khalifa, Janice Loftus, Diane Mayorga, Malcolm Miller, Richard Petty, Baljit Sidhu and Roger Simnett. Over various editions, advice from Stephen Bah (University of Newcastle), Peter Carey (Monash University), Peter Collett (University of Tasmania), Russell Craig, Linda English (University of Sydney), Vic Fatseas (Charles Sturt University), Jack Flanagan, Dean Hanlon (Monash University), Jan Hollingdale (Bond University) and Greg Whittred was appreciated. Cengage also arranged for use of some material in Chapter 6 from the US book by I. Solomon, L. Wither, P. Vargo and L. Plunkett. A special thanks to Judith Quinn for extensive word processing of the materials.

Ken Trotman

Cengage would also like to thank the following reviewers, who provided helpful and useful comments while this edition was being developed:

Abdel Halabi, Monash University
Dean Hanlon, Monash University
Christina James-Overheu, University of Southern Queensland
Youngdeok Lim, University of New South Wales
Maria Mucciarone, Murdoch University
Karen Nicita, North Sydney Institute of TAFE (Meadowbank)
Dr Afzalur Rashid, University of Southern Queensland
Jackie Yong, University of Newcastle.

Introduction to financial accounting

1

ON COMPLETION OF THIS CHAPTER, YOU SHOULD BE ABLE TO:

LO1 describe the basic purpose of financial accounting (1.1, 1.2)

LO2 identify the users of accounting information and the decisions they make that require accounting information (1.3)

LO3 identify the people who are involved in financial accounting (1.4)

LO4 describe how accrual accounting differs from cash accounting (1.5)

LO5 explain the basic contents of the three key financial statements and describe the purpose of each statement (1.6)

LO6 describe the basic principles and assumptions of accounting (1.7, 1.8)

LO7 explain why accounting is important (1.9).

CHAPTER OVERVIEW

Accounting has been described as the 'language of business'. It provides managers within organisations and those outside the organisation (e.g. investors and creditors) with information about the financial performance and financial position of the business. Regardless of what type of career you pursue, accounting information will have important effects on you.

This chapter introduces you to financial accounting and illustrates some useful accounting concepts and techniques. It outlines a way of thinking about financial accounting that will be important to your career, whether you become an accountant or a user of accounting in business or in other walks of life. We believe that every manager is a user of accounting information but some managers use accounting information better than others. You are introduced to the social setting of financial accounting and some of the people involved. Financial accounting is complex and requires sound judgement because it attempts to serve the needs of all these people, not all of whom necessarily see things the same way. You are then introduced to one of the cornerstones of how financial accounting works: accrual accounting, the broad framework within which financial accounting reports are prepared. You are also introduced to the three key financial statements and the basic financial statement assumptions.

1.1 Use and preparation of accounting

LO1 Financial accounting has value because the information it produces is used in a variety of ways. Users include managers, investors, bankers, financial analysts and many others. Such people study accounting to learn how to use information effectively and to do their jobs better. For accountants, this information is essential to the services they provide.

Accounting is a complex human activity. Accounting information doesn't just happen: it is produced by a large set of people, activities and computers. To be effective users of the information, people need to know something about how and why the information is prepared. Accountants' expertise is all about the how and the why.

The demand for useful information shapes how financial accounting information is prepared; for example, when producing annual or monthly performance reports. How it is prepared shapes its use; for example, in analysis of financial statements and managerial decisions using accounting information.

FOR YOUR INTEREST

Learning terminology is important. To help you with that, this book has a glossary of terms at the back on page 697. If you're not sure what a term means, look it up right away.

Accounting is a challenging discipline that involves many capabilities: assigning numbers to represent financial phenomena; providing explanations of those numbers; analysing and verifying the information prepared by others; understanding the needs of those who use accounting's reports to make decisions; engaging in oral, written and electronic communication with the many people involved in an organisation's financial activities; and maintaining judgement that is sound, objective and ethical.

Much of the challenge of accounting is in figuring out which numbers to use and deciding what the numbers tell us. Adding and subtracting the numbers is often the easy part. This makes accounting both easier and harder to learn than you might have thought. Accounting is rooted in the financial setting, and has its own vocabulary, so don't expect it all to make perfect sense at the beginning. It will take a while for you to acquire the knowledge that creates an understanding of business and accounting as they really are in our world. This understanding will be based on your knowledge of both concepts and techniques, and of the viewpoints of both accountants and the users of accounting.

The going will not all be easy, but if you give it your best effort, you may be surprised at the high level of sophistication you will reach. Here is one important suggestion. The only way to learn accounting is to do problems. It is vital that you do more than just read the examples. After reading the chapter, come back and do the examples to check your understanding. Throughout the book there are many questions called 'How's your understanding?'. Try to do the question and then look up the answer at the end of the chapter. These questions are numbered 1A, 1B, 1C, etc. where 1 indicates the chapter and the letter of the particular question.

1.2 Financial accounting

LO1 Accounting is a process of identifying, measuring and communicating economic information to allow informed decisions by the users of that information. Accounting systems are often described as either financial accounting systems (where periodic financial statements are provided to external decision-makers, such as investors, creditors and customers) or management accounting systems (including information for planning and performance reports to managers throughout the organisation; that is, internal decision-makers).

Financial accounting measures an organisation's performance over time and its position (status) at a point in time, and does so in Australian dollars, US dollars, yen, euros or whatever currency is judged relevant to the organisation. This measurement of financial performance and financial position is done for all sorts of organisations: large and small businesses, governments from local to national levels, universities, charities, churches, clubs, international associations and many others. The financial statements, which are financial accounting's reports, summarise the measurements of financial performance and financial position in standard ways thought to be useful in evaluating whether the organisation has done well and is in good shape. These financial statements include notes, which contain many words (sometimes dozens of pages) of explanation and interpretation, in addition to the numbers. The statements report on the economic and financial matters and are largely for the use of people outside the organisation, such as investors, lenders, club members, regulatory agencies and taxation authorities.

In summary:

- *Financial performance* is the generation of new resources from day-to-day operations over a period of time.
- *Financial position* is the organisation's set of financial resources and obligations at a point in time.
- *Financial statements* are the reports describing financial performance and financial position (e.g. the balance sheet and the income statement).
- *Notes* are part of the statements, adding explanations to the numbers.

As we will see throughout this book, financial performance and position are highly related. Good performance is likely to lead to a healthy financial position; if a company has been making profits, it will probably build up resources. On the other hand, a healthy financial position facilitates performance; if you have lots of resources compared to obligations, the company can undertake activities that lead to good performance.

Another branch of accounting, management accounting, is oriented towards helping managers and others inside the organisation, in contrast to financial accounting's more external focus. While management accounting is not examined in this book, students interested in how financial accounting measures managerial performance will find frequent references to the relationship between managers and financial accounting. In the end, all forms of accounting exist to help people such as managers, investors, bankers, legislators and the public make financial decisions.

HOW'S YOUR UNDERSTANDING?

1A What are the two main things that financial accounting measures?
[Answers to all 'How's your understanding?' questions are at the end of each chapter. Make sure you try to answer the question prior to looking up the answer.]

1.3 Who uses financial accounting information?

This book will show you the many ways in which financial accounting has been shaped by the development LO2
of business and society. Financial accounting helps:

- stock market investors decide whether to buy, sell or hold shares of companies
- banks and other lenders decide whether or not to lend
- managers run organisations on behalf of owners, members or citizens (in addition to the help provided by management accounting and other sources of information)
- management by providing basic financial records for the purposes of day-to-day management, control, insurance and fraud prevention
- governments in monitoring the actions of organisations and in assessing taxes, such as income tax and the goods and services tax (GST).

Whole books can be, and have been, written about each of these functions. Though this book emphasises externally oriented financial accounting for business firms, don't forget that there are many other organisations that use, and are affected by, accounting. When words like 'organisation' or 'company' are used, the implications often go well beyond business firms.

The centre of our interest in this book – financial accounting for the organisation – operates within and serves a complex social setting. It seeks to monitor and report on financial events initiated by or happening to the organisation. Accounting is not a passive force within the social setting: it tells us what is going on, but in so doing it affects our decisions and actions and, therefore, also affects what is going on.

The social setting is composed of many people, including groups, companies, institutions and other parties interested in, or having an influence on, the company's financial accounting. As we will see many times in this book, these parties do not share the same interest in the company's accounting, and may even be in competition or conflict with each other. For example, management are likely to prefer higher salaries but this may or may not be in the best interest of shareholders. Most will be in the same country as the company and its management but, increasingly, companies and other organisations are operating internationally. The other groups interested in, and affecting, the company's financial accounting may be located anywhere on the planet.

Let's consider some possible users of the financial statements of a listed company:

- A company's board of directors manages the company on behalf of its shareholders. One function of the board, which involves the financial statements, is hiring the company's top operating management – especially the chief executive officer (CEO). Suppose you are a member of the board and are preparing for a discussion at the next board meeting. The board evaluates the CEO's performance continuously, which is its responsibility. The financial statements have been provided to the board prior to the meeting, and will be a major contribution to this evaluation.
- A company's shares are listed (i.e. can be bought and sold) on the Australian Securities Exchange (ASX). Suppose you are a financial analyst for an investment banker and are preparing a report projecting future earnings and making recommendations about whether the company's shares are worth buying, keeping if already held, or instead should be sold. You have the financial statements and will use them to support your report.
- A company has several hundred million dollars in bank borrowings, and lines of credit (pre-authorised borrowing capability) for millions of dollars more. Suppose you are a commercial lending officer for a bank, conducting a regular review of the company's borrowing status. You must consider the quality of the company's financial performance and assets (many of which have been assigned as security on bank loans, and therefore could be seized if the company doesn't pay its loans back on schedule). Financial performance is important because net profit generates cash to pay loans, and a good past record suggests that the company is likely to be able to earn profit in the future. You have requested the financial statements to use in your review.
- A company depends on a large number of suppliers to obtain goods and services. Suppose you are the sales manager of a stationery supplier and are considering signing a long-term contract to supply the company. You want to sign the contract because your company needs the business, but you have to be satisfied that your shipments will be paid for. More positively, you hope that if you do a good job, you will have an opportunity to grow with the company. Most of the information you need has been received already, but you have obtained the financial statements and are reviewing them as you make your final decisions about the contract.
- Management and unions often negotiate about an increase in pay rates for workers. One key input is the ability of the company to pay these increases. A company's financial statements are an important input to this decision.

In summary, these scenarios indicate the following reasons for using the company's financial statements:

- evaluation of the CEO's performance by a member of the board of directors
- preparation of 'buy', 'sell' or 'hold' recommendations by a financial analyst

- review of the company's borrowing status by a bank lending officer
- development of a supply contract with the company by a stationery supplier's sales manager
- determining pay rises by management and unions.

These scenarios have been chosen to add to your insight into the use of financial accounting information. They are not complete. In all cases, the financial statements would be only part of the information used in the decision-making process. Also, there are many other uses for financial statements, some of which might make different demands on the quality of the information from those discussed here.

FOR YOUR INTEREST

Above we noted that financial statements would be only part of the information used by various groups such as investors and management in decision-making. Another important type of information is sustainability reporting. These reports include information on economic, environmental, social and safety performance. For example, they could include information on carbon emissions, energy usage, employee safety, community involvement, etc. We introduce this material in Chapter 17, as many companies now include this information in their annual reports or in separate sustainability reports.

1.4 The people involved in financial accounting

LO3

The main participants in the art of financial accounting are:

- the information users (the decision-makers)
- the information preparers, who put together the information to facilitate the users' decision-making
- the auditors, who assist the users by enhancing the credibility of the information, providing a professional opinion about the fairness and appropriateness of the information.

Users (decision-makers)

In financial accounting, a user or decision-maker is someone who makes decisions on the basis of the financial statements, on his or her own behalf, or on behalf of a company, bank or other organisation. Ultimately, the nature and contents of financial statements are functions of the demand for decision information from users. If user demand is the fundamental reason for financial statements, understanding the demand is important.

A user's main demand is for the *credible periodic reporting* of an organisation's financial position and performance:

- *Credible* means that the information in the reports (the financial statements) appears to be sufficiently trustworthy and competently prepared for it to be used to make decisions. There is a cost–benefit issue here: huge amounts of money could be spent trying to make the reports absolutely perfect, but since that money would have to come out of the organisation's funds, spending it would make its performance and position poorer. Users, such as owners and managers, may not want that to happen, so credibility is a relative condition, not an absolute one. Accounting information has to be worth its cost.
- *Periodic* means that users can expect reports on some regular basis (such as yearly or quarterly). The longer the wait, the more solid is the information. But waiting a long time for information is not desirable: users are willing to accept some imprecision in the information in return for periodic reports with timely, decision-relevant information.

The main groups of users are as follows:

- *Owners* are individual business owners, such as proprietors, partners and other entrepreneurs; individual investors (shareholders) in shares on stock markets who can vote on company affairs; companies that invest in other companies; superannuation funds and other institutions that invest in companies; and people with quasi-ownership interests, such as members of clubs or voters in local councils. In respect of companies, shareholders own portions of the corporation – shares that can be bought and sold – but the corporation is a legal entity existing separately from its shareholder owners. Investors purchase shares in a company with the hope of gaining in two ways: receiving a portion of the company's profit in the form of dividends, and being able to sell their shares in the future at a price higher than they paid.

- *Potential owners* are people of the same sort as the owners listed above, who do not at present have funds invested in the organisation but may be considering making such an investment. Because potential owners often buy shares from present owners – for example, by trading shares on the stock market – rather than investing directly, there is often a significant difference in outlook between present owners, who may wish to sell their shares for as much as possible, and potential owners, who would like to pay as little as possible.
- *Creditors and potential creditors* are suppliers, banks, bondholders, and others who have lent money to the organisation, who are owed funds in return for supplying something of value, or who are considering taking on such a role. Creditors do not have the legal control of the organisation that owners have, but they often have a large say in organisation decisions, especially if the organisation gets into financial difficulty. In cases of extreme difficulty, creditors may have the right to take over control of the organisation from the owners. Sometimes the difference between creditors and owners is hard to discern because it may depend on subtle legalities about who has what rights, and some people may play both roles for a given organisation. For example, an owner invests money in a business, but in addition may lend the business further money, becoming a creditor as well as an owner. Creditors need to decide whether to supply goods or services to the firm on credit.
- *Managers* are those who run the organisation on behalf of the owners. They have a great interest in the way accounting reports on their activities and results. They use the information for planning, controlling and organising the activities of the entity. Often managers' salaries and bonuses, and the likelihood of staying in their jobs, are directly affected by the contents of the financial statements. In small businesses in particular, the owner may also be the main manager.
- *Employees and their unions or other associations* are interested in the organisation's ability to pay wages, maintain employment levels and keep such promises as paying superannuation contributions. Financial information can be used to assess job security.
- *Regulators and other government bodies and agencies* are groups that may use the financial statements as a basis to evaluate whether the organisation is following various rules and agreements.
- *Financial and market analysts* are people who study companies' performances and prepare reports for others by analysing those companies. Analysts often make recommendations about whether to invest, sell shares or do neither.
- *Competitors* may use the financial statements to try to understand the organisation's operations for the purpose of better understanding what their competitors will do in the future and, therefore, what decisions they should make. Sometimes, for example, managers are reluctant to disclose information to shareholders, because competitors can then also obtain it and act to reduce the organisation's prospects.
- *Accounting researchers* are people – mostly university academics, but also some based in accounting firms and other organisations – who study accounting with the objective of understanding it and contributing to its improvement.
- *Customers* need to consider if the entity is financially sound. This is particularly important when customers are required to pay amounts in advance, such as on a building contract. It is also important if customers rely on the warranties provided by the entity.
- *Miscellaneous third parties* are various other people who may get access to an organisation's financial statements and use them in various ways. Once statements have been issued, many people may make use of them. For example, politicians may make judgements about industry efficiency or taxation levels,

journalists may write stories about employment practices, and judges may evaluate the organisation's ability to pay if it loses a lawsuit.

Think about all these users and decisions! It is a great challenge to develop one set of periodic financial statements for an organisation so that it can be useful for all. Perhaps you will not be surprised to know that there is much controversy about whether financial statements do this well, and whether financial accounting methods serve some users or decisions better than others.

How likely is it that you, the reader, will use accounting information in the future?

If you plan to be an accountant, the value of studying financial accounting is clear. It may not be so clear, however, if you have other plans, such as a career in management, marketing, finance, engineering, law, human resources or production. To provide some perspective to those of you not planning an accounting career, and to help you understand the managers you will work with if you do become an accountant or auditor, comments will be made frequently about managers and financial accounting.

Financial accounting is directly relevant to managers because it reports on the managers' performance as decision-makers, caretakers of the organisation, representatives of the owners, legal officers of the organisation, and so on. Any manager cannot help but be interested in how her or his performance is being measured and in how that performance is analysed, projected and otherwise evaluated. Managers' bonuses, promotions, dismissals, transfers and other rewards and penalties are often directly based on the numbers and commentaries prepared by accountants. Every manager should have an intimate understanding of how accounting is measuring his or her performance and should be able to conduct a 'reasonableness check' of the information being provided. It is critical for managers to understand the impact of every decision they are making on accounting numbers as these numbers will measure their performance.

Here are a few examples of how non-accounting managers may use accounting information:

- Marketing managers need to understand the financial statements of potential customers to determine which customers to focus on and which ones to extend credit to.
- Purchasing managers need to understand suppliers' financial statements to make sure they have the capacity to supply in the long term.
- Human resources managers use accounting information in salary negotiations.
- Information systems designers need to include the accounting information system in their design.

If you are extremely talented and have decided to make your fortune as a sports star or musician, you still need to know about accounting. We suggest that understanding the financial statements of the Sydney Cricket Ground or the Opera House would be of benefit in negotiating with those organisations.

FOR YOUR INTEREST

Over the last few years there have been major negotiations between football (various codes) and cricket players and administrators over how total revenues of the sports should be shared between players and other stakeholders. That is, the players, their representatives and the administrators are using the information in the financial statements of the sporting bodies as part of the negotiations over salaries and other benefits.

Preparers (decision facilitators)

Two main groups are responsible for the information in the financial statements:

- *Managers* are responsible for running an organisation, including issuing accounting and other information, and controlling its financial affairs. The fact that managers are also users, and are vitally interested in the results, has created a fundamental conflict of interest for them and has led to the development of the auditing function (see below). Managers are often referred to, as a group, as management.
- *Accountants* have the job of shaping the financial statements by applying the principles of accounting to the organisation's records, under the direction of management. Many accountants are members of

professional societies, such as CPA Australia, Chartered Accountants in Australia and New Zealand, and the Hong Kong Society of Accountants. Accountants and their professional bodies also often have auditing experience and interests, and sometimes auditing roles, but the task of preparing the financial statements is quite different in principle from the task of verifying those statements once they are prepared.

Auditors (credibility enhancers)

Auditors report on the credibility of the organisation's financial statements, on behalf of owners and others. Auditors have the job of assisting the users by verifying that the financial statements have been prepared fairly, competently and in a manner consistent with accepted accounting principles. The auditing role is a very old one, arising because users demanded some assurance that managers' reports on their performance were not self-serving or biased. This book refers frequently to external auditors, who report on the financial statements on behalf of external users, but there are also internal auditors, who work within the organisation to support the credibility of information being used by management. External auditors provide an opinion on the truth and fairness of the financial statements. While external auditors may be asked for advice in preparing the statements, especially for small companies, they must avoid responsibility for the statements because their role is to scrutinise the preparation process. They cannot credibly audit statements they have prepared! (Professional accountants often do prepare financial statements, but in so doing they are not acting as external auditors, and they make this clear in covering letters and footnotes attached to the statements.)

