

ACCOUNTING

VCE UNITS 1&2

STUDENT BOOK

**NEVILLE
BOX**



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About the author

Author acknowledgements

Neville Box

Neville Box is an experienced and highly esteemed educator who has been teaching VCE Accounting since 1981. He has been involved in the development of Accounting study designs since 2008. His depth and breadth of knowledge, combined with his accessible presentation style, make him a sought-after presenter for professional development events. Neville currently teaches at St Bernard's College in Essendon, Victoria.



I am delighted to present to you the seventh edition of *Accounting VCE Units 1 & 2*. Although it is the seventh edition, it is the first one to be fully published under the banner of Matilda Education. I therefore thank all the staff at Matilda for their support in ensuring that this series has been able to continue for yet another study design. Our goal is to produce a text and relevant support materials to assist students and teachers in VCE Accounting across the state. In particular, I would like to thank Greg Browne (Executive Director) for believing in this project and Olive McRae (Publishing Director) for being the driving force behind the preparation of this series. It has been a pleasure to work closely with Olive as we have further refined this text to suit the needs of teachers. Olive has been able to keep me focused (no small feat!), and has been totally supportive over the last 12 months. She is a highly professional publisher, with innovative ideas, and I thank her sincerely for her efforts in ensuring that this text is second to none. I would also like to acknowledge Robyn Flemming (Editorial), Hannah Tatton (Production), Nicole Melbourne and Jacquie Poon (Typesetting), Katrina Tucker and Kim Lowe (Sales) and the rest of the Matilda team for their support, enthusiasm and professionalism. It has been my pleasure to work with such a positive publishing company.

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*For Therese: my best friend,
my soul mate, my loving partner.*



Study planner

The chapters in each unit are organised to introduce the content logically and to consolidate the key knowledge and skills required to meet the Area of Study (AOS) outcomes.

The table on the following pages provides a summary of the knowledge and skills covered in each chapter and makes suggestions for pacing.

- The study design requires at least 50 hours of classroom instruction per unit.
- Your score in Units 1 & 2 will be determined by the assessment and levels of achievement selected by your school.
- Assessment of levels of achievement for Units 1 & 2 will not be reported to the VCAA.
- All assessments at Units 1 & 2 are school-based.

Unit 1

Week	Chapter	AOS	Outcome	Key knowledge	Key skills
1	1 Let's go accounting!	1	1	• the role of professionals such as accountants and business advisors • the elements of accounting	• use correct accounting terminology • research information from a range of sources
2	2 Accounting for small business ETHICAL CONSIDERATIONS	2	2	• qualitative characteristics of accounting and accounting assumptions	• explain and apply relevant qualitative characteristics and accounting assumptions
3 & 4	3 Balance sheets for a small business ACCOUNTING IN THE REAL WORLD	1, 2	1, 2	• the accounting elements • current and non-current assets • current and non-current liabilities • the twofold effect of transactions on the accounting equation	• distinguish between current and non-current assets and current and non-current liabilities • analyse the effects of financial transactions on the accounting equation
5	4 Single entry accounting for a small business CASE STUDY ETHICAL CONSIDERATIONS	2	2	• documents used by a business to record financial transactions	• identify, classify and record financial data, both manually and through the use of ICT
6	5 Establishing a small business ACCOUNTING IN THE REAL WORLD	1	1	• reasons for establishing a business • factors that lead to success and failure of a business • types of ownership structures	• research information from a range of sources • discuss factors affecting the level of success or failure of a business
7	6 Investment opportunities ACCOUNTING IN THE REAL WORLD ETHICAL CONSIDERATIONS	1	1	• alternative investment opportunities for establishing a business	• discuss a range of alternative investment opportunities for establishing a business
8	7 Recording and reporting cash flows CASE STUDY	1, 2	1, 2	• the purpose and use of special journals • cash receipts and cash payments journals	• identify, classify and record financial data, both manually and through the use of ICT





Week	Chapter	AOS	Outcome	Key knowledge	Key skills
9 & 10	8 Income statements for a service firm CASE STUDY MODELLING EXERCISE	1, 2	1, 2	- accounting reports and information used in judging the success or failure of a business - the distinction between cash and profit	- describe and use accounting information presented in written reports and graphical representations to make a judgment on the success or failure of a business - prepare accounting reports, including spreadsheets, for a service business, manually and using ICT
11	9 Accounting for credit transactions ETHICAL CONSIDERATIONS	2	2	- the nature of cash and credit transactions - materials and supplies required by a service business - sales and purchases journals	identify, classify and record financial data, both manually and through the use of ICT
12	10 Financing for a small business ACCOUNTING IN THE REAL WORLD	1	1	- resources required to establish a business - internal and external sources of finance	describe the sources of finance available to a business
13	11 Cash flow statements	1, 2	1, 2	accounting reports and information used in judging the success or failure of a business	- describe and use accounting information presented in written reports and graphical representations to make a judgment on the success or failure of a business - prepare accounting reports, including spreadsheets, for a service business, manually and using ICT
14	12 Price-setting strategies CASE STUDY ETHICAL CONSIDERATIONS	1	1	- price-setting methods such as recommended retail price, mark-up and cost-volume-profit analysis - graphical representations	- apply and use different methods of price setting - apply theoretical knowledge to actual and simulated situations
15	13 Evaluating the performance of a service business CASE STUDY	2	2	- accounting reports and information used in judging the success or failure of a business - indicators of business performance - graphical representations	- apply and use different methods of price setting - apply theoretical knowledge to actual and simulated situations
16	14 Internal control	2	2	internal control procedures to safeguard resources against theft and fraud	explain and apply appropriate internal control procedures