The external auditors are formally appointed by the owners; for example, at the annual shareholders' meeting. But an organisation's external auditor is not permitted to be an owner or manager of the organisation. For example, they cannot own shares in the company and they cannot act as a director or manager of the company, even for a small part of the year. This is to ensure that the auditor is financially and ethically independent and can therefore be objective about the organisation's financial affairs. Independence and objectivity are fundamental ideas that you will encounter frequently in this book.

External auditors may work alone or in partnership with other auditors in accounting firms. Some of these firms are very large, having thousands of partners and tens of thousands of employees, and offices in many cities and countries. Accounting firms offer their clients not only external auditing but also advice on income tax, accounting, computer systems and many other financial and business topics. However, if they conduct the audit there are rules in place about what other services they can provide, as auditors cannot be involved in auditing their own work, or creating any conflict-of-interest problems. Managing this requires considerable professional skill and attention to the ethics and rules of professional conduct. Whether this is being done successfully is a matter of much controversy at present. In Australia, as well as in many overseas countries, there has been additional regulation aimed at improving the independence of auditors. The large accounting firms annually spend many millions of dollars on their independence and quality-control systems.

People and ethics

Ethics, mentioned above, will be raised throughout this book. Ethical issues can arise in just about any area of accounting. Here are some examples, all of them real:

- An organisation has been sued by a recently fired employee who claims that the dismissal was based on the employee's age, and therefore broke employment laws. The organisation's general manager denies any impropriety. The organisation's chief accountant, who personally feels that the former employee's claim is justified, has suggested to the boss that the lawsuit should be mentioned in a note to the financial statements, so that users of the statements will know there is a potential for loss if the former employee wins. The general manager feels that the chief accountant should ignore the lawsuit in preparing the financial statements, to avoid embarrassment and the appearance of admitting guilt. The general manager fears that such an apparent admission could be used against the organisation in court and so could cause the organisation to lose the lawsuit. What should the chief accountant do?
- While doing an audit, the external auditor learns that the organisation may have been cheating one of its customers. The customer, who is unaware of this and quite happy with things, is another client of the auditor. The auditor, who is bound by rules of conduct designed to protect the confidentiality of

information gained during the audit, knows that saying anything to anyone could result in major lawsuits. Should the auditor just keep quiet about what was found?

- A third organisation's general manager is paid a bonus each year, calculated as a percentage of profit. The general manager is considering a proposed change of accounting methods that will reduce expenses this year and therefore raise accrual profit and increase the general manager's bonus. Should the general manager refuse to implement the accounting change, request that the bonus calculation ignore the change, or just go ahead and enjoy the higher bonus?

These illustrative problems do not have easy answers, so none are offered here. They are dilemmas for the chief accountant, the auditor and the general manager. This book will address ethical issues from time to time, helping you to sharpen your ethical sense along with your accounting knowledge – the two are inseparable.

1.5 Accrual accounting

LO4

Financial accounting's task of producing financial statements is a complex one. For even a small business, thousands of events (transactions) have to be recorded and their financial effects evaluated. For large corporations such as BHP Billiton, Lend Lease, Rio Tinto, Woolworths, AMP, Qantas and Westpac, or organisations such as the University of New South Wales, Brisbane City Council or the Red Cross, the number of annual transactions runs into the millions or billions. Frequently, when the time comes to prepare the financial statements, some transactions have not been completed, are in dispute or have an otherwise unclear status.

To cope with these complexities, financial accounting for most businesses and organisations uses the accrual accounting approach. Under an accrual accounting system, the impact of transactions on the financial statements is recognised in the time periods during which revenues and expenses occur, rather than when the cash is received or paid. Formal definitions of revenues and expenses can be quite complicated, and are left to Chapter 2. At this stage, we will provide examples of the main types of revenues and expenses.

The main form of revenue is usually the sale of goods or services; for example, the sale of coffee machines for $45 000 or carrying out the installation of a new computer system for $300 000. Other revenues include interest on investments held, dividends received on shares and rent from premises owned by the company.

Consider the main revenues and expenses for a coffee cart you see on campus or in the city. The main revenue will come from coffee sales. If all sales are cash sales it would be the cash received for the coffees sold. But note many customers use their credit card (where it may be days/weeks before the cash is received) or that some customers may have an account where all coffees sold to them are recorded and then they pay the whole amount the following month on receipt of an invoice. Note that under accrual accounting it is the delivery of the service (i.e. handing over the cup of coffee) that results in revenue being recognised.

Expenses include the costs of services and resources consumed in the process of generating revenues. Examples of costs incurred are wages, electricity, travel and rent. An example of resources consumed is depreciation. Organisations depreciate the cost of an asset (such as a motor vehicle or a printing machine) over the useful life of the asset; that is, each year a percentage of the cost of the asset becomes an expense. These assets are helping in generating revenue; therefore, a share of the cost should be treated as an expense in each accounting period during which the asset helps generate revenue.

Why do we depreciate the cost of an asset over its useful life rather than treat the cost of the asset as an expense in the first year? The reason is that the asset is used over many years and helps generate revenue over many periods. This depreciation expense is matched to the revenues earned during the period. Note that estimates need to be made. For example, a printing machine that cost $480 000 would have annual depreciation of $120 000, $96 000 or $80 000, depending on whether its estimated life is four, five or six years; that is, the judgement on the useful life of the machine has an impact on profit each year.

Now consider the main expense of the coffee cart mentioned above. Likely expenses include:

- the cost of coffee
- the cost of cups

- wages
- rent of space (e.g. to the university)
- depreciation on the coffee machine
- insurance.

Accrual accounting versus cash accounting

Before considering these complexities, let's consider the basic differences between cash accounting and accrual accounting.

- *Cash accounting* involves recording revenues and expenses at the time the cash is received or paid. This is reasonably precise, because the accountant knows whether cash has been paid or received and the exact amount is easily determined (from accounting books or bank statements).
- However, often the timing of cash flow is in a different accounting period from the substance of the transaction. Examples include selling inventory on credit; when a contractor fixes machinery for your company but will not be paid until a later accounting period; or the use of machinery, which reduces its future useful life. As noted above (but worth repeating), *accrual accounting incorporates these complexities by recording revenues and expenses at the time they occur, not when cash is received.*

Benefits of accrual accounting

The differences between cash and accrual accounting are critical to your understanding so the above points are worth reinforcing. The primary measure of a company's performance is its profit for the period. Profit is measured as revenues minus expenses. The key revenue for most companies comes from the sale of goods or services. The amount of revenue recorded are the amounts expected to be received from providing the good or service regardless of when the customer pays for the goods or services. Expenses represent the amounts paid or owing by the organisation in order to earn the revenues. Some expenses may be paid at the time the expense is incurred but often the amounts will be paid after, or even before, the expense is incurred. For example, you may have done some casual work during the month which is not paid to you by the company until the end of the month. On the other hand, the company will likely pay rent in advance.

The benefits of accrual accounting to the user of financial statements are:

- it includes all assets and liabilities in the balance sheet to give a truer picture of the financial position of the organisation (e.g. accounts receivable and accounts payable)
- it includes all revenues and expenses regardless of whether the cash has yet been received. For example, if a company makes a large sale to an established customer who has always paid its bills, the company would see this as a positive factor. Accrual accounting includes such a transaction in revenues and this more accurately measures profits. Similarly, if the company has received the benefits of services from other organisations then this should be included in expenses and, therefore, impact the performance measure.
- assets are used over a number of years and will benefit the performance of each year. Therefore, in measuring overall performance a share of the costs should be allocated across the life of the asset. This allocation, called depreciation, is included in an accrual accounting system.
- asset and liability values can change over time and these changes need to be included in the performance evaluation where possible.

To compare cash profit with accrual profit, consider the following:

- A company makes credit sales of $100 000 in June, and the cash will be collected in July. Under an accrual system, $100 000 revenue would be included in June, whereas under a cash system the amount would be recognised in July.
- A contractor carries out repair work for your company in June for $20 000, but the bill will not be paid until July. Under an accrual system, the expense would be recognised in June, but under a cash system it would not be recognised until July.

- Under accrual accounting there will be an allocation of the cost of equipment to expenses over several accounting periods to recognise the consumption of the equipment's future economic value. This is called depreciation. If some new equipment cost $80 000 and has a life of eight years, $10 000 depreciation would be included in expenses each year.

HOW'S YOUR UNDERSTANDING?

1B In June, a company makes cash sales of $100 000 and credit sales of $200 000 (all to be collected in July). It pays wages of $60 000 and owes $10 000 for June expenses (to be paid in July).

(i) What is profit using cash accounting?

(ii) What is profit using accrual accounting?

Using accrual accounting to prepare financial statements

Using the accrual accounting approach in preparing the financial statements, attempts are made to:

- include all the cash receipts and payments that have already happened; for example, cash sales and cash payment for wages
- incorporate future cash receipts that should be expected, based on existing transactions; for example, it is necessary to include credit sales now, although the cash will not arrive until the next period
- incorporate future cash payments that need to be paid for goods or services already provided to the organisation
- measure the value of incomplete transactions; for example, estimate the likely amount of accounts receivable that will not be collected or the amount of inventory that is obsolete, and treat these amounts as expenses of this year
- estimate figures when exact amounts are unknown; for example, estimate the amount of interest due from the bank at year-end, even though the bank does not add the interest to your account for another two months – the amount is interest revenue
- make an economically meaningful overall assessment of awkward problems; for example, a customer is suing you for $1 million because of a faulty product. You agree to pay $200 000 in settlement now, but the client takes the matter to court, with the case to be held next year. You need to determine if there is an expense in this year. Complications such as this can be left to later chapters, but it is important to realise early that there are complications in determining profit
- estimate the using up (consumption) of an asset over time (called depreciation), i.e. allocating the cost of the asset to each year over the life of the asset.

Estimates and assessments

Notice the use of the words 'estimate' and 'assessment' above. This illustrates the need for judgements when preparing financial statements under accrual accounting. Examples of estimates are as follows.

- The value of a bank's overseas loans (i.e. the money actually to be received back from those loans) depends on the health of the borrowing countries' economies, stability in international money-transfer arrangements (often disrupted by wars, politics and natural disasters) and the relative values of various countries' currencies, which can change a lot from day to day. In order to judge the value of the bank's uncollected loans, accountants study the loan repayment record of various countries for the bank and estimate how much money the bank will be able to collect.
- The amount of profit that should be recognised during the year by a construction company for a major bridge that will take two years to complete will depend on future expenses. Accountants calculate the costs involved in building the bridge to this point. Based on such estimates as the percentage of the job

completed, he or she also estimates the total likely profit of building the bridge and determines the percentage of profit to be included in this period.

- All companies have to estimate the amount of money owing to employees at the end of each year for wages where the work is done and not yet paid, and calculate the amount owing to employees to be paid in the future for holiday pay, long service leave and superannuation (depends a lot on the type of superannuation plan).

The importance of good judgement

Accrual accounting has been developed because financial statements cannot be based on merely the routine accounting records of what has happened. Measuring economic performance is more complex than that, and the appropriate measures can be elusive or can depend on one's point of view. Many augmentations to the transactional record (estimates, adjustments, judgements and verbal explanations) must be made so that the statements will be meaningful. The resulting statements, therefore, depend to a great extent on the quality and fairness of such augmentations. Managers, accountants and auditors must use their judgement constantly.

Financial accounting, because it relies on many judgements, is far more imprecise than most people (even many regular users of financial statements) realise. To help students understand the reality of modern financial accounting, this book spends much space on the real-life imprecisions of preparing and using financial statements. Accrual accounting is therefore the presumed method in this book, though there will be some comparisons between it and simple cash-based accounting. Modern financial accounting starts with cash receipts and payments, then builds a very large accrual accounting process *in addition to* the cash records in order to provide the sophisticated measures of financial performance and position that today's world demands.

FOR YOUR INTEREST

Many of you will end up working as accountants or managers for organisations that operate in many countries. This book should equip you to understand the financial statements prepared in most countries, including Australia, the United States, the United Kingdom, Canada, New Zealand, China, Singapore, Hong Kong, Indonesia, Malaysia and many others. The methods of preparing financial statements in these countries are very similar. All use the accrual accounting system introduced in this chapter. With the introduction of International Financial Reporting Standards (IFRS) in 2005, differences between financial reporting in these countries are likely to be very small.

1.6 The key financial statements

LO5 Organisations are required to provide the following types of information that are relevant to user needs: financial position, financial performance, financing activities and investing activities.

The key financial statements that provide this information are: a balance sheet, which shows the financial position at a point in time; an income statement, which measures financial performance over a defined period (such as a month or a year) by deducting expenses from revenues during the period to obtain profit for the period; and a statement of cash flows, which shows the sources and uses of cash during the period. Both financing and investing activities are included in this statement.

Balance sheet

Exhibit 1.1 provides an example of a simple balance sheet. The balance sheet shows an organisation's resources and claims on resources at a particular point in time. The heading provides the company name, the title of the report and the date at which the financial position is shown. The three main elements of a balance sheet are assets, liabilities and shareholders' equity. In this case, the organisation is a company, and shareholders' equity is described as shareholders' equity. If the organisation were a sole trader or partnership, it would be called proprietor's equity or partners' equity, respectively.

EXHIBIT 1.1

XYZ LTD

BALANCE SHEET AS AT 30 JUNE 2019

	2019 $000	2018 $000
Assets		
Cash at bank	2 000	1 400
Accounts receivable	16 000	13 000
Inventory	12 000	10 000
Property, plant and equipment	90 000	91 000
Total assets	120 000	115 400
Liabilities and shareholders' equity		
Liabilities		
Accounts payable	17 000	16 800
Wages payable	2 000	2 000
Provision for employee entitlements	4 000	3 000
Long-term loans	30 000	33 600
Total liabilities	53 000	55 400
Shareholders' equity		
Share capital	40 000	36 000
Retained profits	27 000	24 000
Total shareholders' equity	67 000	60 000
Total liabilities and shareholders' equity	120 000	115 400

ASSETS

Assets are the future economic benefits that are controlled by an organisation as a result of past transactions or other past events. The value of every asset needs to be measurable in monetary terms. A brief discussion of the assets in Exhibit 1.1 will make you familiar with the terminology.

- The cash at bank account records deposits to and withdrawals from a bank.
- Accounts receivable (also called debtors) represents amounts owing from customers for goods or services provided to them. Accounts receivable is shown net, which indicates the amount that management expects to collect from customers after allowances have been made for likely uncollectable amounts.
- Inventory generally represents the cost of stock on hand; that is, unsold products.
- Property, plant and equipment includes items such as land, buildings, equipment, motor vehicles, computers and furniture.

Assets can be financed in one of two ways: liabilities and/or shareholders' equity:

Assets = Liabilities + Shareholders' equity

LIABILITIES

Liabilities are the future sacrifices of economic benefits that an organisation is presently obliged to make to other organisations or individuals as a result of past transactions or events. For example, suppliers providing goods on credit and employees carrying out work are examples of past transactions that lead to liabilities.

Liabilities can be legally owed debts, such as loans from the bank, mortgages or amounts due to suppliers. However, they also can be estimates of future payments based on past agreements, such as those arising from promises of future benefits to employees for long service leave, or of warranty repairs for customers when products break down. Liabilities involve the future use of assets, usually cash, or the performance of future services. An example of the former is paying cash to reduce a liability. An example of providing a future service would be carrying out warranty repairs on products previously sold.

Four examples of liabilities in Exhibit 1.1 are accounts payable, wages payable, provision for employee entitlements and long-term loans.

- *Accounts payable* (often called trade creditors) is the amount owed to various suppliers for goods or services they have provided to an organisation.
- *Wages payable* (also called accrued wages) is for work done by employees, but for which they have not been paid.
- *Provision for employee entitlements* refers to entitlements employees accumulate as a result of past work, such as holiday leave, sick leave, long service leave and superannuation.
- *Long-term loans* are loans that are not repayable within a year.

SHAREHOLDERS' EQUITY

Shareholders' equity is the excess of assets over liabilities. It is a residual claim of the shareholders on the assets of the organisation. Shareholders' equity consists of two main elements: share capital and retained profits.

- *Share capital* is the amount that owners have directly invested in the company.
- *Retained profits* represent the total cumulative amounts of profits that the company has retained in the business rather than distributed as dividends.

The relationship between assets, liabilities and shareholders' equity can be expressed in the following accounting equation:

Assets = Liabilities + Shareholders' equity

This equation shows that the resources of an organisation are funded from two types of sources: debt or equity. The effects of transactions on this equation are discussed in Chapter 2. At this point you should note that the equation balances at every point in time.

HOW'S YOUR UNDERSTANDING?

1C For each of the following items state whether they are assets (A), liabilities (L), shareholders' equity (SE) or not listed in the balance sheet:

(i) accounts receivable
(ii) accounts payable
(iii) sales revenue
(iv) share capital
(v) equipment
(vi) loans.

Comparative balance sheets

Note that the balance sheet in Exhibit 1.1 shows numbers for 2018 and 2019. The changes from 2018 to 2019 provide the reader with information about what is happening to various account balances; for example, cash at bank has increased from $1400 to $2000. The statement does not tell us the reasons for the change, but it is possible to obtain information on the change in this account in the statement of cash flows provided in Exhibit 1.3 (to be discussed later). While some of the reasons for the changes in other balances are too complicated for this introductory chapter, you will be able to understand the changes after you have completed the next two chapters (we will return to Exhibit 1.1 in Chapter 2). For now, consider some preliminary ideas:

- What would be a likely explanation for the increase in accounts receivable? Most likely credit sales (this would increase accounts receivable) are greater than cash received from customers related to credit sales (this would decrease accounts receivable).
- What does the increase in share capital mean? This normally indicates that there have been shares issued during the year.
- The long-term loans have decreased from $33 600 to $30 000, indicating the company has borrowed less than it has repaid on the loans.

HOW'S YOUR UNDERSTANDING?

1D Consider the following questions:

(i) If the balances of total assets and shareholders' equity are $100 000 and $40 000, respectively, what is the balance of total liabilities?

(ii) If the balances of total liabilities and shareholders' equity are $200 000 and $300 000, respectively, what is the balance of total assets?

(iii) Given the balances of assets $300 000, liabilities $200 000 and share capital $60 000, what is the balance of retained profits?

Income statement

In previous years, the income statement was called the profit and loss statement. Some companies may continue to use that terminology within their internal reports, so you should at least be aware of it.

The income statement provides information on an organisation's profitability for a period of time. It matches revenues during a period against expenses incurred in earning the revenues. The difference is the profit (revenue greater than expenses) or loss (expenses greater than revenue). Recall that under an accrual accounting system, the cash related to the revenue or expense does not have to be received or paid in order for the revenue or expense to be included in the income statement. Discussion of when revenue and expenses are recognised is included in Chapter 2.

Exhibit 1.2 provides an example of a simplified income statement. Sales is the only revenue item listed. The next item in the income statement is cost of goods sold (COGS). For a retailer, this would be the purchase price of the goods that are sold. For example, if a retailer sells 100 items at $20 each and the cost price of each of the items is $8, sales revenue would be $2000 ($20 × 100) and cost of goods sold would be $800 ($8 × 100). The difference between sales revenue and cost of goods sold is called gross profit (also gross margin).

The income statement also lists various operating expenses, as shown in Exhibit 1.2. These costs relate to the day-to-day running of the business.

EXHIBIT 1.2

XYZ LTD

INCOME STATEMENT FOR THE YEAR ENDED 30 JUNE 2019

	$000	$000
Sales revenue		21 000
Less Cost of goods sold		8 000
Gross profit		13 000
Less Operating expenses		
Salaries	2 500	
Depreciation	500	
Electricity	300	
Travel	300	
Other	400	4 000
Operating profit before tax		9 000
Less Income tax expense		3 000
Operating profit after tax		6 000

Many other operating expenses, such as advertising, staff training, maintenance, telephone and motor vehicle expenses, could also be included. Deducting these operating expenses from gross profit gives operating profit before tax. Tax is then deducted to give operating profit after tax.

The profit figure of $6 million can be paid out in dividends to shareholders or retained in the business. This is the connecting link between the balance sheet and the income statement. The opening balance of retained profits plus the profit for the year minus dividends equals the closing balance of retained profits as shown in the balance sheet.

Companies provide a separate statement or note to the accounts showing the change in retained profit for the year. For example, if XYZ's opening retained profits were $24 million, net profit for the year was $6 million and dividends of $3 million were declared and paid, we would see the following statement in the notes to the accounts for retained profits.

	$ million
Opening balance	24
+ Net profit	6
	30
− Dividends declared and paid	3
Closing balance	27

Statement of cash flows

Because revenues reported usually do not equal cash collected and expenses do not equal cash paid, net profit is different from the change in cash for the period. The statement of cash flows shows the changes during the period in one balance sheet account, namely cash. It shows the receipt of cash and the payment of cash. Accounting standards require companies to present this statement in their published financial statements. Individual transactions are normally split into the following three categories:

1. operating activities: related to the provision of goods and services
2. investing activities: related to the acquisition and disposal of certain noncurrent assets, including property, plant and equipment
3. financing activities: related to changing the size and composition of the financial structure of the entity, including equity and certain borrowings.

Exhibit 1.3 provides an example of a statement of cash flows. Under cash flows from operating activities, it shows that the company received $17 million from customers, and paid $7.7 million and $2.5 million to suppliers and employees respectively, as well as paying $4.3 million in other operating costs.

EXHIBIT 1.3

XYZ LTD

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 JUNE 2019

	$000
Cash flows from operating activities	
Receipts from customers	17 000
Payments to suppliers	(7 700)
Payments to employees	(2 500)
Cash operating costs	(4 300)
	2 500
Cash flows from investing activities	
Purchase of machinery	(2 300)
Cash flows from financing activities	
Issue of shares	4 000
Bank loan	(3 600)
	400
Total net cash flows	600
Cash: 1 July 2018 (opening balance)	1 400
Cash: 30 June 2019 (closing balance)	2 000

Note that these figures are not the same as those in the income statement. For example, the company could have made $21 million in credit sales, but only collected $17 million from customers by the end of the year. There was only one investing item, being the cash paid for a new machine. Cash flows from financing activities show that the company received $4 million from an issue of shares, but paid back a $3.6 million bank loan. The net effect on cash of all of the above transactions was an increase of $600 000. When added to the opening balance of $1.4 million, it shows a closing balance of $2 million, which is also the figure shown under cash in the balance sheet. Statements of cash flows will be discussed in detail in Chapter 14.

Relationships between the financial statements

Exhibit 1.4 shows the main relationships between the various financial statements. We have abbreviated the balance sheet, the income statement and the cash flow statement in Exhibits 1.1, 1.2 and 1.3 to make the relationship clearer. The cash flow statement explains the change in cash in the balance sheet from $1400 to $2000. This change will be from cash flows from operating, investing and financing activities, and a closer examination of Exhibit 1.3 will show which cash flows have the major impact. Net profit of $6000 for the year appears in the income statement, and this amount increases retained profits. How this works can be seen in the note on retained profits, which has increased from $24 000 to $27 000, due to the net profit for the year less the dividends declared and paid; that is, the amount of net profit not used for dividends increases the balance of retained profits.

EXHIBIT 1.4

XYZ LTD

RELATIONSHIPS BETWEEN THE STATEMENTS (BASED ON EXHIBITS 1.1 TO 1.3)

Balance sheet	**2018**	**2019**
Cash	1 400	2 000
Other assets	114 000	118 000
Total assets	115 400	120 000
Liabilities	51 400	53 000
Share capital	40 000	40 000
Retained profits	24 000	27 000
Total liabilities and shareholders' equity	115 400	120 000
Retained profits note		
2018 balance		24 000
+ Net profit		6 000
		30 000
− Dividends		3 000
2019 balance		27 000

Cash flow statement	
From operating activities	2 500
From investing activities	(2 300)
From financing activities	400
Total net cash flows	600
Opening balance	1 400
Closing balance	2 000

Income statement	
Revenues	21 000
Expenses*	15 000
Net profit	6 000

*From Exhibit 1.2, total expenses = COGS + Operating expenses + Income tax expense = 8000 + 2500 + 500 + 300 + 300 + 400 + 3000 = 15 000

HOW'S YOUR UNDERSTANDING?

1E If the opening balance in retained profits is $100 000, net profit after tax is $60 000 and dividends declared and paid is $40 000, what is the balance of retained profits at year-end?

1.7 Demands on the quality of financial accounting information

LO6 Let's think about what the users of financial information (such as the board of directors, the analyst, the banker and the supplier discussed in section 1.3) might reasonably expect of the financial statements. The important accounting concepts and principles involved are described in italics.

1. The financial statements need to contain information that is useful to those who are making the decisions. The information must have value in helping the financial analyst or the bank lending officer make their recommendation. In addition, the information to be provided needs to be supplied in a timely manner. For example, some of the decisions by the board of directors, the analyst, and the banker and the supplier noted earlier need to be made at a certain point in time. While the outcome of a particular contract may be relevant information, the decisions often cannot wait until that contract has been finalised.

   This is the concept of relevance. If information is to assist users in making decisions about the allocation of scarce resources, it should help them make, confirm or correct predictions about the outcomes of past, present or future events.

2 The financial statements should not be deliberately misleading. They should be free from bias. They should not be designed to lead users towards conclusions that are desired by the preparers. If accounting information is to tell people about the economic forces affecting the company, and the business arrangements the company has made to deal with those forces, it should connect to such important underlying phenomena. The bank loans officer would want to feel confident that the statements were not prepared in such a way as to make the company appear to be a better lending risk than it is. Similarly, the board of directors would want the statements to provide an objective portrayal of the CEO's performance in running the company.

This is the criterion of 'faithful representation', previously referred to as reliability. The financial statements should report the economic substance of events happening to the company, and the numbers should measure the events neutrally, neither overstating nor understating their impact. Information should, without bias or undue error, faithfully represent those transactions and events that have occurred. To have perfect faithful representation the financial information needs to be complete, neutral and free from error. While such perfection is seldom completely achievable, the board of directors' objective is to maximise these qualities.

3 Preparing financial statements, like any other activity, costs money and takes time. Most people would be satisfied if the statements were fair in relation to the important things and would not mind a few minor errors in them, especially if preventing small errors would cost the company money (reducing the company's profit and cash flow) or delay the release of the statements.

This is the criterion of 'materiality' (significance). The materiality concept is concerned with assessing whether omission, misstatement or non-disclosure of a piece of information would affect the decisions of users of the accounting reports. Just what is or is not material is a matter of judgement, and has been the subject of considerable research and study by accountants and auditors. Usually, people judge materiality by considering the size of a possible error compared to the net profit or the total assets. For example, an accountant or auditor might judge that an error over 5 per cent of net profit or 1 per cent of total assets is material and a smaller one is not. But, as you might expect, the materiality judgement depends on any particular uses of the information that are expected, and on whether the error moves the profit to a loss or violates some condition in a loan agreement.

4 There needs to be some standard against which an accounting method or number can be judged. The financial analyst would like to know that the company's financial statements were presented fairly, in all material respects, given accepted current methods. The company is actually a group of companies, so its financial statements are consolidated (combined), and it would be reasonable to expect that the company's method of calculating consolidated figures was proper.

This is where 'generally accepted accounting principles (GAAP)' come in. To assure the users that accepted methods have been followed, the auditor's report also says that the auditor's opinion is that the statements have been prepared in accordance with generally accepted accounting principles. This does not mean that one particular method has been followed: GAAP often include several acceptable methods, depending on the circumstances. Therefore, the auditor is saying that the company's accounting methods, and the resulting figures, are appropriate to its circumstances.

5 The previous criteria indicate that the financial statements necessarily reflect judgement on the part of the preparers. Also, the figures in the statements are summaries of many accounts; for example, 'accounts receivable' and 'long-term debt' may include dozens or thousands of different customers or debts. The bank loan officer may want to know what sort of long-term debts the company has, so that they may be evaluated against the bank borrowing by the company. The bank would not want other creditors to interfere with the company's ability to pay back the bank. The financial analyst may want to know if the company has made commitments to issue more shares (such as in a plan to motivate senior management by issuing shares to them cheaply if they perform well), because those might reduce the equity of anyone buying the shares now.

This raises the principle of disclosure. The financial statements include a large number of notes and account descriptions intended to make it clear to the reader which important accounting methods have been followed (especially if those methods are not what might be expected) and to provide supplementary information on debts, share capital, commitments, law suits and other things thought to be helpful, or necessary, in understanding the statements. Disclosure beyond the accounting figures is becoming increasingly extensive: many pages of notes often accompany the set of statements, and companies disclose additional information to taxation authorities, to securities regulators (such as the Australian Securities and Investments Commission and the US Securities and Exchange Commission) and to important other parties who have a reason to get the information (such as the bank loan officer and the financial analyst). More recently, there are increased disclosures related to environmental and human capital issues. These disclosures are important as stakeholders are interested in a company's performance in this area and because they can affect future financial performance.

6 The board, the banker, the analyst and the supplier would like information they can understand. Undoubtedly, their ability to understand will depend on their knowledge of accounting, as financial reports are prepared for users who have a reasonable knowledge of business including accounting. Hopefully, this will be you in a few years.

This principle is called understandability. Reports should be prepared having regard to the interests of users who are willing to exercise diligence in examining the reports, and who possess the skills and ability to comprehend contemporary accounting practices.

7 The banker and the financial analyst are also involved with other companies. They would like to be able to compare the company's financial statements with those of similar companies. It may be difficult to be sure that a company is performing well or badly in an absolute sense, but it can always be compared to others, as long as the financial statements have been prepared in a comparable way.

You will not be surprised that this principle is called comparability. It will be important when we review techniques for financial statement analysis in Chapter 15.

8 The banker, the analyst and the board of directors will also want to study the trend in financial performance and position over time. Is the net profit improving over time, or deteriorating? How about the ratio of debt-to-equity financing? It is important to know if significant events have happened to make comparisons over time difficult or even impossible. It is also important to know if the company has changed its accounting methods over time, because such changes may affect the comparability of the accounting figures from year to year.

Keeping the same accounting methods over time is called consistency. If the company is following GAAP, consistent methods will be used, or the reader of the statements will be told if a change has been made, and what the effects of changes in accounting methods are (if they are material). Note that consistency does not mean that a company has to use the same accounting method in all parts of the company. For example, different depreciation methods can be used for different assets.

We can formalise some of the above ideas by relating them to the conceptual framework put out by the Australian Accounting Standards Board (AASB) in its document *Framework for the Preparation and Presentation of Financial Statements* (hereafter called the Framework). The Framework, which was revised in December 2013, notes that these qualitative characteristics are the attributes that make the information in the financial reports useful to users. It lists two fundamental qualitative characteristics: relevance and faithful representation. In addition, it notes that comparability, verifiability, timelines and understandability are characteristics that enhance the two fundamental characteristics.

In summary, the qualitative characteristics set out in the Framework are:

1 Fundamental qualitative characteristics:
- relevance
- faithful representation.

2 Enhancing qualitative characteristics:
- comparability
- verifiability
- timeliness
- understandability.

The terms 'relevance' and 'faithful representation' were discussed earlier. If you are not sure of their meaning, you should go back and re-read those descriptions. Below we elaborate on the four enhancing qualitative characteristics (based on the Framework).

- *Comparability:* information about one organisation is more useful when it can be compared with similar information from another organisation and also is comparable over time within the same organisation. In terms of *comparability*, GAAP contains many detailed rules with several industry exceptions and alternative accounting policies for the same transactions. All these exceptions and alternative treatments certainly lead to some difficulties in making comparisons across companies. Analysts often come up with their own standard way of presenting accounting data by taking published financial data and converting it to their own requirements.
- *Verifiability:* the numbers in the financial statements can be verified directly by looking at documentation (e.g. the cost price of equipment) or through direct observation (e.g. counting cash or inventory). They can also be verified indirectly by checking inputs to a model formula and recalculating the outputs.
- *Timeliness:* refers to having information available when users need to make their decisions. However, having information earlier rather than later can mean that it is less complete. For example, certain estimates become more accurate over time (e.g. the estimate of uncollectable accounts receivable, discussed in Chapter 8, or the obsolescence of inventory, discussed in Chapter 9 or estimates of depreciation of assets, discussed in more detail in Chapter 10). Liabilities related to certain past acts may also become more accurately measured as time passes (e.g. after court deliberations). However, the characteristic of timeliness incorporates the idea that it is important to have the information when the decision is being made.
- *Understandability:* information is more useful if it is understandable to informed decision-makers. Understandability can be increased by presenting information in a clear and concise manner. The Framework states that users are expected to have a reasonable knowledge of business, economic activities and accounting, and a willingness to study the information with reasonable diligence. However, there is a caveat: information about complex matters, if relevant to users, should not be excluded on the grounds that it is too difficult for users to understand.

FOR YOUR INTEREST

The accounting profession has been criticised for the increased complexity of financial reports, where the notes to the accounts can exceed 50 pages. One reason is the increased complexity of transactions and the increased need for estimates. For example, when senior executives are only paid a salary, reporting of executive remuneration is much easier than when they get additional share options and various incentives based on accounting numbers. Also, given the legal consequences and penalties for omission of required data, it is likely for management to over-report rather than under-report when there is uncertainty. There are taskforces and committees considering these issues at present.

What does all this mean for you as an introductory accounting student? These accounting standards are continually being considered around the world. Some important changes in accounting have already occurred and others are still emerging. Accounting is not static; the better you understand the basic fundamentals of accounting, the better you will be able to cope with these changes.

Trade-offs among accounting principles

If you think about the criteria and principles mentioned above (i.e. relevance, faithful representation, materiality, conformance with GAAP, disclosure, understandability, comparability and consistency), you may see that they do not always fit together well. For example, it would seem sensible to propose that the more faithfully representative the accounting information is, the better. You can achieve this by being very careful about how you prepare it, checking it carefully and having the auditors come in and verify it, and maybe even waiting until some major uncertainties are resolved, so you do not have to estimate them. It also seems sensible that decision-makers need information that is relevant to their decisions when they are making them. This means that information should be timely: people should not have to wait for the information they need.

In this light, let's consider a company trying to report on its liability to employees for long service leave. It has thousands of employees who will take this time off over the next 40 years, if they do not leave the employer earlier. The dollar amount of long service leave paid will depend on how much the employees earn when they take the leave, and that is not yet known for most of them. The amount of leave depends on how long the employees have been with the firm. Under most employment awards, it starts to accumulate after 10 or 15 years of service. For each extra year of service it increases at different rates. If the employee leaves before 10 years of service, no amount normally needs to be paid unless the employee's leaving was involuntary.

How is that for a mass of uncertainty? Any number you come up with for the long service leave liability will be based on all sorts of estimates of unknown future events. Therefore, to get a liability figure that faithfully represents the liability, you really have to wait 20 or 30 years until most of the employees have retired or taken their leave. You can always expect to get more reliable data by just waiting a while, even years, to see how things turn out. But waiting 20 or 30 years will hardly provide timely information that is relevant to decisions such as those being made by the board of directors, the investment analyst, the banker and the supplier mentioned above. Such decisions require the best information we can come up with now, even if it is necessarily based on estimates and assumptions. As time passes, faithful representation rises and relevance falls, so we have to try to find some midpoint where there is enough of both, even though we may prefer even more of one or both of these attributes.

1.8 Financial statement assumptions

LO6 Now that you have seen the financial statements and the basic principles upon which accounting relies, it is important to understand some basic assumptions underlying current accounting practice and the preparation of financial statements. The following concepts (or assumptions) are discussed below: accrual basis, going concern, accounting entity, accounting period, monetary and historical cost.

- *Accrual basis:* financial reports are prepared on the accrual basis of accounting; that is, the effects of transactions and other events are recognised as they occur, regardless of whether cash is received or paid at that time. The use of accrual accounting provides a better basis for assessing an entity's past and future performance than information only related to cash receipts and cash payments during a period.
- *Going concern:* financial statements are prepared on the premise that the organisation will continue operations as a going concern in the foreseeable future. If this is not the case, it is necessary to report the liquidation values of an organisation's assets, i.e. what the assets could be sold for. Consider the following example. Assume last year your university completely remodelled your classrooms with new carpet, tiered seating and new inbuilt projection equipment. Under historical cost, the cost of all those renovations would be recorded as an asset and then depreciated over the life of the asset. If the costs were $10 million and depreciation in year 1 was $1 million, the book value (cost – accumulated depreciation) would be $9 million. This is the amount that would appear on the balance sheet. However, if the government closed your university – that is, it is no longer a going concern – the assets would need to be recorded at liquidation value. Basically, they would be recorded at what they could be sold for. Note that there is not much of a second-hand market for tiered seating to fit a certain size of room,

or carpet that has been cut to fit that room. Liquidation value in this case would likely be a lot less than historical book value.

- *Accounting entity:* under this concept, the accounting entity is separate and distinguishable from its owners. For example, the accounting entity of a sole trader is differentiated from the financial affairs of the owner. Similarly, a company is a separate entity from its shareholders. If either the sole trader or a shareholder of a company goes out and buys a new set of golf clubs, it may affect his or her personal finances but does not affect the accounting entity. Accounting entities do not necessarily correspond to legal entities. For example, as noted above, the personal financial affairs of the sole trader can be separated from the finances of the business, although there is no legal distinction. This concept puts a boundary on the transactions that are to be recorded for any particular accounting entity. It also allows the owner to evaluate the performance of the business.
- *Accounting period:* the life of a business needs to be divided into discrete periods to evaluate performance for that period. Dividing the life of an organisation into equal periods to determine profit or loss for that period is known as the accounting period concept. The time periods are arbitrary, but most organisations report at least annually, with large companies preparing half-yearly and quarterly financial statements for outside purposes (in some countries) and at least monthly (sometimes more frequently) financial statements for management purposes.
- *Monetary:* accounting transactions need to be measured in a common denominator, which in Australia is, not surprisingly, the Australian dollar. This allows comparisons across periods and across different companies. Transactions that cannot be reasonably assigned a dollar value are not included in the accounts. This concept also assumes that the value of the monetary unit is constant over time, which ignores inflation.
- *Historical cost:* under the historical cost concept, assets are initially recorded at cost. As you will see in later chapters, many assets, such as inventory, will still be recorded at cost in the balance sheet in subsequent periods although their value has increased. Some other assets – such as property, plant and equipment – can be revalued periodically. Thus, in reading a balance sheet it is important to note at what valuation the assets are being recorded.