Unit 2

Week	Chapter	AOS	Outcome	Key knowledge	Key skills
1	15 The twofold effect of transactions	1	1	- characteristics of a trading business - the elements of accounting - preparation of historical balance sheets	- use correct accounting terminology - distinguish between current and non-current assets, and current and non-current liabilities
2	16 Cash records for a trading firm	1	1	- documents used by a business to record financial transactions - the purpose and use of special journals - cash receipts and cash payments journals	- identify, classify and record financial data - manually record transactions in cash journals - use ICT, including spreadsheets, to record transactions and construct appropriate graphical representations
3 & 4	17 Accounting for inventory	1	1	- the cost price of inventory - inventory cards using FIFO and Identified Cost to record sales, purchases, returns and inventory losses and gains - the reporting of inventory	- manually record transactions in inventory cards - use ICT, including spreadsheets, to record transactions and construct appropriate graphical representations
5 & 6	18 Managing a trading business CASE STUDY MODELLING EXERCISE	1	1	- indicators used to measure business performance in relation to inventory - recording of drawings of inventory and inventory used for advertising purposes - effective inventory management - internal controls in relation to inventory	- apply theoretical knowledge to simulated situations - discuss the effects of alternative inventory management strategies on the performance of the business
7	19 Credit transactions for a trading business ETHICAL CONSIDERATIONS	1, 2	1, 2	- the purpose and use of special journals - sales and purchases journals - indicators used to measure business performance in relation to accounts receivable and accounts payable - recording of settlement discounts - bad debts - strategies for effective management of accounts payable and accounts receivable - non-financial factors in relation to accounts receivable and accounts payable	- manually record transactions in sales and purchases journals - apply theoretical knowledge to simulated situations - discuss alternative strategies in relation to accounts receivable and accounts payable - discuss ethical considerations in relation to accounts receivable and accounts payable
8	20 Income statements for a trading business CASE STUDY ETHICAL CONSIDERATIONS	2	2	- preparation of historical income statements - reporting of cash and credit transactions	prepare historical income statements for a trading business, both manually and using ICT





Week	Chapter	AOS	Outcome	Key knowledge	Key skills
9	21 Cash flow statements for a trading business ETHICAL CONSIDERATIONS	1	1	- preparation of historical cash flow statements - reporting of cash flows from accounts receivable and to accounts payable	prepare historical cash flow statements for a trading business, both manually and using ICT
10	22 Accounting for non-current assets CASE STUDY ETHICAL CONSIDERATIONS	3	3	- valuation of non-current assets - the straight-line method of depreciation - reporting depreciation in the income statement and balance sheet - effective non-current asset management, including the use of asset registers - indicators used to measure performance in relation to non-current assets - ethical considerations when purchasing and managing non-current assets	- explain and apply relevant qualitative characteristics and accounting assumptions in relation to depreciation - apply theoretical knowledge to simulated situations - identify, classify, record and report financial data using manual processes and ICT, including spreadsheets - determine the valuation of a non-current asset - select and justify strategies for improving business performance in relation to non-current assets
11	23 Reducing balance method of depreciation	3	3	- reducing balance method of depreciation - selecting a depreciation method - reporting depreciation in the income statement and balance sheet	- explain and apply relevant qualitative characteristics and accounting assumptions in relation to depreciation - apply theoretical knowledge to simulated situations - identify, classify, record and report financial data using manual processes and ICT, including spreadsheets - determine the valuation of a non-current asset - model the potential impact of different options when deciding to purchase a non-current asset
12 & 13	24 Budgeting for a small business CASE STUDY	1	1	budgeted income statements, cash flow statements and budgeted balance sheets	- prepare budgeted income statements, budgeted cash flow statements and budgeted balance sheets - apply theoretical knowledge to simulated situations - model potential outcomes of different options, analyse the results and provide advice
14 & 15	25 Headstart: An introduction to double entry accounting			preparation for Units 3 & 4 of VCE Accounting	record transactions using a double-entry accounting system

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Practise and apply activities in every chapter

Practice will improve your score.
Stay organised and complete all the activities in the chapter.

Prior knowledge quiz

Consolidate key knowledge prior to starting a new chapter.

Topic quiz

Check your understanding before starting a new topic.

Chapter revision quiz

Sharpen your recall with the chapter revision quizzes.



Revision notes: PPT summarising key concepts

Customise to make personalised study notes.



Exercises (completed on paper or in Excel spreadsheets)

Record transactions both manually and using ICT.



Ethical considerations, case studies, modelling activities

Build your skills in applying theoretical knowledge to simulated situations.

Modelling questions provide the opportunity to model and analyse.

Exam-style questions

Start building familiarity with exam-style questions.

Video of selected exercises and exam-style questions being completed, with step-by-step instructions and advice.

Develop confidence and build familiarity with the process of successfully answering questions.



Opportunities to apply theoretical knowledge to simulated situations, to use ICT and to practise accounting terminology are woven throughout the text.

And don't forget the appendix of over 300 Check your understanding questions to consolidate your content knowledge and hone your written response skills. Answer the questions after completing each section of the chapter. See page 430.





UNIT 1

The role of accounting in business

The content in Unit 1 of the VCE Accounting course will be covered in the following chapters:

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CHAPTER

1

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Let's go accounting!

KEY TERMS

Revenue
Expenses
Profit
Assets
Liabilities
Owner's equity

This chapter starts with an overview of the basic concepts and purposes of accounting. You will learn some key accounting terms and examine how financial reports set out accounting information.

Learning objectives

By the end of this chapter, you will be able to:

- **describe** what is involved in accounting [\[1.1\]](#)
- **define** the terms 'revenue', 'expenses' and 'profit' [\[1.2\]](#)
- **explain** what the terms 'assets', 'liabilities' and 'owner's equity' mean [\[1.2\]](#)
- **identify** and **define** essential accounting terms [\[1.3\]](#)

Estimated time required: 1 week



1.1 What is accounting?



Accounting is the process of recording financial events, reporting on these events, and providing accurate information to support sound financial decisions.

Who benefits from accounting information?

- Most Australians, during their lives, earn a salary or a wage; save, invest and borrow money; and pay taxes.
- Managers of businesses, both large and small, make financial decisions on a daily basis.
- Government departments, and the government itself, prepare budgets, record and control costs, and collect taxes.

In other words, accounting and the world of finance is relevant to everyone and everything.

In simple terms, accounting involves an ongoing, continuous process throughout the life of a business, as follows:

- 1 collecting financial data
- 2 recording financial data
- 3 reporting financial information
- 4 analysing financial reports
- 5 making decisions for the future.

Don't think of these steps as separate events. They are all part of a continuous system that exists in the day-to-day life of a business.

Accounting as a career

Accounting qualifications can open doors to a variety of industries, because all businesses must report regularly on their financial events. Accountants are involved in a range of activities and specialist areas – they don't just do tax returns!

Common types of accounting include:

- financial accounting
- management accounting
- tax accounting
- forensic accounting (especially in relation to investigations of fraud)
- environmental accounting
- financial planning (including superannuation)
- government accounting
- small business accounting.

Accounting is a dynamic profession because accountants must keep up to date, particularly with changes in technology.

Let's get started on exploring these topics!





1.2 Accounting in the real world

Accounting relates directly to the real world. Businesses prepare financial reports on a regular basis. Large companies (known as public companies) make their financial reports available to the general public. This is a legal requirement, because members of the public may want to invest in these companies.

Individuals invest in companies via the Australian Securities Exchange (ASX), which is a marketplace for buying and selling shares. Many people own shares in companies such as BHP, Telstra and the Commonwealth Bank. They want accounting information that indicates how their investments are performing.

Many people also invest in small businesses. In every Australian suburb and country town, you will find people who work for themselves, running their own small business. In this sector, many businesses don't need a full-time accountant. Instead, business owners may consult regularly with an accountant who has the important roles of helping them to understand their finances and supporting their decision-making.



1.3 Essential accounting terms



All VCE subjects use specialist, technical language in their study designs, and accounting is no different. You will need to understand both the practical applications of this subject as well as the theory behind it. Accounting does use some technical language, and you will learn key terms throughout this text. The following terms are a starting point and an introduction to your first financial report.

Revenue is the inflow of resources to a business when it sells goods or provides services to its customers. For example, when a plumber receives \$200 for repairing spouting, this amount is referred to as the plumber's revenue. Similarly, when a shop sells a dress for \$300, it earns \$300 revenue. Other forms of revenue exist, but 'sales' most often describes the revenue earned in these situations.

Expenses are the economic resources (assets) under the control of a business that are lost in generating revenue. Examples of assets include cash, the goods we sell (known as inventory), and longer-term items such as furniture and vehicles. These assets decrease when we use them up to make sales revenue. When we make a sale, our inventory decreases; our revenue increases when the sale is completed.

Profit is how much money a business earns. Simply, it's revenue minus expenses. So, if our total sales for a year were \$100 000 and our expenses were \$40 000, the business made a profit of \$60 000 ($\$100\,000 - \$40\,000 = \$60\,000$). Net profit is the result when *all* expenses have been accounted for. Of course, if a business's expenses over a period of time are greater than its revenue, it will make a *net loss* for that period.

Assets are economic resources that a business controls now as a result of past events. These resources are expected to produce economic benefits for the business in the future. Assets can include computers, shop fittings, land and buildings, and other items.

Liabilities are a business's present obligations to transfer economic resources as a result of past events. If a business takes out a loan, it has a liability because it's obliged to repay that money. It also has a liability if it purchases something on credit, as it has promised to pay the debt at some time in the future.

Owner's equity is the owner's remaining value or interest in the business after liabilities are deducted from assets. If a business's total assets are \$500 000 and its liabilities are \$200 000, then its owner's equity is \$300 000 ($\$500\,000 - \$200\,000 = \$300\,000$).

An **income statement** shows a business's revenues and expenses over a period of time. The end result of this financial report is the business's net profit (or loss).

A **cash flow statement** reports the cash a business receives, and the cash it pays, over a period of time. The end result is the business's actual bank balance at the end of a particular period.

A **balance sheet** shows a business's financial position. This report lists all its assets and liabilities on a particular date. As shown above, assets minus liabilities equals owner's equity, which is also reported in a balance sheet.

If a business provides goods or services to customers on credit, this creates an **accounts receivable**. These customers must pay off their account within a certain period of time, usually 30 days.

Just as some businesses sell on credit, they may also buy on credit from their suppliers. This activity creates an **accounts payable**. The suppliers, who are often wholesalers who sell goods in large quantities, usually require small business owners to pay off the amount they owe within 30 days.

revenue increases in assets, or decreases in liabilities, that result in an increase in owner's equity, achieved by providing goods or services to customers

expenses decreases in assets, or increases in liabilities, that result in a decrease in owner's equity

profit the excess of revenues over expenses for a specific period of time

assets present economic resources under the control of a business entity, with the potential to produce future economic benefits for the business

liabilities an entity's present obligations to transfer economic resources to another entity

owner's equity the residual interest an owner has in a business after liabilities are deducted from assets



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [1.1]** Accounting is the process of recording financial events, reporting on these events and providing accurate information to support sound financial decisions. It is relevant to everyone. Accounting is a dynamic profession, and accountants may specialise in a variety of areas.
- [1.2]** Accounting information may be used by individuals in their private lives, by owners of small businesses and by large companies to help with decision-making.
- [1.3]** Assets are resources with the potential to produce economic benefits for a business, while liabilities are obligations to pay or transfer resources to another entity. Owner's equity is the owner's financial interest in their business after deducting liabilities from assets.
- [1.3]** A business's revenues lead to increases in assets, including cash, by providing goods or services to customers. Its expenses cause decreases in assets that are used up to produce revenue. Its overall profit is its revenues minus its expenses.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 The accounting system

The accounting system is made up of five stages. Identify steps 2 and 3 in the following diagram.



2 Essential accounting terms

Match the following accounting terms with the best description from the list provided on the right.

1 Revenue	A Customers who have been provided with goods but have been given 30 days to pay.
2 Expenses	B Economic resources that have future economic value to a business.
3 Assets	C The present obligations of a business to make future payments to other businesses.
4 Liabilities	D A report used to determine profit for a period.
5 Accounts payable	E The costs of running a business through the sacrifice of resources.
6 Income statement	F A report that shows a business's financial position.
7 Accounts receivable	G Income received from the provision of goods or services.
8 Balance sheet	H Suppliers who accept payment at a later date for goods provided to a business today.



Workbook
p. 2



XL template



Workbook
p. 2



XL template



Workbook
p. 3



XL template

3 Researching the banking sector

Australia's 'big four' banks are the National Australia Bank (NAB), Commonwealth Bank of Australia (CBA), Australia & New Zealand Banking Group (ANZ) and Westpac Banking Corporation (Westpac). Which of these four banks do you think has the highest value of assets? Using the internet, find out some financial information from the latest available annual report of each of these banks.

Using a spreadsheet and the websites of the various banks, prepare a summary of your findings in relation to the following financial data. As the numbers will be large, express your results in millions of dollars.

Hint

The information can be found in the report's balance sheet.