Some of these basic concepts have already been briefly mentioned earlier in this chapter, and all will be referred to again throughout the book. We note that the Framework only lists accrual accounting and going concern as the basic assumptions of financial reporting, but many authors, including us, would also include the accounting entity, accounting period, monetary assumptions and historical costs.

1.9 Is accounting really important?

In case you are not convinced that accounting numbers (profit and balance sheet figures) are important, we hope the following examples may convince you. Concrete examples of our suggestions appear in the financial section of most newspapers every day. Our examples below show that a lot of emphasis is placed on accounting figures (especially profits) in decision-making by management and by users such as shareholders and creditors, corporate boards and consumer groups, as well as their impact on a range of other community groups. LO7

a *Used by management in making business decisions.* Accounting numbers have an important impact on management decisions to contract and expand the business, which in turn affect employees, suppliers, contractors and the economy. For example, the availability of large sums of cash, undrawn debt facilities, and growing cash flows enable companies to take advantage of opportunities to expand by acquiring other businesses. On the other hand, businesses are often put up for sale when they cannot provide the financial performance (as measured by accounting numbers) to give investors the return they want, or they take actions including cutting staff numbers and/or selling off some other parts of the business.

b *Used by shareholders for decision-making purposes (and impact on shareholders).* Both good and bad accounting news often has a big impact on the share market (see Chapter 6 for a more sophisticated discussion). In particular, when companies announce bad news their share prices are usually adversely affected and sometimes the drops can result in a $100 million plus decrease in the value of the company.

c *Used by bankers and other creditor groups.* Bankers use accounting numbers to decide whether to lend, to determine the level of risk and often the interest rate to charge. Rating agencies such as Standard & Poor's and Moody's use accounting numbers to give their credit ratings, which have an impact on the interest rates companies have to pay. Weaker accounting numbers can result in the loss of the much desired AAA credit rating. This applies not only to companies but State governments which have received warnings about ongoing deficits, growing risk and the decline in debt ratios.

d *Used by corporate boards in rewarding and removing executives.* Most executive compensation schemes include performance bonuses, and accounting numbers are key components of these performance hurdles. You will find many reports of pay changes of many millions of dollars for CEOs of the largest companies due to meeting or not meeting profitability targets.

e *Used by unions and management in negotiating wage agreements.* In pay disputes, both managers and unions often use accounting numbers to support their case. For example, the higher the profits, the more likely the pay increases. Unions often refer to the company's high profit levels when arguing for higher wages.

f *Impact on the community and consumers.* Dwindling profits have resulted in movement of sporting events (e.g. moving the Australian Grand Prix), changing budget allocation to TV stations which affect the programs they offer, music festivals cancelled in future years, etc.

g *Impact on employees and jobs.* Accounting numbers can lead to corporate failure, with resulting consequences for workers. In Australia, there have been major losses of jobs in the car manufacturing industry which has been closed down due to falling profits. For example, cessation of manufacturing of Holden resulted in the loss of approximately 3000 jobs at Holden, but many other job losses in companies that were suppliers of tyres, steering wheels, etc.

PRACTICE PROBLEMS

Solutions to practice problems can be found at the end of the chapter. These problems are intended to facilitate self-study and additional practice: *don't look at the solution for any of these without giving the problem a serious try first*, because once you have seen the solution it always looks easier than it is.

PRACTICE PROBLEM A

Classification of items

Listed below are balances at 30 June 2019.

	$
Cash at bank	210 000
Inventory	60 000
Sales	210 000
Wages	40 000
Cost of goods sold	70 000
Share capital	140 000
Accounts payable	30 000

1 Classify each account as an asset, liability, revenue, expense or equity.
2 Prepare an income statement for the period ending 30 June 2019.
3 Prepare a balance sheet at 30 June 2019.

PRACTICE PROBLEM B

Accrual profit

1 During the accounting period, Green Limited received $750 000 from sales and paid out $580 000 in wages and other expenses. However, an extra $260 000 worth of sales were made during the year but the cash has not been collected yet. The company also owes $240 000 for various expenses. What is the accrual profit?
2 Green Limited purchased 3000 items for $5 each on credit and sells 2000 of these items on credit for $8. What is the sales revenue and cost of goods sold for the period?

PRACTICE PROBLEM C

Calculate shareholders' equity

Given the following information relating to Penguin Ltd, what is the balance of shareholders' equity? (Remember A = L + SE)

	$
Property, plant and equipment	1 500 000
Accounts receivable	400 000
Cash	100 000
Inventory	500 000
Bank loan	250 000
Wages payable	90 000

HOMEWORK AND DISCUSSION TO DEVELOP UNDERSTANDING

This section starts with simpler discussion questions that revise some of the basic concepts, which are then followed by a set of problems.

DISCUSSION QUESTIONS

1 What is the basic purpose of financial accounting?
2 Distinguish between financial performance and financial position.
3 What is the difference between financial and management accounting?
4 Who are the main parties that comprise the social setting of accounting?
5 What is meant by credible periodic reporting? What prevents organisations from making financial statements increasingly credible? (Consider cost–benefit implications.)
6 List four important users of financial accounting and describe the use that each user would make of the information.
7 Do all users of financial accounting have the same information needs? Why or why not?
8 List some similarities and differences between the need for financial information for shareholders and bankers.
9 List five situations in which judgement is required by the preparers of financial information.
10 What does an audit achieve?
11 Describe what is meant by accrual accounting. How does it differ from cash accounting?
12 Who uses accrual accounting?
13 Consider the following accounts: accounts payable, accounts receivable, cash and inventory. Which of these terms would you see in financial statements prepared under (a) accrual accounting and (b) cash accounting?
14 What are the three key financial statements, and what relevant information do they provide to users of accounting reports?
15 Explain, in simple terms, each of the following financial accounting terms:
   a accounting entity
   b accounting period
   c monetary
   d historical cost
   e going concern
   f materiality.
16 What are the fundamental qualitative characteristics of useful financial information and what are the enhancing characteristics?
17 Provide an example of trade-offs among accounting principles.
18 The Framework states that understandability is an enhancing qualitative characteristic. Is this consistent with the huge complexity in financial statements?

PROBLEMS

PROBLEM 1.1

What are various people's interests in financial accounting?

Briefly describe what each of the following people would likely want to learn from the financial statements of BrandX Ltd, and how each might be affected if the statements showed good or bad financial performance or financial position.

1 The chief executive officer (CEO) of the company
2 The company's chief financial officer (CFO)

3 The chairperson of the company's board of directors (the board evaluates the CEO's performance on behalf of the shareholders)
4 The partner of auditing firm Dimbleby & Co., for whom BrandX is a client
5 The local manager of tax collections for the Australian Taxation Office
6 John Flatstone, who owns 100 shares of BrandX
7 Mildred Evans, who is thinking of buying some shares of the company
8 The local manager of Big Bank, which has made a large loan to BrandX

PROBLEM 1.2

What are various people's interests in financial accounting?

Briefly describe what each of the following groups would like to know from the financial statements of the Swans Football Club.

1 The CEO
2 The players
3 The supporters
4 The suppliers of gourmet pies and beer for home games

PROBLEM 1.3

Users and their needs

Accounting information is demanded by a wide range of external users, including shareholders, bankers, suppliers, trade unions, the Australian Securities and Investments Commission (ASIC) and the Australian Taxation Office (ATO). Which user is likely to seek each of the following types of information?

1 The profitability of each division in the company
2 The likelihood of the company meeting its interest payments on time
3 The prospects for future dividend payments
4 The probability that the company will be able to pay for its purchases on time
5 The profitability of the company based on the tax law
6 The change in profitability of the company since the last contract with employees was signed
7 The disclosures on the financial position and performance of a company issuing shares to the public for the first time.

PROBLEM 1.4

Calculate accrual accounting profit

Paul Jones set up his own catering business on 1 July 2018. During the 12 months up to 30 June 2019 the following transactions occurred:

1 Paul put $30 000 of his own money into the business.
2 He borrowed $40 000 from the bank for one year at 5 per cent per annum, with interest to be paid at the end of the loan.
3 He paid $12 000 in wages and owed $2400 in wages for work done.
4 He bought catering equipment for $8000, which has an expected useful life of four years.
5 He paid other expenses of $10 000.
6 Paul sent bills for $60 000 to customers for work performed between 1 July 2018 and 30 June 2019. By 30 June he had received $55 000 and expected the other $5000 by August.

Using the concepts of accrual accounting, calculate Paul's profit for the year ended 30 June 2019.

PROBLEM 1.5

Accrual profit

Lock Limited made cash sales of $650 000 and credit sales of $270 000 ($150 000 of which had been collected by year-end). It paid $400 000 in expenses and owed $220 000 at year-end. What was the accrual profit?

PROBLEM 1.6

Calculate accrual accounting profit

James Smith started a consulting business on 1 January 2019. During the period up to 30 June 2019, the following transactions occurred:

1 James put $40 000 of his own money into the business.
2 He borrowed $40 000 from the bank at 10 per cent per annum for one year with interest to be repaid at the end of the loan.
3 He sent bills for $37 000 to customers for work performed. By 30 June he had received $30 000 and expected the other $7000 in July.
4 He bought equipment for $8000 that has an expected useful life of four years.
5 He paid $14 000 in wages.
6 He paid other expenses of $15 000.
7 He received a $3000 bill for advertising (appeared in newspapers in May; will be paid in July).

Using the concepts of accrual accounting, calculate James' profit for the four months ending 30 June 2019.

PROBLEM 1.7

Accrual profit

1 During the year ended 30 June 2019, French Horn Ltd made cash sales of $100 000, credit sales of $200 000 ($50 000 of which were still to be collected at year-end), and received $25 000 owing from credit sales, which occurred in May 2018. What is French Horn's sales revenue for the year ended 30 June 2019?
2 Also during the year ended 30 June 2019, French Horn paid $60 000 and owed $10 000 in employee wages. Of the $60 000 paid, $5000 related to wages payable as at 30 June 2018. What is the total of French Horn's accrual accounting expenses?
3 What is French Horn's accrual accounting profit for the year ended 30 June 2019?

PROBLEM 1.8

Prepare a balance sheet and calculate profit

1 Given the following balances, prepare a balance sheet as at 30 June 2019 for Willow Tree Limited.

	$
Share capital	260 000
Bank loan	40 000
Accounts payable	80 000
Wages payable	60 000
Inventory	170 000
Cash at bank	70 000
Buildings	200 000
Retained profits	90 000
Accounts receivable	90 000

2 The company did not declare any dividends during the year. Its balance in retained profits at the start of the year was $70 000. What is the profit for the year?

PROBLEM 1.9

Contents of financial statements

Match each item with the financial statement it would appear in by ticking the appropriate column.

Item	Balance sheet	Income statement	Statement of cash flows
Wages expense			
Cash paid for equipment			
Cash at bank			
Equipment			
Cash flow from customers			
Accounts payable			
Cash paid to employees			
Sales revenue			

PROBLEM 1.10

Comparing net profits and cash flow

Kingsford Customs was founded on 1 July 2019. At the end of the first year's operations, the following summary of its activities has been prepared by the owner.

1 Borrowed cash of $60 000 from CAA Bank.
2 Employees earned $96 800 of wages, of which $40 000 is to be paid in the next accounting period.
3 Performed customised services that generated sales revenue of $243 300, of which $100 000 remained uncollected at the end of the year.
4 Other operating expenses, including phone bills and electricity amounting to $26 800, were incurred during the year. Of this amount, $10 000 remained unpaid at the end of the year.

Show the effect on net profit and cash of each of the above transactions for this accounting period.

PROBLEM 1.11

Contents of financial statements

Match each item with the financial statement that it would appear in by ticking the appropriate column.

Item	Asset	Liability	Shareholders' equity	Revenue	Expense
Inventory					
Cleaning expenses					
Cash at bank					
Marketing expenses					
Buildings					
Income taxes payable					
Loans from banks					
Accounts payable					
Retained profits					
Accounts receivable					
Income tax expense					
Cost of goods sold					
Sales revenue					

PROBLEM 1.12

Classification of items

Listed below are balances for 2019.

	$
Accounts receivable	100 000
Sales	250 000
Electricity	30 000
Retained profits	70 000
Loan	200 000
Transportation costs	10 000

1 Classify each account as an asset, liability, revenue, expense or equity.
2 Prepare an income statement for the period ending 31 December 2019.

PROBLEM 1.13

The accounting equation

Cardigan Ltd has total assets of $150 000 and liabilities that add up to $70 000 as at 30 June 2018.

1 What is Cardigan's shareholders' equity as at 30 June 2018?
2 During the year to 30 June 2019, Cardigan's total assets increase by $63 000 while total liabilities increase by $25 000. What is the amount of Cardigan's shareholders' equity on 30 June 2019?
3 Now assume that in the year to 30 June 2019, Cardigan's total liabilities increase by $20 000 and its shareholders' equity decreases by $12 000. On 30 June 2019, what is the level of Cardigan's total assets?
4 Assume that in the year to 30 June 2019, Cardigan's total assets double while its shareholders' equity remains unchanged. What are its total liabilities as at 30 June 2019?

PROBLEM 1.14

The accounting equation

Use the accounting equation to answer the following questions.

1 Pillow Ltd halved its liabilities during the year. At the beginning of the year, the amount of total assets was $80 000 and owners' equity was $50 000. What is the amount of Pillow's total liabilities at the end of the year?
2 Buffalo Ltd began the year with assets of $60 000 and liabilities of $25 000. Net profit for the year was $43 000. What is the amount of owners' equity at the end of the year?
3 During the last financial year, Sparkle Industries tripled the amount of its assets. At the end of the year, total liabilities amounted to $57 000 while owners' equity was $15 000. What was the amount of total assets at the beginning of the year?

PROBLEM 1.15

Matching financial statement items to statement categories

Raindrop Holdings Ltd is a public company. Below are items taken from its recent consolidated balance sheet and consolidated income statement. Note that different companies use slightly different titles for the same item. Mark each item in the following list as an asset (A), liability (L) or shareholders' equity (SE) that would appear on the balance sheet, or revenue (R) or expense (E) that would appear on the income statement.

1 Property, plant and equipment
2 Sales revenue
3 Trade and other payables
4 Advertising costs
5 Provisions

6 Inventories
7 Prepayments
8 Revenue received in advance
9 Reserves
10 Cash and cash equivalents
11 Depreciation
12 Cost of sales

PROBLEM 1.16

Income statement

Given the following information, prepare an income statement for PK Ltd for the year ended 30 June 2019.

	$
Sales	350 000
Cost of goods sold	200 000
Rent expense	30 000
Wages	75 000
Advertising	25 000
Training expense	9 000

PROBLEM 1.17

Income statement

Given the following balances, prepare an income statement for the year ended 30 June 2019 for Bush Traders.

	$
Sales	480 000
Cost of goods sold	210 000
Wages	80 000
Electricity	40 000
Travel	20 000
Advertising	10 000

PROBLEM 1.18

Analysing revenues and expenses and preparing an income statement

Assume you are the owner of Double Café, a coffee shop in Sydney's CBD. At the end of June 2019, you find (for June only) this information:

1 Sales, as per cash register records, of $47 000, plus sales on credit (two birthday parties) of $750.
2 The cost of goods sold during June had cost $16 000 consisting of coffee, cups and cakes.
3 During the month, according to the cheque book, you paid $14 000 for salaries, rent, advertising and other expenses; however, you have not yet paid the $680 monthly bill for electricity for June.

On the basis of the data given (disregard income taxes), what was the amount of net profit for June? Show computations.

PROBLEM 1.19

Calculate shareholders' equity

GT Limited has the following assets and liabilities.

	$
Cash	100 000
Loan	150 000
Accounts payable	110 000
Accounts receivable	170 000
Equipment	200 000

1 Classify each balance as an asset or a liability.
2 Calculate shareholders' equity.

PROBLEM 1.20

Calculate shareholders' equity

Given the following information relating to Stripes Ltd, what is the balance of shareholders' equity?

	$
Land and buildings	2 800 000
Accounts payable	250 000
Cash and cash equivalents	340 000
Inventory	410 000
Bank loan	600 000
Taxes payable	104 000

PROBLEM 1.21

Matching cash flow statement items to categories

The following items were taken from a recent cash flow statement. Note that different companies use slightly different titles for the same item. Mark each item in the list as a cash flow from operating activities (O), investing activities (I) or financing activities (F).

1 Cash paid to employees
2 Cash borrowed from the bank
3 Cash proceeds received from sale of investment in another company
4 Income taxes paid
5 Repayment of loan principal
6 Cash received in return for issue of share capital
7 Cash received from customers
8 Purchases of property, plant and equipment
9 Cash paid to suppliers
10 Cash paid for dividends to shareholders
11 Repayment of loan interest

PROBLEM 1.22

Identify some accounting concepts and principles

Identify the accounting concepts or principles that relate to each of the following sentences and explain what effect the concepts or principles have on financial statements:

1 Users of financial statements should be able to believe that the numbers represent real events.

2 It is hard to say absolutely if a company is performing well or badly, but you can evaluate its relative performance.
3 Financial accounting should be helpful both in understanding the past and looking ahead to the future.

PROBLEM 1.23

Accounting assumptions

Consider the following statements relating to how we might account for certain transactions or events. What accounting assumption or principle underlies each?

1 'Accounting financial statements are primarily based on historical costs.'
2 'At the end of each period, a company has to calculate any salaries that have accrued, and recognise an expense and a liability for that amount.'
3 'If a company changes its depreciation policy, it needs to disclose (in the notes to the financial statements) the nature of the change, and its financial effects.'
4 'If a company issues new shares this is recorded in the company's books. However, a sale of the company's shares from one shareholder to another is not.'

PROBLEM 1.24

Qualitative characteristics

The *Framework for the Preparation and Presentation of Financial Statements* examines the characteristics of accounting information that make this information useful for decision-making. It also points out that various limitations, which are inherent in the measurement and reporting process, may necessitate trade-offs between these limitations and the positive characteristics of useful information.

1 Briefly describe the following characteristics of useful accounting information:
   a relevance
   b faithful representation
   c understandability
   d comparability
   e timeliness
   f verification.
2 For each of the following pairs of information characteristics, give an example of a situation in which one of the characteristics may be sacrificed in return for a gain in the other:
   a relevance and verification
   b faithful representation and timeliness
   c comparability and relevance
   d relevance and understandability.

PROBLEM 1.25

Identify some accounting concepts and principles

Identify the accounting concepts or principles that relate to each of the following sentences, and explain what effect the concepts or principles have on financial statements:

1 Users of financial statements should be able to believe that the numbers represent real events.
2 Financial statements should avoid undue optimism about the future.
3 It is hard to say absolutely if a company is performing well or badly, but you can evaluate its relative performance.
4 Financial accounting should be helpful both in understanding the past and looking ahead to the future.