	NAB (\$M)	CBA (\$M)	ANZ (\$M)	Westpac (\$M)
Total assets				
Total liabilities				
Owner's equity*				

*Also known as shareholders' equity

- a** Which bank has the greatest value for total assets?
- b** Which bank has the greatest amount of debt to others?
- c** Rank the banks in order of owner's equity, from highest to lowest.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 2



Accounting for small business

KEY TERMS

Accounting period
Data
Information
Accounting standards
Timeliness
Understandability
Relevance
Faithful representation
Comparability
Verifiability
Period assumption
Accrual basis assumption
Going concern assumption
Accounting entity assumption
Entity
Ethics

In this chapter, you will explore the characteristics of effective accounting reports used by small businesses, the assumptions that are the basis of accounting, and the ethical issues that businesses must consider.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** the concept of 'small business' [2.1]
- **describe** the role of accounting in the small business sector [2.2]
- **distinguish** between financial data and financial information [2.3]
- **identify** a variety of users of accounting [2.3]
- **describe** the six qualitative characteristics of accounting [2.4]
- **outline** the four generally accepted accounting assumptions [2.5]
- **discuss** an ethical issue in relation to operating a business [2.6]

PRIOR KNOWLEDGE

CHAPTER 1 Let's go accounting!



Estimated time required: 1 week





2.1 The concept of 'small business'

Small businesses operate in every Australian city, suburb and country town. (Victoria has almost 600 000 small businesses.) They play an important role in satisfying consumers' demands for specific goods and services.

But what exactly is a small business? A strict definition is almost impossible. However, a 'typical' small business usually has some of these features:

- a sole proprietor (one owner) or a partnership (a few owners)
- an owner who also manages the business
- an owner who contributes most of the finances the business requires
- a relatively small turnover (the amount of revenue in a particular **accounting period**)
- few, if any, employees
- a customer base mostly in the local area
- a relatively small market share.

accounting period the period of time over which revenues are compared with expenses to determine profit

There is no clear point at which a 'small business' becomes a 'big business'. Some small businesses may have up to 20 employees and be financed by loans from banks or other financial institutions. A small business may be registered as a company, rather than as a sole proprietorship or partnership. Many small businesses operate entirely online, catering to the needs of customers outside the local area.

The focus for your VCE Accounting studies will be the local and small business sector, which includes businesses such as local cafés, plumbers, clothing stores, dentists and so on.

Small businesses tend to cater mostly to the needs of customers or clients in their local area.



2.2 The role of accounting in small business



The typical small business doesn't employ a financial expert on a full-time basis. Some business owners have the skills to manage their own finances – possibly because they studied Accounting in secondary school or at university.

However, not all business owners can handle the Goods and Services Tax (GST), income tax deductions, cash management and the recording of business transactions. Small business owners often seek help with these financial matters from qualified accountants.

A qualified accountant is a member of either the Australian Society of Certified Practising Accountants (i.e. a CPA) or the Institute of Chartered Accountants in Australia (i.e. a CA). These accountants can provide financial advice on matters such as:

- identifying future prospects for a potential business
- designing an accounting system for a small business
- choosing computerised accounting packages
- meeting taxation requirements, including payroll tax, income tax, the GST and business activity statements (BAS)
- determining the selling prices of goods
- controlling transactions made on credit
- managing inventory (goods being sold)
- identifying the types of financial records to keep
- sourcing finance
- identifying investment opportunities
- planning for the future of the business.

Other financial advisors

Small business owners may also consult with financial advisors other than accountants. Banks, for example, often provide advice to small business owners as part of an overall package of business finance.

Government departments also support small businesses because they play an important role in the Australian economy. The Victorian Government's Business Victoria department assists small business owners. Its website offers advice and resources to help with:

- setting up a business
- marketing and sales (including e-commerce)
- money, profit and accounting
- hiring and managing staff
- small business events and workshops.



Business Victoria
mea.digital/businessvic



2.3 Financial data versus financial information

data a collection of raw facts

information data put into a meaningful form for a particular use

In finance, as in statistics, it's important to distinguish between data and information. **Data** refers to a collection of raw facts; **information** is data put into a meaningful form for a particular use.

In accounting, data is often recorded on business documents. These documents are then used to make entries in a recording system. Each document relates to a particular part of the accounting system and should produce some type of meaningful information.

Consider the business document in Figure 2.1, which is a receipt issued by Central Sports.

Figure 2.1 Cash receipt

CENTRAL SPORTS		TAX INVOICE
ABN 212 191 922 22		Date 02/02/28
Received from	David Semini	
The sum of	\$80	
Plus GST	\$8	← Tax invoices are required to show the amount of GST a business is charging and collecting.
Total received	\$88	← Business documents are used to record important financial information.
For	2 cricket balls	

This receipt contains data (raw facts) about one business transaction. It states clearly that the business trading as Central Sports has received \$88, including \$8 for GST.

These facts become more meaningful when they are processed and entered into an accounting record. For example, at the end of a week's trading, the manager of Central Sports can calculate total receipts and summarise the week's cash sales. This is a simple example of financial information that originates from raw data on business documents.

Financial information and accounting

A well-designed accounting system provides a business owner with information about things such as sales levels, profit margins, debts owed to the business and debts the business owes. To make effective decisions, the owner must be able to collect the required data, sort and classify it, and summarise it into a useful form. These steps make up the basic accounting process and are shown in Figure 2.2.

Figure 2.2 The accounting process



The figure shows how important accurate financial information is when making decisions. These decisions will often be made at the end of the accounting process, so they can only be as good as the information that's provided. If the financial information is inaccurate, or if it's not available when it's required, managers' poor decisions may affect the performance of the business. If the information is always accurate and produced on time, managers are more likely to make sound decisions.

Users of financial information

It isn't just the owners of a business who need the financial information its accounting system generates. Other users include:

- *management*, when the owner isn't also the manager
- *banks*, to evaluate the business's finances
- *other lenders*, to assess if the business is a 'good risk'
- *suppliers*, to assess the business's ability to repay its credit accounts
- *government departments*, perhaps to assess the owner's tax liability
- *potential owners*, to evaluate the potential of the business
- *employees*, to evaluate the potential for improved conditions such as wage increases.

To satisfy all these users of financial information, the accounting system must be both accurate and flexible.

The owner and/or manager is likely to place the most frequent demands on the accounting system and may use financial information for a variety of reasons. However, the owner may sometimes have to provide specific information to other users.

2.4 Qualitative characteristics of accounting



The International Accounting Standards Board (IASB) has created a conceptual framework for the accounting profession. This framework basically provides the rules of accounting, including six qualitative characteristics that financial information should have.

As the name implies, the International Accounting Standards require accountants around the world to follow one set of rules, or **accounting standards**.

The six qualitative characteristics (shown in Figure 2.3) are intended to ensure that the reports prepared by accountants are useful to a range of users.

accounting standards
rules and regulations that provide a framework of acceptable accounting procedures



Use the acronym 'TURF CV' in your notes to help you remember the six qualitative characteristics.

Accounting reports must be informative in order to satisfy a range of different users.

Figure 2.3 The six qualitative characteristics of accounting reports

timeliness a qualitative characteristic of accounting that requires information to be presented in a timely manner so that it may influence decisions

understandability a qualitative characteristic of accounting that requires information to be presented clearly and concisely in an understandable fashion

relevance a qualitative characteristic of accounting that requires all information that could influence decision-makers to be included in accounting reports

faithful representation a qualitative characteristic of accounting that requires information being reported to be complete, without bias and free from error

comparability a qualitative characteristic of accounting that requires financial reports to be prepared using consistent accounting methods so that performance can be compared

verifiability a qualitative characteristic of accounting that enables accounting information to be checked against business documents

Timeliness

Relevant information should be available to decision-makers in time to influence their decisions. A lack of **timeliness** can reduce the information's potential usefulness; the older it is, the less useful it is.

Understandability

Users with a reasonable knowledge of business and economics should be able to find the financial information **understandable**. To be understandable, information should be presented clearly and concisely. Accounting reports are often complex and contain specialised terms. It's important to prepare reports so that users can quickly understand what they are intended to show.

Relevance

Relevant information can make a difference to the decisions made by users. **Relevance** requires financial information to relate to an economic decision. Information is relevant if it:

- influences a user's decision-making in relation to the business
- helps them to make predictions about the outcomes of events
- gives them feedback on their previous decisions and evaluations.

Given that one accounting report may have several users, the accountant must ensure that all relevant information is available to all users.

Faithful representation

The information in a report must be a **faithful representation** of the real-world economic event it represents. The user of the information should be confident that the information is complete, unbiased, neutral and free from error.

Comparability

Comparability allows users to identify and understand similarities and differences between reports. Information about an entity is more useful if it can be compared with information about other entities, or with information about the same entity for another period or date. Accountants often want to compare a business's results in one year with those of previous years.

Verifiability

Verifiability means that the information can be confirmed as correct. Financial information should therefore be supported by evidence that users can check to verify it is faithfully represented. Such evidence includes business documents that provide the details of financial transactions.

2.5 Accounting assumptions



In addition to the qualitative characteristics, several accounting assumptions have become generally accepted over time (see Figure 2.4). These assumptions help to support the qualitative characteristics.



Figure 2.4 The four accounting assumptions

Period assumption

The **period assumption** is that reports are prepared for a particular period of time, such as a month or a year. To determine profit, recognise the revenue for a period and then deduct the expenses incurred in that same period.

There is no minimum period over which profit is measured. The Australian Taxation Office (ATO) sets the maximum period as one year, to enable it to assess all businesses or their owners for income tax.

The period assumption helps to ensure *comparability* of results. Only information relevant to that one period should be reported at that time (the characteristic of *relevance*). Items not relevant to that period should be entered in other reports for other accounting periods.

period assumption financial events are recorded and reported for a specific period of time, which allows valid comparisons of performance to be made

Accrual basis assumption

Under the **accrual basis assumption**, revenue is recognised when it can be measured in a faithful and verifiable manner. Expenses are also recognised when the consumption of goods or services can be measured. We can then determine profit for an accounting period by subtracting expenses incurred during that period from revenue earned in that same period.

Again, the accountant should only recognise revenues and expenses that are *relevant* to that particular period.

accrual basis assumption profit for a given period of time is determined by deducting expenses incurred from the revenue earned in that same period

going concern assumption

a business will continue to operate indefinitely and won't be wound up in the near future

Going concern assumption

Financial reports are prepared on the assumption that the business entity will continue to operate indefinitely. The **going concern assumption** is that the entity won't be wound up in the near future but will continue its business activities. This allows for assets and liabilities to be reported on a balance sheet, because these often continue on to the next accounting period. Depending on the business, a distinction can be made between assets that provide benefit to future accounting periods, and expenses that are fully consumed within one accounting period.

accounting entity assumption

a requirement that all relevant items be reported for a business entity, excluding any personal transactions of the owner and any other entity

entity any business, organisation or individual that conducts financial transactions

Accounting entity assumption

When a small business is created, a new body or entity comes into existence. The **accounting entity assumption** states that the records of assets, liabilities and business activities of the **entity** must be kept separate from those of the owner or other entities. A separate set of accounting records is kept for each entity, and its financial statements provide information on that entity only. This is done so that the performance of the actual business is evaluated, and not the owner's personal income or wealth.

EXAMPLE 2.1

A sports store owner has the following financial transactions.

- 1 Bought 10 cricket bats to be resold in the shop: \$900
- 2 Paid insurance on the family home: \$400
- 3 Paid for insurance of shop: \$600

By applying the accounting entity assumption, only two of the above three transactions can be considered relevant to the sports store entity. The insurance on the family home is a personal expenditure and should not be recorded in the books of the business. (This also supports the *relevance* characteristic, because the personal transaction has no relevance to the books of the business.)

When a new business is created, the business owner should open a separate bank account in the name of the business. Office stationery pre-printed with the business name should also be used for all business transactions. These simple steps make it easier to distinguish between personal and business transactions.



2.6 Ethics and business decision-making



ethics a set of moral principles

All business owners, whether they are operating large companies or small local businesses, should make their day-to-day decisions in an ethical manner. In other words, owners should be interested not just in the financial needs of their business but also in the social and/or environmental impact of their financial decisions.

Many members of our community are concerned about whether businesses operate in an ethical manner. Some customers will judge a business (and its owners) on their social or environmental impact. They may shop elsewhere if they believe that a business operates in an unethical manner.

When evaluating issues relating to social, environmental or ethical questions, consider the following factors:

- costs of a decision to a business
- potential benefits to a business
- effect on the reputation of a business
- potential environmental damage of business decisions
- financial and emotional effect on individuals, including owners, managers and consumers.