CASES

CASE 1A Woolworths Limited

Refer to the extracts of the 2017 annual report of Woolworths Limited in the book's appendix. All questions relate to the consolidated accounts.

1 On what date does Woolworths' most recent reporting year end?
2 For how many years does it present complete:
   a balance sheets?
   b income statements?
   c cash flow statements?
3 Provide indicators that Woolworths uses accrual accounting.
4 What were total assets at 25 June 2017?
5 What were total liabilities at 25 June 2017?
6 What was shareholders' equity at 25 June 2017?
7 State the accounting equation in dollar figures at 25 June 2017.
8 What was the net profit before tax for 2017?
9 What was the net profit after tax for 2017?
10 What were the largest cash inflow and outflow relating to operating activities?
11 Give two reasons why the cash flow from operations is a different figure from operating profit after tax.
12 Did its total assets increase or decrease over the last year?
13 How much inventory (in dollars) did Woolworths have as at 25 June 2017?
14 Are its financial statements audited by an independent firm? Who is the auditor for the company?
15 What information would Woolworths' investors and lenders be most interested in?
16 Provide examples of the accounting principles of materiality and comparability from note 1 of the accounts.

CASE 1B Accrual and cash profit in measuring performance

Wings Ltd is an airline services company with a plant near Sydney Airport and service centres in several states. It provides meals, serviettes and other food-related items, cleaning, interior maintenance and several other services to various airlines. The company has been fairly successful, though recessions and the deregulation of air services have put significant pressure on its operations. When the company began in the late 1990s, it had a relatively weak financial position (mainly because of borrowing to get set up) and its financial performance, while satisfactory, has not enabled it to reduce its debt load very much. It seems that every time the company gets a little ahead, new equipment must be purchased or new product lines developed, and the company finds itself borrowing again.

A recent year provides a good example. The company's accrual profit was $188 000 and its cash profit was $241 000. (The difference resulted because of a depreciation expense of $96 000 and uncollected revenue being $43 000 higher at the end of the year than at the beginning. In the company's financial statements, the phrase 'net profit for the year' was used to describe the accrual profit and 'cash generated by operations' described the cash profit.) The CEO had looked forward to using some of the cash to pay debts, but late in the year the company had to buy new food-handling and wrapping equipment for $206 000 to meet revised standards announced by its airline customers. Therefore, the company ended up only a few thousand dollars ahead in cash, not enough to make much of a dent in its debts.

The CEO has a regular half-yearly meeting with the company's external auditor to discuss accounting and auditing issues. After the above results were known, the CEO phoned the auditor and made the following comments: 'I thought I'd ask you to think about a few things before our meeting next week. When it comes to our accounting, I think the company has too many masters and too many measures. What I mean is first that too many people are concerned with what our financial statements say. Why can't we just prepare financial statements that meet my needs as CEO? Why do we have to worry about all the other people outside the company? Sometimes I'm not even sure who all those other people are, since you accountants and auditors often just talk about "users" without being too clear what you mean. Also, I'm confused by the existence of both a "net profit" figure and a "cash generated by operations" figure in our financial statements. Why can't we just have one or the other to measure our performance?'

The CEO raised issues that will be addressed frequently as this book develops your understanding. But for now, what would you say to the CEO?

CASE 1C Audit and ethics issues

Assume you were reading an article on the auditing profession in a professional accounting magazine that included terms such as independence and auditors' responsibilities. It also noted that there was a large standards expectation gap between auditors and users of financial statements.

1 What is meant by independent assurance?
2 Give some examples of lack of independence.
3 What does the 'Expectation Gap' refer to?
4 How do management's and auditors' responsibilities differ?
5 Why is the integrity of management important to the financial reporting process?

HOW'S YOUR UNDERSTANDING SOLUTIONS

1A Financial performance and financial position.

1B (i) Cash profit: \$100 000 – \$60 000 = \$40 000
(ii) Accrual profit: \$100 000 + \$200 000 – \$60 000 – \$10 000 = \$230 000

1C (i) A
(ii) L
(iii) Not listed in the balance sheet
(iv) SE
(v) A
(vi) L

1D (i) \$60 000; \$100 000 – L = \$40 000
(ii) \$500 000; A = \$200 000 + \$300 000
(iii) \$40 000; \$300 000 = \$200 000 + \$600 000 + RE

1E \$100 000 + \$60 000 – \$40 000 = \$120 000

PRACTICE PROBLEM SOLUTIONS

PRACTICE PROBLEM A

1

Account	Classification
Cash at bank	Asset
Inventory	Asset
Sales	Revenue
Wages	Expense
Cost of goods sold	Expense
Share capital	Equity
Accounts payable	Liability

2

Income statement For the year ending 30 June 2019	$
Sales	210 000
Cost of goods sold	(70 000)
Gross profit	140 000
Wages	(40 000)
Net profit	100 000

3

Balance sheet As at 30 June 2019	$		$
Assets		**Liabilities and shareholders' equity**	
Cash at bank	210 000	Accounts payable	30 000
Inventory	60 000	Share capital	140 000
		Retained profits	100 000*
	270 000		270 000

*Opening retained profit + profit-dividend = closing balance retained profit (0 + 100 000 – 0 = 100 000)

PRACTICE PROBLEM B

1 Accrual profit = total sales – total expenses
= $750 000 + 260 000 – 580 000 – 240 000
= $190 000

2 Sales revenue = 2000 × $8
= $16 000

Cost of goods sold = 2000 × $5
= $10 000

PRACTICE PROBLEM C

Shareholders' equity = Assets – Liabilities
= (Property, plant and equipment $1 500 000 + Accounts receivable $400 000 + Cash $100 000 + Inventory $500 000) – (Bank loan $250 000 + Wages payable $90 000)
= $2 500 000 – 340 000
= $2 160 000

COURSEMATE EXPRESS

WEBSITE RESOURCES

CourseMateExpress

Go to **http://login.cengagebrain.com** and use the access code that comes with this book for 12 months access to the resources and study tools for this chapter.

The CourseMate Express website contains:

- student revision quizzes
- glossary of key terms and flashcards
- and more!

Measuring and evaluating financial position and financial performance

2

ON COMPLETION OF THIS CHAPTER, YOU SHOULD BE ABLE TO:

LO1	describe the contents of a balance sheet (2.1, 2.2)
LO2	determine what business activities result in changes in a balance sheet (2.2)
LO3	carry out preliminary analysis based on a balance sheet (2.3)
LO4	show how specific activities affect each item in the balance sheet (2.5)
LO5	prepare a balance sheet (2.5)
LO6	determine the effect of transactions on revenue and expenses (2.7)
LO7	prepare an income statement (2.7)
LO8	explain the nature of each of the items in the balance sheet and income statement for a public company (2.4 and 2.9)
LO9	describe the contents of the note reconciling opening and closing retained profits (2.8)
LO10	explain the importance of income statements and balance sheets to managers (2.6 and 2.10).

CHAPTER OVERVIEW

Chapter 1 introduced accrual accounting, the key financial statements and the users and preparers of these statements. Now we turn to three chapters that set out financial accounting's results and outline the record-keeping system that leads to those results. This chapter focuses on the content and use of the statements measuring financial position at a particular date (a balance sheet) and measuring financial performance (an income statement) over a period. Chapters 3 and 4 consider how the double-entry system produces accounts and how these accounts are assembled together to form financial statements.

The balance sheet is financial accounting's oldest and most basic report. It measures the organisation's financial position at a particular date and is the basis for much financial analysis. In fact, many companies use the term 'Statement of Financial Position' instead of 'Balance Sheet'. Figure 2.1 outlines what you will learn in the next three chapters:

- *procedures and techniques:* how the double-entry accounting system produces accounts, and how to assemble a balance sheet and an income statement from those accounts
- *concepts and principles:* why the balance sheet and income statement are important and why they are arranged as they are

- *analysis and decisions:* using the financial statements to understand how an organisation is put together financially and how it does its business, and using it to do some analysis of the organisation's financial health and performance.

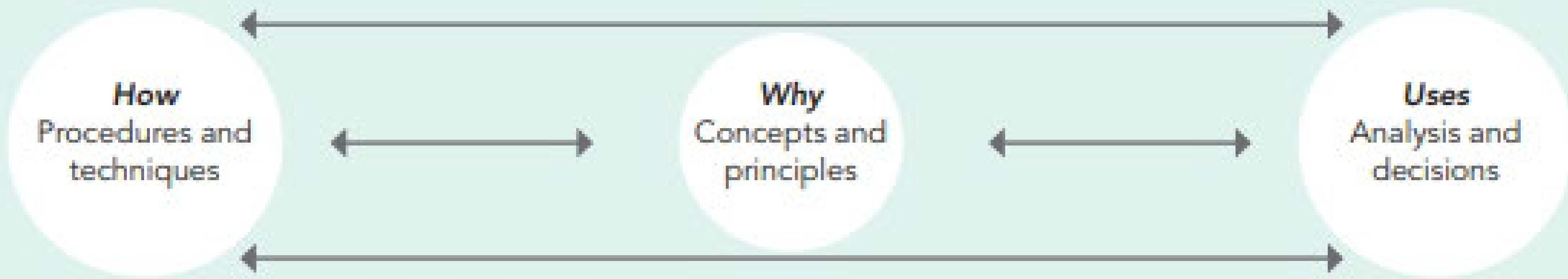


FIGURE 2.1 The how, why and uses of accounting

The balance sheet summarises, at a particular date, the organisation's financial position as accounting measures it, in three categories of lists:

- *resources* (such as cash, inventory, land and buildings), called assets
- *obligations* (such as loans owing and debts to suppliers), called liabilities
- *owners' interests* (what's left after subtracting the obligations from the resources), called equity.

The individual items in each of these lists are called accounts, so over the centuries the task of preparing them has been named accounting, and the people who do it are accountants. All these words are derived from 'count', which is where accounting began: just counting things and listing them. Recall from Chapter 1 that:

Assets = Liabilities + Shareholders' equity

The balance sheet portrays the organisation by arranging its lists of accounts so that the assets sum to the same total as the other two lists, and setting them beside (or below) each other, something like this:

Assets		Liabilities and equity	
Item a	$$	Item x	$$
Item b	$$	Item y	$$
Etc.	$$	Etc.	$$
Total	T$$	Total	T$$

Because the left total equals the right total, accountants say that they balance – hence the name balance sheet. The underlying accounting system maintains this balance by making sure that any changes in one side of the balance sheet are matched by changes in the other side (e.g. assets increase and liabilities increase from buying an asset and owing the supplier) or by opposite changes on the same side of the equation (e.g. buy inventory for cash where an asset 'inventory' increases and another asset 'cash' decreases). This requires that each change be recorded twice, so the accounting system is called double-entry. The balance sheet turns out to be the accumulation of everything financial accounting has recorded about the organisation since the day the organisation began, so it is the fundamental cumulative accounting record.

The balance sheet provides important information about the organisation's financial structure and strength, but its description of the organisation's financial position is not the only story to be told. Its picture is static: it tells us what the position is at a point in time. Most managers, owners and creditors also want to know how well the organisation is performing and how it got to where it is. To provide that explanation, we need to measure financial performance. This is provided by an income statement (often called a profit and loss statement internally within organisations).

Corporations – which are legally incorporated companies such as Qantas, Commonwealth Bank, Telstra, BHP Billiton, Woolworths and thousands of local, national and international businesses – produce financial statements at least annually. So do many other kinds of organisations, such as the City of Brisbane, the Salvation Army, the Government of Australia and your university's student union. We mainly focus on businesses, especially corporations, but other kinds of organisations are considered where appropriate.

For large corporations, especially public companies whose shares are traded on stock markets, the financial statements are included in a larger document called an annual report. An annual report typically begins with narrative material on the corporation's performance and prospects, moves on to an extensive discussion and analysis by management, then turns to the financial statements: the balance sheet, the income statement and the statement of cash flows. The first two are discussed in this chapter, and the statement of cash flows is discussed in Chapter 14.

2.1 Introduction to the balance sheet

LO1 The balance sheet is only one of the set of financial statements, each of which is important for particular uses. However, as the summary of the double-entry system, the balance sheet is a critical part of financial accounting. It balances, containing two lists that have the same dollar total and together describe the organisation's financial position at a particular date.

The first list is the organisation's financial resources at that date, as measured by the financial accounting methods you will learn. These resources, called assets, include the organisation's cash, accounts receivable (money customers have promised to pay), inventory (goods for sale), land, buildings, equipment and many other resources that the organisation has accumulated and can use in the future.

The second list is the sources, or financing, of those resources at that date.

- These financing sources include existing obligations that will have to be paid in the future, such as loans from the bank, amounts due to be paid to employees and suppliers (wages payable and accounts payable respectively), long-term borrowings, and many other debts. Some estimates of future payments are also included, although they may not be legally owed just yet, such as promises to pay employee holiday leave and estimated future warranty costs based on the expected warranty expenses related to sales already made. All these legal obligations and estimates together are called liabilities.
- The list of sources also includes amounts received from owners, which normally involve permanent financing and do not have to be repaid (often called 'capital'), plus any past profits that have not been paid out to the owners in the form of dividends. Owners can finance an organisation by contributing money to the organisation, or by not taking profit out of the organisation, as we will see. The owners' investment is called owners' equity, or just equity. (For corporations, which are owned by shareholders, the term is usually shareholders' equity.)

Because the balance sheet balances, the total amount of assets must equal the total of liabilities plus equity. Arithmetically, the accounting equation (often called the balance sheet equation) therefore is:

Sum of assets = Sum of liabilities + Sum of equity

This gives us the accounting equation:

Assets = Liabilities + Shareholders' equity

This equation is fundamental to financial accounting. Accounting procedures are designed to create and maintain this equality at all times. For example, if you obtain $100 by borrowing from the bank, your balance sheet would list the $100 cash you received as a resource and the $100 obligation to repay as a liability. By maintaining this equality, financial accounting ensures that all the financing sources that go with the resources are identified, and vice versa. This balanced pair of lists is one of the main reasons for financial accounting's value as an information system.

The two lists are put side by side, or the first above the second, as in the standard style shown in Figure 2.2.

Format of balance sheet
(all figures are as of a particular date)

Side-by-side style

Assets: Useful financial resources	**Liabilities:** Obligations to be paid **Equity:** Owners' investment

OR

Vertical style

Assets: Useful financial resources
Liabilities: Obligations to be paid **Equity:** Owners' investment

In both cases, sum A = sum L + sum E

FIGURE 2.2 Balance sheet

Exhibit 2.1 is a simple example of a balance sheet using the side-by-side style to emphasise the equality of the two lists, with assets on the left and liabilities and equity on the right. Explanations of the terms used in the balance sheet follow the example.

EXHIBIT 2.1

SOUND AND LIGHT LTD

BALANCE SHEET AS AT 30 JUNE 2019

	$000	$000		$000	$000
Assets			**Liabilities and equity**		
Current assets			**Current liabilities**		
Cash	50		Accounts payable	73	
Accounts receivable	75		Wages payable	30	103
Inventory	120	245			
Noncurrent assets			***Noncurrent liabilities***		
Land	100		Loan		87
Equipment (net)*	150	250	**Total liabilities**		190
			Shareholders' equity		
			Share capital	130	
			Retained profits	175	305
Total		495	**Total**		495

* Equipment (net) = Cost – Accumulated depreciation = $272 000 – $122 000 = $150 000

Let's review some features of this balance sheet:

- The title identifies the organisation (Sound and Light Ltd), the point in time at which it is drawn up (30 June 2019) and the currency in which amounts are measured (thousands of dollars).
- The balance sheet balances! As at 30 June 2019, total assets of $495 000 are exactly equalled by the total sources of these assets (i.e. liabilities and shareholders' equity). It is a summary, so we cannot tell exactly which source produced which asset or assets; for example, the $50 000 of cash came partly from bank borrowing and partly from other sources, such as past profits. (More about sources shortly.)
- Assets are usually separated into shorter-term ones (current assets) and longer-term ones (noncurrent assets). (More about these categories below.)
- Like assets, liabilities are usually separated into shorter-term ones (current liabilities) and longer-term ones (noncurrent liabilities).
- The balance sheet shows several individual accounts, telling us about the company's particular financial structure. For example, the company expects to receive $75 000 from customers (accounts receivable) and owes $73 000 to its suppliers (accounts payable). The company owes $30 000 to the bank but has chosen not to pay it all back, keeping more than that ($50 000) on hand as cash. (These accounts are usually aggregates of many smaller accounts; for example, there is an account for each customer who owes money to Sound and Light.)
- The $495 000 of assets have been financed by $190 000 ($103 000 + $87 000) of liabilities and $305 000 of owners' equity.
- Note: the accounting equation always balances:

Assets = Liabilities + Equity

HOW'S YOUR UNDERSTANDING?

2A Which of the following items would be classified an asset in the balance sheet:
- Cash at bank
- Accounts receivable
- Accounts payable
- Buildings
- Retained profits?

2.2 Explanations of the three balance sheet categories: assets, liabilities and equity

LO1 LO2 Recall from the previous section that Assets = Liabilities plus Equity. More detailed explanations of each of these elements are discussed below.

Assets

Assets are a mixture of the resources that the company needs to do business – for instance, products to sell (inventory) and a building to operate from – and the resources that it has accumulated as a result of doing business, including amounts due from customers for past sales (accounts receivable). You can think of assets as economic resources that have probable future benefits that are controlled by the entity.

More formally, assets are resources controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity. Based on this definition, assets need to have three essential characteristics:

- *Future economic benefits* because the assets are used to provide goods and services for exchange, with the objective of generating net cash flows (e.g. through the sale of the asset or the sale of the output produced through the use of the asset). Consider the following examples of assets and how they provide future economic benefits. Cash balances are beneficial because of their command over the future economic benefits they provide. Assets such as accounts receivable are direct claims to cash inflows (receipt of payment from accounts receivable); prepayments (e.g. prepaid rent) provide rights to receive services in the future; inventories can be exchanged for cash; and equipment can provide goods or services for sale.
- *Control by the entity* relates to the capacity of an entity to benefit from the asset in pursuing its objectives and to deny or regulate the access of others. For example, if a company owns a truck it can prevent others from using it. Some future economic benefits will not be controlled by an entity, because the entity cannot deny others access to the benefits of the asset; for example, a property developer who builds home units and is required by the local council to put in a public park as part of the project. If the park is open to the general public without charge, then the developer does not have control over the asset and the public park would not be included as an asset for the property developer.
- *Occurrence of past transactions or other past events* means that the transaction or other event giving the entity control over the future economic benefits must have occurred. Most assets are obtained by an entity by using cash, credit (promise to pay in the future) or barter transactions.

Sound and Light's assets include cash, accounts receivable, inventory, land and equipment. Other 'assets' of Sound and Light might include happy employees and a safe working environment – yet these do not directly appear on its balance sheet. There is a distinction between the assets that accounting recognises and these other 'assets'. There are objective, standard measures for the economic control of the first group and for demonstrating the probability of future benefits that will eventuate for the first group, but not for the second group. For example, in the first group, an inventory of machine parts is owned by the organisation and has a dollar cost that can be easily verified. The benefit will come from future use or selling the inventory. In the second group, a happy employee is, in theory, more productive than an unhappy employee, but it is difficult to measure reliably (with any consistency) how much more productive a very happy employee is compared with an employee who is only mildly happy.