Ethical considerations are an important part of the VCE Accounting course. Throughout this textbook, you will be presented with scenarios and questions that highlight social, environmental and ethical issues relating to business decisions. (The first one is at the end of this chapter.) Sometimes there aren't right or wrong answers when addressing these scenarios, but you should be ready to justify your opinions and explain your reasons.



A safe workplace should always be a priority for owners, as this affects their employees, customers and, possibly, other contractors.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [2.1]** Small businesses play a vital role in the Australian and Victorian economies. Every small business is different, but most are sole proprietorships or partnerships, have few employees, have a relatively small turnover and cater to local customers.
- [2.2]** Small businesses require financial and accounting advice, but the typical small business doesn't employ a financial expert on a full-time basis. Some business owners manage their own finances, but most need to hire a qualified accountant on a regular basis to provide them with assistance.
- [2.3]** A core element of accounting is taking raw financial data and turning it into useful financial information. Business managers and owners can then use that information to make decisions that should improve the operation and profitability of their business.
- [2.4]** There are six qualitative characteristics of any effective accounting report: timeliness, understandability, relevance, faithful representation, comparability and verifiability.
- [2.5]** Accountancy operates under four accounting assumptions: the period assumption, the accrual basis assumption, the going concern assumption and the accounting entity assumption.
- [2.6]** Business should be more than just maximising profits; managers and owners should also pay attention to ethical considerations.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Qualitative characteristics

The owner of Harvey's Electricals, Norman Harvey, is trying to determine his profit for the past 12 months. He estimates that his sales were between \$150 000 and \$180 000 for the year, so he reported them as \$165 000 (the average of his two estimates).

- a Has Harvey satisfied the demands of *faithful representation*? Explain your answer fully.
- b Describe how *verifiability* could have assisted Harvey when reporting his sales figure for the year. How could he have satisfied this characteristic in his business?

2 Qualitative characteristics

Jen Quick owns and manages a small business in Melbourne. She is trying to determine the value to record for the vehicle she uses in her business. She has come up with the following information.

Item	Value
Holden Commodore	\$30 000 – the cost paid for the car in 2026
	\$20 000 – estimated current market value in 2028
	\$22 000 – the amount a friend has offered for the vehicle in 2028

What value should Quick use for the vehicle in the books of her business? Explain your answer fully, with reference to any relevant qualitative characteristics of accounting.

3 Accounting assumptions

Clive Haese is concerned about the future of his business. As he isn't sure that he will keep trading, he has valued his assets based on what he thinks he could get for them if the business closed today.

- a Which accounting assumption has Haese breached? What should he have done with his assets?
- b Has Haese also breached a qualitative characteristic of accounting? Explain your answer.

4 Qualitative characteristics and accounting assumptions

Consider the following situations. For each one, state the qualitative characteristics and/or accounting assumptions that have been breached, and explain what the business owners should have done instead.

- a The owner of Coburg Art Supplies, Michelle Humphries, has been operating her business for seven years. During this time, she has only determined the profit of the business twice. She justifies this by saying she runs the business by herself and doesn't have time to keep accounting records.
- b Michael Cao, the owner of Bayside Beds, doesn't enjoy keeping records for his business. He has just prepared a profit report based on his own personal estimates of the year's transactions.



Workbook
p. 5



XL template



Workbook
p. 5



XL template



Workbook
p. 6



XL template



Workbook
p. 7



XL template





- c** Robert Peluso has owned Peluso's Pet Paradise for the past 10 years. Over this time, he hasn't always determined his annual profit or loss immediately at the end of the accounting period. In fact, sometimes he hasn't finalised his profit result until six months after the period has ended.
- d** Liz Costa is the owner/proprietor of two businesses: Metro Music and Trendy Tables. To keep things simple, she only operates one bank account. She uses this account for her personal banking, and for the receipts and payments for both businesses.
- e** Ben Stern has had trouble keeping track of all his business documents. When preparing financial reports, he sometimes states an item's original cost based on what he thinks he paid for it. At other times, he simply states what the same item would cost if he bought it new today.
- f** Cathy Tran owns Frankston Toys and Models. During a recent lunch break, she found a dress on sale for \$100 that she just had to have. She was short on cash, so she took \$100 from her shop's cash register. She doesn't see any need to record this amount – after all, she says, the money in the till is really her money.



Workbook
p. 8



XL template

ETHICAL CONSIDERATIONS

Phil Horner, who has run a sporting goods store for several years, is concerned about one of his products. He read recently that the Flash brand of running shoes, which he stocks in his shop, is produced in a sweatshop overseas. Apparently, the workers who make the sneakers only get paid \$2 a day.

The brand is very popular with the store's customers. Horner can import the shoes for \$40 per pair and sell them for \$125. A competitor's shoes wholesale for \$65 a pair, so there's a significant difference in the cost of the two brands. Most other shops sell the competitor's products for \$129, and Horner knows that his customers will shop elsewhere if he charges too much for these shoes. However, he's now concerned about the ethics of continuing to import Flash shoes.

- a** Should Horner refuse to stock the Flash brand and only offer the competitor's product? Discuss this ethical issue with reference to any relevant points, such as:
 - financial costs
 - financial benefits
 - customer perceptions
 - ethical decision-making.
- b** 'All business owners have a responsibility to make ethical business decisions.' Do you agree? Discuss fully.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

Balance sheets for a small business

This chapter examines the three main considerations for any business: the economic resources it controls, its present obligations, and its net worth to the owner. You will learn how the balance sheet records these to show the business's financial position.

Learning objectives

By the end of this chapter, you will be able to:

- **describe** the purpose of a balance sheet [3.1]
- **prepare** T-form and narrative-form balance sheets [3.2]
- **prepare** a classified balance sheet for a small business [3.3]
- **explain** the concept of 'liquidity' [3.3]
- **explain** the twofold effect of a transaction on a balance sheet [3.4]

KEY TERMS

Balance sheet
Assets
Liabilities
Owner's equity
Accounting equation
T-form balance sheet
Narrative-form balance sheet
Current assets
Non-current assets
Current liabilities
Non-current liabilities
Working capital
Liquidity
Working capital ratio

PRIOR KNOWLEDGE

CHAPTER 1 Let's go accounting!

CHAPTER 2 Accounting for small business



Estimated time required: 2 weeks





3.1 The role of the balance sheet

balance sheet an accounting report that states the financial position of a business at a particular point in time

assets present economic resources under the control of a business entity, with the potential to produce future economic benefits for the business

liabilities present obligations of a business entity to transfer economic resources to another entity

owner's equity the residual interest an owner has in a business after liabilities are deducted from assets

accounting equation an equation that determines the format of a balance sheet: assets = liabilities + owner's equity ($A = L + OE$)

The **balance sheet** is an accounting report that shows a business entity's financial position at a particular point in time. The report has three main sections: assets, liabilities and owner's equity.

An **asset** is a present economic resource an entity controls as a result of past events. Assets have the potential to produce future economic benefits. A business's assets may include items such as cash on hand, cash at bank, accounts receivable, computers, furniture and display equipment.

The economic benefit of cash at bank is obvious. Accounts receivable are customers who owe money for goods or services provided on a credit basis; they are therefore a promise of a future benefit for a business. An asset such as display equipment has future value because the equipment is used to display goods for sale, which helps a business to earn its future income.

A **liability** is a present obligation of an entity to transfer an economic resource due to past events. In other words, a business may be obliged to give up some of its resources to other business entities or other individuals. Such obligations may be to accounts payable (e.g. for goods purchased on credit) or to banks or other lenders to repay loans.

Owner's equity is what remains after an entity deducts its liabilities from its assets. An owner's equity in a business is equal to the total value of its assets less its obligations regarding liabilities. The owner's equity is the 'net worth' of the business to the owner.

Keeping in mind the accounting entity assumption and the qualitative characteristic of *relevance*, the balance sheet should include only assets and liabilities that are *relevant* to the business. The personal assets of an owner aren't relevant.

The net worth of the business to the owner is calculated by using the **accounting equation**. Every balance sheet is based on this equation, which states that:

$$\text{Assets} = \text{liabilities} + \text{owner's equity}$$

It can also be used to calculate the net worth of a business:

$$\text{Owner's equity} = \text{assets} - \text{liabilities}$$

The accounting equation holds true in *every* balance sheet, whether it's a statement for a private individual, a small business, or a large company such as Coles or Telstra.



3.2 Format of a balance sheet



The purpose of a balance sheet is to report on and summarise the three key areas: assets, liabilities and owner's equity. It's important to display these three elements of accounting clearly. Accountants use two main formats: the T form and the narrative form.

The T-form balance sheet

The **T-form balance sheet** is the most common format. It is divided into two sides horizontally, with assets on one side and liabilities and owner's equity on the other. The report has a title line across the top and a vertical dividing line between the two sides, giving it a 'T' shape.

T-form balance sheet
an accounting report showing assets on one side and liabilities and owner's equity on the other

EXAMPLE 3.1

On 30 June 2028, Rae Gibbs's Williamstown Wool Shop has the following economic resources:

- cash at bank \$4 000
- inventory of wool \$30 000
- amounts owing by customers (accounts receivable) \$5 200
- shop fittings \$18 000
- knitting machine \$2 800.

The business also has the following obligations:

- amounts owing to wool suppliers (accounts payable) \$3 000
- loan from bank (due for repayment 1 July 2030) \$20 000.

Figure 3.1 shows a T-form balance sheet using this data.

Assets	\$	Liabilities	\$	\$
Cash at bank	4 000	Accounts payable	3 000	
Accounts receivable	5 200	Bank loan (due 1/7/30)	20 000	23 000
Inventory	30 000			
Shop fittings	18 000	Owner's equity		
Knitting machine	2 800	Capital		37 000
Total assets	60 000	Total equities		60 000

Figure 3.1 T-form balance sheet

The dollar amount shown as 'Capital' is the net worth of the business to the owner.

This balance sheet shows the economic resources under the control of Williamstown Wool Shop (a total of \$60 000), the shop's obligations or debts (totalling \$23 000) and the net worth of the business to the owner (\$37 000) on 30 June 2028.

The accounting equation for the Williamstown Wool Shop is therefore:

$$\begin{aligned}\text{Assets} &= \text{liabilities} + \text{owner's equity} \\ \$60\,000 &= \$23\,000 + \$37\,000\end{aligned}$$

The term 'equities' in the report means anyone with a legal claim on the assets of the business. There are two types of claims: external and internal. External equities are those from outside the business; that is, liabilities. The internal claim is the owner's claim to the assets; in this case, Gibbs's net worth of \$37 000.



narrative-form balance sheet an accounting report prepared as a vertical list down the page, highlighting the owner's equity in the business

Figure 3.2 Narrative-form balance sheet

The narrative-form balance sheet

The **narrative-form balance sheet** emphasises owner's equity (i.e. net worth) as the key figure. Narrative forms run vertically.

EXAMPLE 3.2

Figure 3.2 shows the data in Example 3.1 for Williamstown Wool Shop in narrative form.

Owner's equity	\$	\$
Capital		37 000
Is represented by:		
Assets		
Cash at bank	4 000	
Accounts receivable	5 200	
Inventory	30 000	
Shop fittings	18 000	
Knitting machine	2 800	60 000
Less: Liabilities		
Accounts payable	3 000	
Bank loan (due 1/7/30)	20 000	23 000
Net assets		37 000

Owner's equity will always be equal to assets – liabilities.

The narrative-form statement, which highlights net worth, uses the accounting equation:

$$\begin{aligned}\text{Owner's equity} &= \text{assets} - \text{liabilities} \\ \$37\,000 &= \$60\,000 - \$23\,000\end{aligned}$$



3.3 Classified balance sheets

A classified balance sheet helps to meet the demands of the qualitative characteristic of *understandability* by making a complicated report easier to read.

Assets

Assets are normally classified according to how easily they can be turned into cash (i.e. how liquid they are). Assets that are expected to be turned into cash (or used up) within the next 12 months are known as **current assets**. Examples of current assets are cash on hand, cash at bank, short-term investment accounts (e.g. a three-month term deposit), inventory and accounts receivable.

Assets that remain under the control of the business for more than 12 months are called **non-current assets**. Businesses purchase long-term assets to help them earn revenue over an extended period. Examples of non-current assets are vehicles, machinery, computers and business premises.

Businesses usually have both current and non-current assets.