Moreover, at least in our society, an organisation does not own its employees! Accounting generally records assets only where there is economic control; that is, where the value of the asset can be reliably measured and it is probable the future benefits will eventuate. The expenditure for market research will not qualify as an asset because it is not possible, at the date of expenditure, to establish that it is probable that the future benefits will eventuate. This places limits on the scope of the financial statements.

In summary, an asset is only recognised in the balance sheet when (a) it is probable that future economic benefits will eventuate, and (b) the asset possesses a cost or other value that can be reliably measured. We will discuss these complications in more detail in Chapter 6.

Assets are usually separated into shorter-term ones (current assets) and longer-term ones (noncurrent assets). Current assets are those that are expected to be used, sold or collected within the next year. Noncurrent assets, therefore, are expected to have benefits for more than a year into the future. Sound and Light has $245 000 in current assets and $250 000 in noncurrent assets.

HOW'S YOUR UNDERSTANDING?

2B Which of the following would *not* be included as assets in the balance sheet: accounts receivable, equipment, share capital, inventory and employees?

Liabilities

Liabilities are probable debts or obligations that result from an entity's past transactions (e.g. someone providing them with a service) and will be paid for with assets (e.g. cash) or services (e.g. providing a service to someone who has already paid for that service in advance). More formally, liabilities are present obligations of the entity arising from past events, the settlements of which are expected to result in an outflow from the entity of resources embodying economic benefits.

There are two essential characteristics of liabilities. First, a present obligation exists and the obligation involves settlement in the future via the sacrifice of future economic benefits. Most obligations are legally enforceable; for example, they arise out of contractual arrangements, including money borrowed, amounts owing on assets purchased or for services provided, or obligations to provide services to parties who have paid in advance. Obligations can also be imposed on the entity, including damages awarded by courts, workers' compensation claims and income tax payable. Obligations can also arise from normal business practice, custom and a desire to maintain good business relations or act in an equitable manner. If, for example, an entity decides as a matter of policy to rectify faults in its products even when these become apparent after the warranty period has expired, the warranty amounts that are expected to be expended in respect of goods already sold are liabilities.

The other essential characteristic of a liability is that it has adverse financial consequences for the entity, in that the entity is obliged to sacrifice economic benefits to one or more entities. Thus, the existence of a liability depends on the present obligation being such that the legal, social, political or economic consequences of failing to honour the obligation leave the entity little, if any, discretion to avoid the future sacrifice of economic benefits to another entity.

Liabilities include amounts owed to creditors, such as banks and suppliers, or amounts estimated to be due later, such as holiday and long service leave payments to employees, estimated future income taxes or interest building up on a bank loan. For example, if an electrician has done repair work on a company building, the electrician will be owed money (accounts payable). The electrician has done the work (past transaction) and the company has a present obligation to pay.

Not all liabilities are expected to be paid in cash; some are 'paid' by providing goods or services. An example is a deposit received from a customer for goods to be shipped later. The organisation has the money (an asset) and records a corresponding liability for the deposit, but expects to give the customer the agreed-upon goods to discharge the liability. In the meantime, the customer has a claim on the organisation, expecting to get either the goods or the cash back if the goods are not supplied. Sound and Light's liabilities (Exhibit 2.1) include amounts owing to suppliers (accounts payable) and amounts owing to employees for work done (wages payable) and a long-term loan.

Following the same rule as for assets, liabilities generally include only obligations that can be reliably measured. If you are in debt to a friend for $10, that would appear on your balance sheet. However, if you are 'in debt' to a friend for saving your life, that would not appear on your balance sheet. The requirement that the obligation has arisen from a past transaction means that a promise to pay is a liability if the organisation has already received the benefit; for example, if it has received cash from the bank or goods from a supplier or hard work from an employee expecting a pension.

An expectation to pay later is not a liability if the transaction bringing the benefit has not happened. For example, an agreement to borrow before the cash has been received is not a liability, nor is an order to purchase something before the goods have arrived. Because some of these expected or possible future events may result in future payments, even if they do not meet the definition of a liability and so do not appear in the balance sheet, they are sometimes described in the notes to the financial statements so that the users of the financial statement are aware of them.

Like assets, liabilities are usually separated into shorter-term ones (current liabilities) and longer-term ones (noncurrent liabilities). Current liabilities are those that are due (expected to be paid or otherwise discharged) within the next year. Noncurrent liabilities, therefore, are due more than a year into the future. Some liabilities, such as many house mortgages, extend for years into the future, but are partly paid each year, so the balance sheet would show both a current and a noncurrent portion for them. Sound and Light has $103 000 in current liabilities and $87 000 in noncurrent liabilities.

HOW'S YOUR UNDERSTANDING?

2C Consider the following questions:

(i) Which of the following are liabilities: accounts receivable, inventory, accounts payable, wages payable and taxes payable?

(ii) Would an agreement to borrow money from the bank in three months' time appear in the balance sheet?

(iii) A company places an order to buy 10 TVs at $600 each on 1 April and receives them on 1 May. When would the liability of $6000 be recorded?

Equity

Equity is the owners' interest in the organisation.

- Equity can be derived from direct contributions the owners have made, or from the accumulation of profits that the owners have chosen not to withdraw. For a company, this would mean profits that have not been distributed as dividends.
- The details of the owners' equity section of the balance sheet depend on the legal structure of the organisation and its ownership arrangements (examined later in this chapter).
- The balance sheet does not distinguish between assets whose sources are liabilities and assets provided by owners. Complex financial events make this impractical, so the assets represent a pool of resources provided by all sources.
- The owners' interest can also be considered as a 'residual' of the sum of the assets minus the obligations the organisation has taken on. (If A = L + E, the equation can also be written A – L = E.)

Because the balance of the shareholders' equity figure equals assets minus liabilities, this residual or net concept of equity is often referred to as the book value of the whole organisation. Book value is an arithmetically valid idea, as the above equation shows. But it may not tell us very much. For example, if Sound and Light suddenly went out of business, the owners would be unlikely to receive exactly the equity of $305 000 (Exhibit 2.1), because nobody knows what the assets would fetch if they had to be sold off all at once, and the liabilities perhaps would be settled for something other than the expected future payments used to record them.

Similarly, if the owners decided to sell the business, the price they would get would depend on their and the buyers' views as to the future success of the business, not just on the accumulated assets and liabilities recorded in the balance sheet. Thus, the amount would be very unlikely to equal the balance sheet equity figure.

Shareholders' equity is generally based on historical transactions, and does not, except by coincidence, equal the current market value of the whole business. Many high-technology and internet companies at the start of this century had small equity amounts in their balance sheets but huge stock market values (market capitalisation, or the share price times the number of shares outstanding). The stock market may have been considering all sorts of 'assets' not included by accounting, such as competitive strength or smart employees, and/or expecting good future performance. Many of these share prices have subsequently dropped, but there often are differences between the dollar values in the shareholders' equity section of the balance sheet and the current market price of the company.

Contributions from owners can come in many forms, including the issue of share capital and the obtaining of past profits (discussed below). For a corporation like Sound and Light, the most usual is share capital: people give the corporation money in exchange for shares, which are portions of ownership interest. Sound and Light owners (shareholders) have contributed $130 000 to the corporation (Exhibit 2.1). For example, some owners probably contributed cash to get Sound and Light started, so they would be among the sources of the cash asset. Many corporations' shares, also called stocks in some countries (such as the United States), are traded on sharemarkets (e.g. the Australian Securities Exchange). In such markets, shares are traded between owners; the corporations issuing the shares receive money only when the shares are issued by them to the first owners. Therefore, trades subsequent to the initial share issue are not reflected in the corporation's share capital; these trades are transactions for the owners, not for the corporation.

Past profit retained, usually called retained profits (or retained earnings), represents past accrual profit not yet given to owners. (The terms 'earnings' and 'profit' are used pretty much interchangeably, but they all refer to accrual profit, as described in Chapter 1.) Sound and Light has $175 000 in retained profits (Exhibit 2.1), which means it has $175 000 more in assets than it would have had if those profits had all been paid out. The owners could have withdrawn cash or other assets from the company (for instance, by declaring themselves a dividend, which is a payment of some of the retained profits to the owners), but they have chosen instead to leave the assets in the corporation. Thus, those assets are resources of the corporation and retained profits are their source. The corporation can use the assets to earn more profit in the future.

Since E = A − L, it is arithmetically possible for equity to be negative. If the assets are less than the liabilities, which would indicate an organisation has more obligations than resources (not a good position to be in!), the equity, and therefore the organisation's book value, will be negative. Such a situation is a sign of serious financial problems and is likely to be followed by insolvency.

HOW'S YOUR UNDERSTANDING?

2D If assets are resources, what are the possible sources for these assets?

2.3 Some preliminary analysis of the Sound and Light balance sheet

From the Sound and Light balance sheet (Exhibit 2.1), we can answer some questions about the corporation's financial condition: LO3

1 Is the organisation soundly financed? Sound and Light has financed its $495 000 in assets by borrowing $103 000 short-term and $87 000 long-term, and by getting $130 000 in contributions from owners and not

paying past earnings of $175 000 out to owners. Its $495 000 in assets are therefore financed by $190 000 (38.4 per cent) from creditors and $305 000 (61.6 per cent) from the owners. Its debt-to-equity ratio is $190/$305 = 62.3 per cent (often written 0.62:1). So, Sound and Light is not much in debt, proportionately. What would you think if the creditors were owed $450 000 and the shareholders' equity was only $45 000? This would be a debt-to-equity ratio of $450/$45 = 1000 per cent (10:1), much more risky for the creditors because a lot more of their money than the owners' money would be at risk if the company ran into trouble.

Debt to equity ratio = Total liabilities ÷ Total shareholders' equity

2 Can the organisation pay its bills on time? Sound and Light owes $103 000 in the short term and has only $50 000 in cash. Therefore, to pay its bills it will have to collect cash from its customers, either by getting them to pay what they already owe or by selling them some inventory for cash. There is likely no problem here: collections and sales, and payments to creditors, are probably going on continuously. The company has $245 000 of current assets that it should be able to turn into cash to pay the $103 000 of current liabilities. It is said to have $245 000 – $103 000 = $142 000 in working capital and a current ratio of $245/$103, or 2.38. The working capital is positive, and the ratio indicates there is more than twice as much current assets as current liabilities, so Sound and Light appears to be fine.

Current ratio = Current assets ÷ Current liabilities

3 You can see that if the company had a slow period of sales or collections, it could have difficulty paying its bills. But if you were concerned about the company's ability to sell inventory to pay its bills, you could calculate the quick ratio (also called the acid test ratio). It is like the working capital ratio, but has only cash, very short-term investments that could be sold, and accounts receivable in its numerator. For Sound and Light, the quick ratio would be ($50 000 + $75 000)/$103 000 = 1.21. The company could pay its current liabilities without having to sell inventory. What would you think if the company had only $10 000 in cash and $160 000 in inventory instead of cash of $50 000 and inventory of $120 000? In that case, though its working capital and working capital ratio would be the same, it would likely be overstocked (i.e. too much inventory) and short of cash, and might have trouble paying bills. Now the quick ratio would be ($10 000 + $75 000)/$103 000 = 0.83. The company would have to sell some inventory to meet its current liabilities. All ratios are only indicators. They require interpretation of the specific circumstances of each organisation, so we don't know from our calculations if the company is in trouble, but a low quick ratio would give a signal to look further into the situation.

Quick ratio = (Current assets – Inventory) ÷ Current liabilities

4 Should the owners declare themselves a dividend? If so, how large should it be? Legally, the board of directors (who manage the company on behalf of the shareholders) are able to declare a dividend to shareholders of $175 000, the full amount of the retained earnings. But there is not nearly enough cash for that. Those past earnings have been reinvested in inventory, land, equipment and so on, and are therefore not sitting around in cash waiting to be paid to owners. This is true of nearly all companies: they invest past earnings in operating assets, so do not have a lot of cash on hand. Probably a dividend of more than about $25 000, only one-seventh of the retained earnings, would cause Sound and Light some cash strain. What would you think if the company had no land or equipment but $300 000 in cash instead? It would appear to be cash-rich in that case, and should either invest the cash productively or pay a dividend to the owners so they can do what they like with the money.

5 Equipment (net) of $150 000 is represented by the cost of the equipment $272 000 less accumulated depreciation of $122 000. In calculating its profit, Sound and Light has deducted depreciation on its equipment as an expense each year. The profit that is in the retained profits part of the equity is, therefore, smaller than it would have been without this deduction. The accumulated amount of that expense, built up over the years, is deducted from the assets in the balance sheet to show how much of the economic value of the assets is estimated to have been used up so far. Accumulated depreciation is therefore a 'negative asset' used to reduce the amounts of other assets. In this case, the equipment

cost $272 000, against which depreciation of $122 000 has accumulated, so the 'net' book value of the equipment is the remainder: $150 000. (It is normal for the balance sheet to report only the net amount and give cost and accumulated depreciation amounts in the notes.) Comparing the cost and the accumulated depreciation tells us something about the age of the equipment. The $122 000 accumulated depreciation is less than half the equipment's cost, so the company estimates that less than half the economic value of the equipment has been used. What would you think if the accumulated depreciation were $250 000? The equipment would be nearing the end of its estimated life.

Common presentation styles for balance sheets

So you see that the balance sheet provides interesting information if you know how to read it. Your skill in reading it will grow as you work with it. There are different styles of presentation for the balance sheet; all show the same information, but they are arranged differently. Exhibit 2.1 showed you the side-by-side format for Sound and Light Ltd. In Exhibit 2.2, the vertical format is shown, which has become far more common. It shows assets less liabilities equals shareholders' equity.

EXHIBIT 2.2

SOUND AND LIGHT LTD

BALANCE SHEET AS AT 30 JUNE 2019

	$000
Current assets	
Cash	50
Accounts receivable	75
Inventory	120
Total current assets	245
Noncurrent assets	
Land	100
Equipment (net)	150
Total noncurrent assets	250
Total assets	495
Current liabilities	
Accounts payable	73
Short-term loan	30
Total current liabilities	103
Noncurrent liabilities	
Loan	87
Total noncurrent liabilities	87
Total liabilities	190
Net assets	305
Shareholders' equity	
Share capital	130
Retained profits	175
Total equity	305

2.4 A closer look at the balance sheet

LO8 To gain further insights into the content of a balance sheet, we will examine the content of Chez Ltd's balance sheet, shown in Exhibit 2.3.

EXHIBIT 2.3

CHEZ LTD

BALANCE SHEET AS AT 31 MAY

	2019 $000	2018 $000
Current assets		
Cash and cash equivalents	8 952	6 336
Investments	18 516	5 179
Accounts receivable	26 396	18 069
Inventory	22 831	20 427
Prepayments	3 586	2 015
Total current assets	80 281	52 026
Noncurrent assets		
Land	23 205	23 205
Buildings (net)	26 282	25 911
Equipment (net)	35 120	36 630
Furniture (net)	4 864	4 140
Intangibles (net)	2 398	3 586
Total noncurrent assets	91 869	93 472
Total assets	172 150	145 498
Current liabilities		
Accounts payable	7 984	6 443
Accrued expenses	5 740	3 491
Income taxes payable	3 248	2 756
Provision for employee entitlements	10 823	4 481
Total current liabilities	27 795	17 171
Noncurrent liabilities		
Long-term loans	23 856	21 805
Provision for employee entitlements	14 006	13 647
Total noncurrent liabilities	37 862	35 452
Total liabilities	65 657	52 623
Net assets	106 493	92 875
Shareholders' equity		
Share capital	23 961	23 961
Retained profits	82 532	68 914
Total shareholders' equity	106 493	92 875

- It is comparative: it contains figures both for the most recent year and for the preceding year to help the users recognise changes. It is standard practice for the more recent figures to be to the left, closer to the words describing those figures.

- For clarity, the figures are shown in thousands of dollars (and for bigger companies it will be 'millions of dollars'), not exact amounts to the cent.
- References are normally made to various notes. It is not possible to explain every important item on the face of the balance sheet, so extensive explanatory notes are referred to and appended to most balance sheets. Chez's notes are not provided here because they raise issues we have not yet covered. Remember to look for notes when you are using financial statements.
- The company has many different kinds of asset, liability and equity accounts. They are not necessarily easy to classify into the categories you saw in the Sound and Light Ltd example. You probably won't understand all the accounts and how the company has categorised them; that understanding will develop as you work through the book.
- The balance date is 31 May, not 30 June. The end of the taxation year, 30 June, is the most popular accounting year-end (financial year-end), but many companies choose other dates, particularly subsidiaries of US companies, among whom 31 December is popular.

HOW'S YOUR UNDERSTANDING?

2E Given the following information for Northern Ltd:

- share capital $1000
- accounts receivable $1100
- accounts payable $2100
- inventory $1700
- retained profits $2200
- cash $500
- equipment $2000

(i) Calculate the totals for current assets, noncurrent assets, total assets, current liabilities, noncurrent liabilities and shareholders' equity.

(ii) Comment on the company's financial position at that point in time.

Some explanation of the detailed content of balance sheets will be helpful now, before some examples of preparing balance sheets are given.

Some of Chez's assets were described in Chapter 1: cash, accounts receivable and inventory. Property, plant and equipment is split into land, buildings, equipment and furniture. Many Australian companies show property, plant and equipment as one item on the face of the balance sheet (e.g. property, plant and equipment net = $100 000), with the split-up in one of the notes to the accounts (e.g. property, plant and equipment – accumulated depreciation: $400 000 – $300 000 = $100 000).

Note that land is not depreciated, but buildings, equipment, and furniture are shown net, meaning that accumulated depreciation has been deducted. The exact amount of the accumulated depreciation deducted will be shown in the notes. For example, if equipment cost $1 million and had an expected life of five years, the amount of depreciation each year would be $200 000. After three years, accumulated depreciation would be $600 000 ($200 000 + $200 000 + $200 000).

Chez Ltd also has some other assets that were not introduced in Chapter 1, including investments, prepayments, property, plant and equipment (net), and intangibles.

- Investments are short-term; that is, included under current assets – and could be shares in other companies (such as the Commonwealth Bank or Woolworths), which Chez intends to convert to cash within a year.

- Prepayments (or prepaid expenses) are amounts that have been paid in advance but for which the benefits have not yet been received. For example, if we pay a 12-month insurance premium on 1 April 2018, at 31 May 2018 we will have a prepayment equal to 10/12ths of the amount paid at year end. Prepayments are assets because they represent future economic benefits.
- The property, plant and equipment (PPE) will be recorded at cost net of accumulated depreciation. Each year depreciation expense is calculated and the sum of these depreciation expenses is called accumulated depreciation. Depreciation expense and accumulated depreciation are discussed in more detail in Chapter 5. When you see the word 'net' after PPE it means accumulated depreciation has been deducted from cost.
- Intangible assets are noncurrent assets that have no physical substance, such as copyrights, patents, trademarks, brand names and goodwill. They are discussed in Chapter 10.

Chez Ltd includes many liabilities that have not yet been discussed. Accounts payable and long-term loans were described in Chapter 1. Two others are accrued expenses and provision for employee entitlements.

- Accrued expenses relate to expenses that have been incurred during the year but not yet paid. Consider two examples. Assume Chez Ltd pays salaries and wages every two weeks for work done in the previous two weeks. If the last pay day was 19 May, the company would owe employees salaries and wages from 20 May to 31 May. This is called accrued wages or wages payable. Another example of accrued expenses could be the amount owing to the electricity company. If it bills you quarterly and the last bill was for the period ending 30 April, you would owe the company for one month's electricity at the end of the accounting period. This would also form part of accrued expenses. Income taxes payable is the amount payable to the tax office in the next year.
- Provision for employee entitlements relates to long service leave, holiday pay and some superannuation. It is an estimate, based on years of employee service, of the amounts owing to employees that will have to be paid in future periods. The provision for employee entitlements has both current and noncurrent proportions, depending on when the amounts are likely to be paid.

Note that for accounts payable the company will have received an invoice showing the amount owing. Accruals need to be estimated but often this can be done reasonably accurately. However, when the estimation process is more difficult, the term 'provisions' is common.

Where do the figures come from?

A full understanding of what assets and liabilities are and how to measure them will take time and many examples. One thing you may be wondering about is where the figures used to measure these things come from. This is a deep and controversial question indeed. Only a superficial answer can be given now, but after a few more chapters you will have a deeper understanding of it.

Accounting is generally a historical measurement system: it records what has happened, not what will happen or would have happened if conditions had been different. Therefore, asset and liability values are derived from the past. Assets are generally valued at *what they cost when they were acquired*, and liabilities are generally valued at *what was promised when the obligation arose*. In most countries, assets and liabilities are not valued at the current prices they might fetch if sold right now. This is something that confuses many users: looking at a balance sheet, for example, a user might think that assets such as land and buildings are shown at what those assets would be worth right now if they were sold. They are, instead, generally valued at what they cost when they were acquired.

The differences in these values can be large. For example, a company may have bought land in Sydney 20 years ago for $300 000. The land may now be worth many millions of dollars. But the balance sheet normally will show the land asset at a figure of $300 000, its original cost. This is because the only thing that has happened is that the land was acquired 20 years ago, and the cost incurred then can be verified. Nothing further has happened: the land has not been sold, so its current value is hypothetical and difficult to verify. However, in Australia certain assets can be revalued in the balance sheet to current market prices. They are shown at either independent valuation or directors' valuation. This important valuation issue is discussed in more detail in Chapter 10. Also, around the world there is a trend towards valuing many assets, including investments, at their 'fair values' rather than historical cost. This will be discussed in Chapter 10.

The balance sheets of most Australian companies actually show a little less detail than our Chez Ltd example. For example, under liabilities it is quite normal to have a heading 'payables', which includes accounts payable and accrued expenses. The split-up of these amounts is then given in the notes to the accounts. Also as noted earlier, Land, Buildings, Equipment and Furniture are likely to be included under one heading 'Property, Plant and Equipment'.

HOW'S YOUR UNDERSTANDING?

2F Account balances for Mike's Tyre Repair (company) are: long-term loan, \$250; accounts receivable, \$640; inventory of supplies, \$210; equipment cost, \$890; accumulated depreciation on equipment, \$470; accounts payable, \$360; share capital, \$660. Calculate total assets, total liabilities and shareholders' equity.

2.5 Maintaining the accounting equation

LO5

In sections 2.1 and 2.2 the accounting equation was introduced:

Assets = Liabilities + Shareholders' equity

An understanding of this equation is fundamental to your understanding of the balance sheet and the whole accounting recording process. Financial accounting is said to use the double-entry system, whereby the accounting equation is always kept in balance. If an asset goes up, a liability or equity must go up too (or another asset must go down). If a liability goes up, an asset must go up too, or an equity or another liability must go down. Here are some examples, using the balance sheet descriptions in the Sound and Light example in section 2.1 and the equation $A_1 = L_1 + E_1$ to represent the balance sheet before the events:

- cash of \$100 obtained from an owner for shares: 'cash' asset up, 'share capital issued' equity up, so $A_1 + \$100 = L_1 + E_1 + \$100$
- \$120 collected from a customer: 'cash' asset up, 'accounts receivable' asset down, so $A_1 + \$100 + \$120 - \$120 = L_1 + E_1 + \$100$
- goods for sale costing \$130 received from a supplier: 'inventory' asset up, 'accounts payable' liability up, so $A_1 + \$100 + \$120 - \$120 + \$130 = L_1 + \$130 + E_1 + \$100$.

After these three events, the new balance sheet is \$230 higher on both sides and so still in balance:

$$A_1 + \$230(\text{net}) = L_1 + \$130 + E_1 + \$100$$

The key point is that the equation will always be in balance. The equation would balance before recording these transactions and will balance after the transactions have been recorded.

We cover transaction analysis in more detail in Chapter 3, including expanding the equation to incorporate revenue and expenses. So at this point we will just consider transactions that only have an impact on the balance sheet.

Assume that, at 30 June 2019, FGH Ltd had cash of \$200 000 and share capital of \$200 000. Note that the accounting equation balances at this point. In fact, the equation will balance after we record every transaction. Consider the impact of each of the following transactions:

1 The company receives \$400 000 from the issue of shares (200 000 shares at \$2 each). This transaction increases an asset (cash at bank) and increases shareholders' equity account (share capital).

2 The company purchases new equipment for \$500 000, paying cash to the supplier. This transaction increases one asset (equipment) and decreases another asset (cash).

3 The company borrows $200 000 from the bank. This transaction increases an asset (cash at bank) and increases a liability (loan).

4 The company purchases inventory on credit for $150 000. This transaction increases a liability (accounts payable) and increases an asset (inventory).

5 The company pays $50 000 to accounts payable. This transaction decreases an asset (cash) and a liability (accounts payable).

Each of the above transactions is recorded in Exhibit 2.4 and the new balance sheet at 31 July 2019 appears in Exhibit 2.5.

EXHIBIT 2.4

FGH LTD

ACCOUNTING EQUATION

	Assets			=	Liabilities + Shareholders' equity		
	Cash	Inventory	Equipment		Accounts payable	Long-term loan	Share capital
Bal.	+200 000						+200 000
1	+400 000						+400 000
2	−500 000		+500 000				
3	+200 000					+200 000	
4		+150 000			+150 000		
5	−50 000				−50 000		
	+250 000	+150 000	+500 000		+100 000	+200 000	+600 000
			900 000	=	900 000		

EXHIBIT 2.5

FGH LTD

BALANCE SHEET AS AT 31 JULY 2019

	$		$
Assets		**Liabilities**	
Current assets		**Current liabilities**	
Cash	250 000	Accounts payable	100 000
Inventory	150 000		
	400 000	**Noncurrent liabilities**	
		Long-term loans	200 000
Noncurrent assets		**Total liabilities**	300 000
Equipment at cost	500 000	**Shareholders' equity**	
		Share capital	600 000
		Retained profits	0
		Total shareholders' equity	600 000
Total assets	900 000	**Total liabilities and shareholders' equity**	900 000

HOW'S YOUR UNDERSTANDING?

2G (i) What is the effect of each of the following transactions on total assets?
- (a) Purchased equipment for $200 000 cash.
- (b) Purchased inventory for $30 000 on credit.
- (c) Received a loan of $50 000 from the bank.
- (d) Received $20 000 from accounts receivable.
- (e) Issued additional shares of $300 000.

(ii) Which of the above transactions increase total liabilities?

2.6 Managers and the balance sheet

Why do managers care about their companies' balance sheets? The basic reason is that many outsiders do, including owners, creditors, tax authorities and unions. Read any issue of a business newspaper or magazine and you will see frequent references to the importance of the balance sheet and levels of debt. For example: LO10

> Rob Ltd was an attractive prospect because it had a strong balance sheet.
> The balance sheet shows a weak financial structure. Management must solve this problem before risk-shy investors can be expected to take an interest in the company.
> The balance sheet shows the large cash reserves, so one can only guess that management is looking to buy another company.
> X Ltd's debt-to-equity ratio is high for the industry.
> The underlying strength of PB's balance sheet is hard to ignore.
> W Ltd has grown because it has a very conservative balance sheet that provides opportunities.

The balance sheet reports what the organisation's position (assets, liabilities and shareholders' equity) is at a point in time (the financial year-end or any other date on which the balance sheet is prepared). It shows the assets (resources) that management has chosen to acquire for the organisation, and how management has decided to finance those assets. Therefore, it provides a useful picture of the state of the company and is used by many outsiders to evaluate the quality of management's decisions on obtaining, deploying and financing assets. For better or worse, it is the summary of all the information recognised by accounting and is, to many people, the basic score card of management's stewardship of the company.

The balance sheet does not directly state how management has performed in using assets to earn profit. Such information is contained in the income statement, but all of it correlates with the basic double-entry information contained in the balance sheet. Good profit performance, for example, is reflected in increased assets and shareholders' equity (retained profits). The strengths and weaknesses of the balance sheet, which will be explored throughout this book, are therefore fundamentally important to managers, who are responsible for managing companies' assets and liabilities.

Managers' own salaries, promotions, careers and reputations depend on other people's decisions (such as investors' decisions to buy and sell shares) which, in turn, rest to some extent on balance sheet information.

2.7 The income statement

A business exists over a period of time. If the owners and managers are successful, it may prosper for a long time. Suppose a measure of the company's financial performance is desired for comparison with other companies, for assessing income tax, for help in deciding how much to sell the company for, or for many other reasons we will come to. How could such performance be measured? LO6 LO7

We might measure the company's financial performance by closing it down, selling off all its assets, paying off all its liabilities and discovering how much is left for the owners. Good performance would be indicated if the money left for the owners plus the amounts they withdrew over the years were greater than the amount they put in when they founded the company, perhaps adjusted for inflation over that time and for the owners' costs in raising the money they put in.

But killing the business to measure how well it has been doing is a little drastic! Waiting until it dies of natural causes hardly seems any better: many companies have outlasted generations of owners and managers. It would be more useful to measure performance over selected shorter periods of time: annually, every three months (quarterly) or on a monthly basis. People could then make their decisions about investing in the company or selling their shares, and hiring managers or firing them, when they wanted to do so.

This is where the income statement becomes useful. This statement uses accrual accounting to measure financial performance over a period of time, usually a year, six months, three months or one month, indicating the net profit for the period, calculated as revenues minus expenses.

Net profit for the period = Revenues – Expenses for the period

Revenues and expenses

Recall that in section 1.5 the concepts of revenues and expenses were introduced. As part of the conceptual framework of accounting, official pronouncements developed definitions of revenues and expenses. They were developed to be applicable to a range of measurement models and to include some transactions unique to the public sector. Consequently, the definitions are difficult to follow, especially for students in their second week of an accounting course. As a result, we will defer discussion of these definitions until Chapter 13. Below are some fundamental definitions that cover most revenues and expenses.

REVENUES

Revenues are described here as increases in the company's wealth arising from the provision of services or the sale of goods to customers. Wealth increases because customers:

- pay cash for goods or services
- promise to pay cash (such promises are called 'accounts receivable' for goods and services)
- (more rarely) pay with other forms of wealth, such as by providing other assets to the company or forgiving debts owed by the company for goods and services.

If, *in return for services or goods*, a customer paid $1000 in cash, another customer promised to pay $1000 later, another gave the company $1000 in equipment, or another forgave a $1000 debt the company had owed the customer, each would be called a revenue of $1000.

Interest and dividends received are also examples of revenue because they are increases in wealth as a result of providing a service (lending or investing money in another organisation).

The key test for revenue recognition is *whether the goods or services have been rendered* (e.g. delivery to customers or the provision of a service). Revenue recognition can become quite complicated for some companies. For example, if a company received a contract to build a new highway from Brisbane to Melbourne, when would revenue be recognised? This and other more complicated questions concerning revenue recognition will be addressed in Chapter 13.

EXPENSES

Expenses are the opposite of revenues. They are *decreases in the company's wealth that are incurred in order to earn revenue*. Wealth decreases because operating costs have to be paid; customers have to be given the goods they have paid for; long-term assets wear out as they are used to earn revenue; and liabilities may be incurred as part of the process.

If, *as part of its attempt to earn revenues*, the company paid $600 in rent, or the goods bought by a customer cost the company $800 to provide, the equipment depreciated by $400, or the company promised to pay an employee $500 in wages later on for work already completed, each of these would be called an expense (rent expense $600, cost of goods sold $800, depreciation $400, wages expense $500).

A major expense category that sometimes causes confusion is the cost of goods sold (COGS) expense. In the examples above, if the goods bought by the customer cost the company $800 to provide, $800 is the cost of the goods sold that earned revenue of $1000. The revenue is what the customer agrees to pay; the cost of goods sold is what it costs the company to provide those goods. Therefore, a transaction with a customer who is buying goods has two aspects:

- the company is better off because of the revenue gained
- the company is worse off because of the cost of the goods that the customer takes away.

When the company buys the goods for sale, they begin on the balance sheet in the asset account 'inventory of unsold goods'. When they are sold, their cost is transferred from the asset account to the expense account 'cost of goods sold'. This is done as a separate accounting activity from recording the revenue, because it is a separate economic event.

HOW'S YOUR UNDERSTANDING?

2H During the year a retailer buys 800 televisions at $400 each and sells 600 of them for $1000 each. Calculate the following:

(i) Sales revenue for the year
(ii) Cost of goods sold for the year
(iii) The closing balance of inventory in the balance sheet related to the televisions.

PROFIT

Both revenues and expenses are measured by following the concepts of accrual accounting; therefore, they represent increases or decreases in wealth, whether or not cash receipts or payments occur at the same time. As net profit is the difference between revenues and expenses, it represents the *net inflow of wealth* to the company during the period. The reporting of net profit means that the company has become wealthier during the period. If net profit is negative – that is, if revenues are less than expenses – it is instead called net loss, and represents a net *outflow of wealth*. In this case, the company has become less wealthy.

Expenses include all the costs of earning the revenues, including income and other taxes, but they do not include payment of returns to owners (withdrawals by sole traders or partners, or dividends to shareholders of companies). Payments, or promises of payment, of returns to owners (such as when a company's board of directors *declares* – or promises – a dividend) are considered to be *distributions* of net profit to owners. The undistributed remainder is kept in the company as retained profits.

HOW'S YOUR UNDERSTANDING?

2I Calculate the total revenue and expenses for the month of June 2019, given the following:

(i) Credit sales of $200 000 made in June; 50 per cent to be collected in June.
(ii) Cash sales of $300 000.
(iii) Received $20 000 as a deposit from a customer in June for a job to be carried out in July.
(iv) Paid salaries of $40 000; $10 000 related to work carried out in May and $30 000 related to June work.
(v) Paid rent for the month of June of $6000 on 7 June.
(vi) Received a bill for $1500 from an electrician for work done on 20 June. This will be paid next month.

The relationship of profit for the period to retained profits

Retained profits is the sum of past net profits, measured since the company began, minus dividends declared (even if not yet paid) to owners since the beginning. Retained profits from the end of the preceding period (year, quarter, month or whatever) are therefore increased by profits for the period and reduced by any dividends.

Retained profits at end of period	= Retained profits at beginning of period
	+ Net profit (or − Net loss) for the period
	− Dividends declared during the period

An alternative format to show the change in retained profits is:

Start with retained profits, beginning of period (end of previous period)	XXXX
Add net profit for the period	XXXX
Deduct dividends declared during the period	(XXXX)
Equals retained profits, end of period	XXXX

In the above example, the company earned a profit. If the company performed badly, the profit could be negative (expenses greater than revenues, producing a net loss instead), and in that case, the net loss is deducted from the beginning retained profits. If things get really bad, retained profits can also be negative (losses having overtaken profits).

You might be interested to know that you can, *if you have the past records*, go back year by year, figuring out how much profit was added to retained profits each year and how much in dividends was deducted. You could go all the way back to the first day of the company, when there had not yet been any profit and, therefore, not yet any retained profits. The balance sheet can be said to reflect everything that has ever been recorded in the accounts: it is the accumulation of everything that has happened from when the company began until now.

In a company, the board of directors is the senior level of authority, which looks after the company on behalf of the owners. When the board declares a dividend, the amount is deducted from retained profits at that time. At that point, the company has a liability to the owners, which it pays off later by sending the owners the promised cash. This involves two principles of financial accounting:

1 Transactions with owners, of which the main example is dividends, are taken out of retained profits. They are not an expense, and therefore are not deducted in calculating profit for the period.

2 Owners can be creditors too, if they are owed dividends or have lent the company money in addition to the shares they bought.

HOW'S YOUR UNDERSTANDING?

2J The following transactions occurred during 2019:

(a) Issued shares to investors for $100 000 cash
(b) Borrowed $61 000 from the bank
(c) Purchased equipment for $17 000 cash
(d) Purchased $723 000 of additional inventory on credit
(e) Sold $1 141 900 of products to customers on credit; cost of the goods was $700 000
(f) Incurred $218 200 in selling expenses, paying 80 per cent in cash and owing the rest
(g) Paid cash dividends of $16 000
(h) Earned $4000 interest on investments, receiving 75 per cent in cash

> (i) Incurred $2900 in interest expense to be paid at the beginning of next year
> (i) What was revenue for the year?
> (ii) What are expenses for the year?
> (iii) What is the net profit?
> (iv) If the opening balance of retained profits was $1 million, what is the closing balance?

2.8 Connecting balance sheets and income statements

LO9

The balance sheet shows all assets, liabilities and shareholders' equity accounts at a point in time. Usually the balance sheet is comparative, showing the accounts at both the beginning of the income statement's period (i.e. the end of the previous period) and at the end of the income statement's period, and therefore showing both the beginning retained profits and the ending retained profits.

Assets at beginning	=	Liabilities + equity (including retained profits) at beginning
Assets at end	=	Liabilities + equity (including retained profits) at end
Change in assets	=	Change in liabilities + change in equity (including retained profits)

Suppose a corporation had assets of $1200 at the beginning of a year and $1450 at the end, and liabilities of $750 at the beginning and $900 at the end. We can deduce that its equity was $450 at the beginning and $550 at the end (i.e. Assets – Liabilities = Equity). These data produce the following calculation of the changes in the balance sheet categories:

	Assets		Liabilities		Equity
Beginning:	$1200	=	$750	+	$450
Ending:	$1450	=	$900	+	$550
Changes:	$ 250	=	$150	+	$100

Where did the change in equity come from? Upon investigation, we find out that the company issued more share capital of $40, earned profit of $185 and declared a dividend of $125. Thus:

	$	$
Share capital change:		
Equity increase due to issued share capital		40
Retained profits change:		
Equity increase due to profit	185	
Equity decrease due to declaration of dividend	(125)	60
Change in equity between the two balance sheets		100

We know what the profit was, but not what the company did to earn it. This is what the profit and loss component of the income statement is for: describing the revenues and expenses that produced the $185 profit. But once we have that, it is useful to know how that factors in to the balance sheet. The net profit is part of the change in retained profits, which in turn is part of the change in the balance sheet over that period. The statement (or note) showing changes in retained profits therefore 'knits' the balance sheet and the income statement together by showing that the net profit is part of the change in the balance sheet over the period. (Accountants refer to this knitting together as the articulation of the two statements.) Profit is part of the change in retained profits for the period, therefore:

Profit is part of the equity component of the accounting equation

Make sure you understand how this works:

- A *revenue* increases wealth, so it either increases assets or decreases liabilities, and therefore increases equity.
- An *expense* decreases wealth, so it either decreases assets or increases liabilities, and therefore decreases equity.
- Positive *net profit* has the overall effect of increasing assets and/or decreasing liabilities, and therefore increases equity (increases due to revenues exceed decreases due to expenses).
- A *net loss*, which is negative net profit, does the opposite, decreasing equity (decreases due to expenses exceed increases due to revenues).

At this stage make sure you grasp the idea that profit is part of equity through retained profits. Note that in Chapter 13 you will see that the full income statement includes other equity changes that articulate through to the balance sheet.

FOR YOUR INTEREST

People sometimes think that the whole balance of retained profits is available to pay dividends. Legally that may be true, but practically it is very unlikely to be true, because profit comes from changes in all the forms of wealth on the balance sheet.

A company that has made good profits and used the money earned to invest in new plant and equipment, for example, would have to sell the plant and equipment if it were to pay out all the retained profits as dividends. Also, since profit is based on accrual accounting, it is represented by changes in non-cash accounts such as accounts receivable (uncollected revenues) and accounts payable (unpaid expenses), so the profit in retained profits is not all cash, and the company might have to clear up all its receivables and payables to get the cash to pay a big dividend. The owners may not even want a dividend: many companies that pay small or no dividends have excellent share prices on the stock market, because shareholders believe that the companies will grow and prosper if the money that could have been paid as dividends is instead kept inside the company and used to make profitable business investments.

An example of articulation between the balance sheet and the income statement

Bratwurst Ltd had the following balance sheet at the end of 2018 (beginning of 2019): assets $5000, liabilities $3000 and equity $2000.

- The beginning equity figure was made up of the shareholders' invested share capital of $500 plus retained profit accumulated to the end of 2018 of $1500. (That $1500 was therefore the sum of all the net profits the company had ever had up to the end of 2018 minus all the dividends ever declared to owners up to that point.)
- During 2019, the company had revenues of $11 000 and expenses of $10 000, and declared dividends to owners of $300.
- At the end of 2019, the company had assets of $5900, liabilities of $3200 and equity of $2700, made up of the shareholders' invested share capital of $500 plus retained profits of $2200.

Exhibit 2.6 shows the relationship.

EXHIBIT 2.6

BRATWURST LTD

INCOME STATEMENT FOR 2019

	$
Revenues	11 000
Expenses (including income tax)	10 000
Net profit for 2019	1 000

NOTE SHOWING CHANGE IN RETAINED PROFITS FOR 2019

	$
Retained profits beginning of 2019 (end of 2018)	1 500
Add net profit for 2019 (from income statement)	1 000
	2 500
Deduct dividends declared during 2019	300
Retained profits end of 2019	2 200

BALANCE SHEET AT THE BEGINNING AND END OF 2019

Assets	End $	Begin $	Liabilities and equity	End $	Begin $
Assets	5 900	5 000	Liabilities	3 200	3 000
			Shareholders' equity		
			Share capital	500	500
			Retained profits	2 200	1 500
Total	5 900	5 000	**Total**	5 900	5 000

You can see several things from this example:

- We have used the term 'retained profits' instead of 'retained earnings'. Both are used in Australia, but the former is more common. In the United States and Canada, 'retained earnings' is much more common.
- The income statement's bottom line is transferred to the statement of retained profits, which is often shown as a note to the balance sheet.
- The retained profits note's bottom line is transferred to the balance sheet, showing that the statements tie together (articulate) through retained profits.

In addition, asset and/or liability accounts in the balance sheet also have to change to reflect the wealth changes that revenues and expenses involve. These changes keep the balance sheet in balance with the change in retained profits. This is true for all companies, not just simple ones like Bratwurst Ltd.

HOW'S YOUR UNDERSTANDING?

2K Suppose Bratwurst Ltd's accounting records showed the following for the next year, 2020: revenues earned $14 200, cash collected from customers $13 800, expenses incurred $12 900, dividends declared $600. (Remember, retained profits equalled $2200 at the end of 2019.) What was Bratwurst's net profit for 2020 and its retained profits as at the end of 2020?

2.9 A closer look at the income statement

LO8 Social and economic forces have helped to produce an income statement that is more complex than the simple Bratwurst Ltd example you saw earlier. See Exhibit 2.7 for Tabcorp Holdings' Income statement.

EXHIBIT 2.7

TABCORP HOLDINGS LIMITED

INCOME STATEMENT FOR THE YEAR ENDED 30 JUNE 2017

	2017 $m	2016 $m
Revenue	2 234.1	2 188.7
Other income	(24.1)	4.4
Commissions and fees	(921.4)	(869.2)
Government taxes and levies	(314.1)	(335.0)
Employment costs	(224.0)	(187.6)
Depreciation and amortisation	(183.3)	(178.6)
Impairment	(27.5)	–
Communications and technology costs	(86.3)	(77.9)
Advertising and promotions	(73.3)	(64.0)
Property costs	(54.7)	(43.1)
Other expenses	(223.8)	(136.7)
Profit before income tax expense and net finance costs	101.6	301.0
Finance income	1.6	2.9
Finance costs	(78.3)	(72.8)
Profit before income tax expense	24.9	231.1
Income tax expense	(45.7)	(61.4)
Net profit/(loss) after tax	(20.8)	169.7

Tabcorp Holdings Limited, *Annual Report 2017*.

Among the things you may notice as you review the two statements are:

- The income statement covers a period of time (years ending 30 June in this case), not a point in time, as the balance sheet does. It also is shown in millions of dollars.
- As you already saw with the balance sheets, extensive explanatory notes are normally referred to on the income statement and appended to them. The notes are not attached here. The content of such notes is important, however, so some comments are made about that below, and further attention will be paid to it in later chapters.
- At the top of the statement, the total revenue for the year is disclosed as $2234.1 million.
- Expenses (including employment costs of $224.0 million and commissions/fees of $921.4 million) are then deducted to get operating profit before income tax.
- Income tax is levied on a company's profit because it is legally separate from its owners. Such tax is usually a percentage of profit before income tax (though there are many complications). Income tax expense of $45.7 million is deducted to get net profit/(loss) after tax. In 2016 there was a net profit of $169.7 million but in 2017 a loss of $20.8 million.

- Note that the government taxes and levies ($314.1 million) are not income tax. There are separate taxes related to the gaming industry.
- In 2017 there is an impairment of $27.5 million. This is where companies need to reduce the value of some of their assets below cost and is explained in Chapter 10.

HOW'S YOUR UNDERSTANDING?

2L If the opening balance of retained profits is $850 000, net profit before tax $150 000, net profit after tax $120 000, and $70 000 of dividends were declared, what is the closing balance of retained profits?

FOR YOUR INTEREST

Both in Australia and internationally the label for the statement that provides the profit figure has changed often over recent decades; examples include profit and loss statement, statement of financial performance and income statement. You should be aware of these name changes as some companies may retain the older names for internal documents because of managers' familiarity with them. For example, the use of the term 'profit and loss statement' is still common in many companies.

2.10 Capital markets, managers and performance evaluation

The profit figure, as disclosed in the income statement, has major impacts on managers' salaries, promotions, careers and reputations – especially where capital markets such as stock markets are concerned. Managers of large, publicly traded companies are under constant pressure because of the spotlight on profits and its components. Business and social observers often comment that this spotlight is too intense; that there is more to managerial performance than the profit figure. LO10

An indication of the importance placed on the 'bottom line' can be found in almost any issue of a financial newspaper, such as *The Australian* or the *Australian Financial Review*, in their regular announcements of companies' annual and/or half-yearly profits. These announcements presumably are meant to focus on the crucial bits of information. The emphasis is on profit. There is limited data about non-financial performance, longer-term issues or other aspects of managers' efforts. This is not to say that these other factors are not considered at some point, but when announcements tend to stress profits, other things can be overlooked.

The announcements show sales, profits before tax (pre-tax), net profit after tax (net), earnings per share (EPS), interim and final dividends per share (which includes the date of payment; 'ff' signifies the dividend is fully franked, meaning that tax has already been paid on the profits by the company; 'p' means it is partly franked) and the present share price, which includes the change from the previous day (shares last).

Some figures are converted to per-share data (roughly, these are the profit figure divided by the number of ordinary shares issued by the company). Per-share amounts are thought to be helpful to the user who owns or is thinking of buying a particular number of shares and wonders what portion of the company's results can be related to that number of shares. If you own *n* shares of X Limited, you can say that your shares earned $0.555 *per share* in the 2019 financial year, up from $0.481 per share in the previous financial year.

Share price information is given for the current period. For example, it shows that the share price of X Limited at the last sale the previous day was $5.36, which was down 4.2 cents on the previous day's closing price.

When the financial statements are produced, and announcements like Exhibit 2.8 are made from them, the statements will reflect the same things. Therefore, share prices will go up or down when investors receive news about a company that changes the attractiveness of its shares. If this news comes out before the financial statements and the above announcements (which is usually the case, especially for well-known companies that are frequently in the news), then the share price will already have changed in the manner to be expected from the announcements. If an announcement (surprisingly good or bad results) is not expected, then the share prices will change when the announcement is made, because the announcement *is* the news. In either case, share market prices and profit announcements tend to end up moving in the same direction, and therefore are correlated.

EXHIBIT 2.8

X LIMITED

ANNOUNCEMENTS OF COMPANY PROFITS IN THE FINANCIAL PRESS

Full year	2019 $m	2018 $m
Sales	1 672.2	1 571.3
Pre-tax	537.9	491.7
Net	605.6	529.3
EPS	55.5¢	48.1¢
Final div.	13¢ff	13¢ff
Shares (last)	$5.36	-4.2¢

Managers of companies with traded shares are therefore keenly aware of accounting's profit measurement, because accounting is tracking factors that investors are concerned about. If the investors do not learn about these factors from other sources, they will certainly learn about them from the accounting statements.

The income statement is also important for managers of smaller companies or private companies. While their shares are not traded, managers and owner–managers of smaller companies are also concerned about management bonuses, income tax and other effects of profit figures.

Managers of many companies – especially, but not only, larger corporations – go to great lengths to explain their performance to investors and to people on whom investors rely, such as share market analysts and business journalists. Therefore, every manager should be conversant with how her or his performance is measured in the income statement – because a lot of other people are!

PRACTICE PROBLEMS

Solutions to practice problems can be found at the end of the chapter. These problems are intended to facilitate self-study and additional practice: *don't look at the solution for any of these without giving the problem a serious try first*, because once you have seen the solution it always looks easier than it is.

PRACTICE PROBLEM A

Calculate net profit

Assume this is the first year of operations for the company. Using the following information calculate net profit before tax.

	$
Credit sales	300 000
Cash sales	100 000
Cash received from accounts receivable	160 000
Cost of goods sold	70 000
Cash purchases of inventory	90 000
Operating expenses paid	80 000
Operating expense incurred during the year but owing at year-end	30 000

PRACTICE PROBLEM B

Prepare a balance sheet appropriately classified

From the following information, prepare a balance sheet, appropriately classified, as at 30 June 2019 for PSM Limited.

	$000
Share capital	108 518
Cash	11 636
Accounts payable	43 091
Investments ($3 371 000 held for short-term investment)	5 458
Retained profits	28 546
Prepayments	3 958
Accounts receivable	47 515
Long-term borrowings	30 866
Inventory	66 479
Provisions for employee entitlements ($30 919 000 due within one year)	34 888
Property, plant and equipment	67 760
Other long-term assets	42 742
Other receivables (due in more than one year)	361

PRACTICE PROBLEM C

Revenues and expenses

The following transactions occurred during 2019.

1. Issued shares to investors for cash.
2. Provided services to customers, receiving part in cash and the rest on credit.
3. Incurred advertising expense, paid in cash.
4. Collected cash from accounts receivable.
5. Repaid a bank loan.

6 Purchased equipment on credit.
7 Bought inventory for cash.
8 Sold goods on credit (COGS equals 60 per cent of sales).
9 Paid wages expense for the period.
10 Received a loan from the bank.
11 Incurred maintenance expense, paid cash.
12 Declared and paid a cash dividend to investors.

For each of the transactions, indicate the effect (+ for increase and – for decrease) of each transaction on revenues, expenses and net profit. Write NE if there is no effect.

PRACTICE PROBLEM D

Income statement and balance sheet

Isabelle Limited started business on 1 September 2019. During the first month in business the following transactions occurred.

a Issued share capital, $100 000.
b Paid one month's rent of $2000.
c Provided services to customers on credit, $30 000; $11 000 of this amount had been received by the end of the month.
d Paid wages of $7000.
e Received a $1000 bill for cleaning services on the newly rented property. The bill will be paid in October.

Required:

1 Prepare an income statement for the month of September 2019.
2 Prepare a balance sheet at 30 September 2019.

HOMEWORK AND DISCUSSION TO DEVELOP UNDERSTANDING

This section starts with simpler discussion questions that revise some of the basic concepts, which are then followed by a set of problems.

DISCUSSION QUESTIONS

1 Define the following terms in your own words:
   a revenue
   b expense
   c net profit
   d dividend
   e retained profits
   f shareholders' equity.
2 What is the difference between current and noncurrent assets?
3 What is the difference between current and noncurrent liabilities?
4 Do liabilities always involve future payments of cash?
5 Suggest two ways retained profits may decrease.
6 How can a balance sheet answer the following questions:
   a Is a company financially sound?
   b Can a company pay its bills on time?
   c Should the board of directors declare a dividend?
   d How old is the equipment?

7 Explain the main differences between the alternative methods of setting out a balance sheet: the side-by-side style and the vertical style.
8 List three liabilities that can be either current or noncurrent liabilities. What determines their categorisation?
9 The CEO of a large Australian company announced at a recent shareholders' meeting: 'Our people are our greatest assets.' If this is the case, why are they not included in the balance sheet?
10 Explain the following in non-technical language that a business person who has not read this text would understand:
   a Why is net profit part of shareholders' equity?
   b Why are dividends to shareholders not considered to be an expense in calculating net profit? Employee wages are considered to be an expense, as is the cost of products delivered to customers, and shareholders must be kept happy, as must employees and customers.
11 Why are inventory and accounts receivable normally current rather than noncurrent assets? When would they be noncurrent assets?
12 Provide one example each of investments, intangibles, prepayments and accrued expenses.
13 Provide an indicator of whether a company is financially sound.
14 Provide an indicator of whether a company can pay its bills on time.
15 Consider any company you are familiar with or interested in and make a list of all the people who might be interested in its balance sheet. Make your list using the following headings:

Person (decision-maker)	**Use (decision to be made)**

Try to think about the 'use' issue broadly: your list could easily be a long one. You might make it even more broad by including people you think might like to use the balance sheet but whose needs are not served by it as you understand it, or who do not have timely access to it.
16 'Financial reports are no longer timely today.' Discuss.
17 Can a single balance sheet ever satisfy all the users of a company's financial statements, or should there be different balance sheets prepared to meet the differing needs of users? Write a paragraph giving your considered views.
18 'You can have a perfectly accurate balance sheet 50 years after year-end.' Discuss.
19 Explain why the difference between current and noncurrent liabilities is important to a company.
20 Explain the difference between an accrued expense and a provision.

PROBLEMS

PROBLEM 2.1

Classifying accounts on a balance sheet

Below are some of the accounts of MM Ltd:

1 Share capital
2 Accounts payable
3 Cash and cash equivalents
4 Inventory
5 Borrowings
6 Provision for employee entitlements (current portion)
7 Wages payable
8 Equipment
9 Prepayments
10 Retained profits

State whether each would be classified as an asset, a liability or shareholders' equity.

PROBLEM 2.2

Interpreting balance sheets

1 'The company is in a position to utilise a strong balance sheet to make acquisitions that should boost its earnings per share.'
2 'The company has maintained a strong balance sheet and had ample capacity to expand its business.'

Discuss the implications of each of these statements from the point of view of the comments made on their balance sheets.

PROBLEM 2.3

Prepare a classified balance sheet

Based on the following information, prepare an appropriately classified balance sheet as at 30 June 2019 for JKL Limited.

	$000
Share capital	45 092
Cash	63 382
Accounts payable	105 344
Retained profits	39 346
Accounts receivable	98 264
Interest-bearing liabilities (current)	192 370
Inventories	110 234
Provisions (current)	70 876
Property, plant and equipment	181 148

PROBLEM 2.4

Prepare a classified balance sheet

From the following information, prepare a balance sheet, appropriately classified, as at 30 June 2019 for Cobin Ltd.

	$
Share capital	150 000
Property, plant and equipment, at cost	550 000
Accounts payable	61 000
Accounts receivable	68 000
Cash and cash equivalents	43 000
Notes payable	30 000
Prepayments	10 000
Long-term debt, excluding current portion	200 000
Long-term investments	110 000
Provision for employee entitlements (noncurrent)	34 000
Retained profits	184 000
Income taxes payable	32 000
Inventory	81 000
Patents and trademarks	44 000
Current portion of long-term debt	25 000
Accumulated depreciation	190 000

PROBLEM 2.5

Explain balance sheet ideas to a business executive

You are the executive assistant to Stephane Solden, a particularly hard-driving and successful owner of a chain of restaurants. Not long ago, Solden and you were flying to another city, and the inflight film was so bad the two of you ended up talking about all sorts of things. One subject was Solden's impatience with accountants and accounting which, probably because the annual audit of the company's accounts was then taking place, seemed particularly strong. How would you respond to the following questions from Solden?

1. 'The main thing that sticks in my mind about the balance sheet is that the thing balances! Who cares? Why should it matter?'
2. 'My auditor keeps wanting to talk to me about what the balance sheet says about the company's finances and how I've managed them. But I always look to the future – why should I care about the balance sheet when it's just a ''snapshot'' of history?'
3. 'Last year, I had a really good idea about the balance sheet. You know, I consider our restaurant managers to be the most important asset the company has. I was going to have the managers added to the balance sheet as assets, so it would show all our assets. But the accountants and auditors didn't seem interested in my idea. Why not?'

Required:

Classify each item as it would be reported on a balance sheet using the following categories: current asset, noncurrent asset, current liability, noncurrent liability and shareholders' equity.

PROBLEM 2.6

Prepare a classified balance sheet

From the following information, prepare an appropriately classified balance sheet as at 30 June 2019 for SPOM Limited.

	$000
Share capital	71 667
Cash	32 000
Accounts payable	57 634
Retained profits	42 666
Receivables ($1 549 000 due in more than one year)	49 132
Interest-bearing liabilities ($8 732 000 due this year)	96 185
Intangibles	49 053
Inventories	55 117
Provisions ($31 704 000 due within one year)	35 438
Property, plant and equipment	90 574
Other long-term assets (financial assets)	19 390
Prepayments	8 324

PROBLEM 2.7

Basic retained profits ideas

Assume a balance of $12 220 for retained profit at 30 June 2019.

1. Explain what 'retained profits' represents.
2. For the year ended 30 June 2019, the company's revenues were $101 160 and its expenses (including income tax) were $98 810. During the year ended 30 June 2019, the company declared dividends of $1200. What was the balance in retained profits at the beginning of that year (1 July 2019)?
3. If the 2019 expenses were $116 000 instead of the figure in point 2, and the company did not declare any dividends, what would the retained profits be at 30 June 2019? How would you interpret this number?