Liabilities

Liabilities are usually classified based on urgency; that is, how soon the future obligation has to be met.

Current liabilities are those obligations that must be met within the next 12 months. Examples include bank overdrafts, accounts payable and short-term loans (up to one year).

current assets assets expected or intended to be used up or turned into cash within the next 12 months

non-current assets assets of a long-term nature, usually under the control of the business entity for a period greater than 12 months

current liabilities economic obligations due to be settled or paid off within the next 12 months

Non-current liabilities are obligations to be met over a period greater than 12 months. Examples include longer-term loans and mortgage loans, which may be over 20 or 25 years.

Liabilities listed as non-current can be broken down further. The portion of the debt that is due to be repaid within the next year (if known) can be listed as a current liability. The remainder of the debt would then be shown as a non-current liability.

non-current liabilities obligations of a long-term nature, usually due for settlement or payment over a period greater than 12 months

EXAMPLE 3.3

Figure 3.3 shows the classified balance sheet for the Williamstown Wool Shop.

Economic resources expected to be used within 12 months.

Assets	\$	\$	Liabilities	\$	\$
<i>Current assets</i>			<i>Current liabilities</i>		
Cash at bank	4 000		Accounts payable	3 000	
Accounts receivable	5 200		Bank loan*	10 000	13 000
Inventory	30 000	39 200	<i>Non-current liabilities</i>		
			Bank loan*		10 000
<i>Non-current assets</i>					
Shop fittings	18 000		Owner's equity		
Knitting machine	2 800	20 800	Capital		37 000
Total assets		60 000	Total equities		60 000

Figure 3.3 Classified balance sheet

Present obligations due for payment within 12 months.

Present obligations due for payment beyond 12 months.

Economic resources expected to be used for more than 12 months.

*Assuming loan repayments are equal over the next two years

Liquidity and working capital

A classified report also provides an owner or manager with valuable information about the business. From the balance sheet in Figure 3.3, they can see that more than half of their firm's assets (\$39 200) are liquid assets. On the other side of the report, the current liabilities are only \$13 000.

Current assets are economic resources expected to be turned into cash within the next year. Current liabilities are obligations due for payment within the next year. These two items can be compared to calculate a firm's **working capital**.

Williamstown Wool Shop's working capital is calculated as follows:

$$\begin{aligned}
 \text{Working capital} &= \text{current assets} - \text{current liabilities} \\
 &= \$39\,200 - \$13\,000 \\
 &= \$26\,200
 \end{aligned}$$

working capital current assets less current liabilities at a particular point in time



liquidity the ability of a business to meet its short-term obligations as they fall due

working capital ratio a financial indicator used to measure liquidity, determined by current assets divided by current liabilities

The working capital figure can be used to measure liquidity. **Liquidity** is a business’s ability to meet its short-term obligations as they fall due.

A positive working capital indicates that the business is unlikely to have problems meeting its debts. However, if current liabilities exceed current assets, the business may soon have liquidity problems.

Working capital can also be expressed as a ratio:

$$\begin{aligned} \text{Working capital ratio} &= \frac{\text{Current assets}}{\text{Current liabilities}} \\ &= \frac{\$39\,200}{\$13\,000} = 3.01 : 1, \text{ or } 301\% \end{aligned}$$

The **working capital ratio** in this example indicates that, for every \$1 of current liabilities, the business has \$3.01 of current assets – a very satisfactory liquidity position.

There is no universally acceptable working capital ratio. However, if it’s below 1 : 1, or 100%, liquidity problems may occur because current liabilities exceed current assets.



3.4 Financial transactions and the balance sheet

Each time a business transacts with another entity, two items in the balance sheet will change in value.

For example, the following transaction occurs:

Jul 1 John Barker invested \$30 000 to commence trading as Perfect Printers

The first requirement of the balance sheet is to show the economic resources controlled by the business. ‘Cash at bank’ is listed as \$30 000 under the ‘Assets’ heading.

The second item represents the owner’s equity in the business for John Barker. ‘Capital’ means the economic resources contributed by an owner to a business. In this example, Barker has made a capital contribution of \$30 000 to start his business.

Assets	\$	Owner’s equity	\$
Cash at bank	30 000	Capital – Barker	30 000
	30 000		30 000

Further transactions occur as follows:

Jul 3 Bought office furniture for \$5000 cash

This causes a reduction in the asset ‘Cash at bank’, with a corresponding increase in the asset ‘Office furniture’.

Assets	\$	Owner’s equity	\$
Cash at bank	25 000	Capital – Barker	30 000
Office furniture	5 000		
	30 000		30 000

Jul 3 Took out loan from NAB for \$30 000

The asset 'Cash at bank' increases and the future obligation to NAB must be created as a liability.

Assets	\$	Liabilities	\$
Cash at bank	55 000	Loan – NAB	30 000
Office furniture	5 000	Owner's equity	
		Capital – Barker	30 000
	60 000		60 000

Jul 4 Barker paid cash for a vehicle costing \$35 000

The asset 'Cash at bank' will be decreased by \$35 000 and the asset 'Vehicle' is introduced to the balance sheet.

Assets	\$	Liabilities	\$
Cash at bank	20 000	Loan – NAB	30 000
Office furniture	5 000	Owner's equity	
Vehicle	35 000	Capital – Barker	30 000
	60 000		60 000

Jul 5 Barker paid \$2000 off the loan from NAB

The asset 'Cash at bank' will be decreased by \$2000 and the liability 'Loan – NAB' will also be decreased by \$2000.

Assets	\$	Liabilities	\$
Cash at bank	18 000	Loan – NAB	28 000
Office furniture	5 000	Owner's equity	
Vehicle	35 000	Capital – Barker	30 000
	58 000		58 000

Always check that the balance sheet balances after every transaction.

Note that the accounting equation holds true in all of these balance sheets: the total of assets is always equal to the total of liabilities plus owner's equity.

Although a business won't prepare a new balance sheet after every transaction, it's important to understand how a transaction can affect the report. As you study further topics in your Accounting course, keep in mind the twofold effect on the balance sheet of *all* business transactions.

Qualitative characteristics and the balance sheet

When a balance sheet is being prepared, assets are usually recorded at their original purchase price (also called original cost). This cost can be checked against a business document, such as an invoice or an electronic funds transfer (EFT) document. The original document is evidence of the transaction and satisfies the demands of the qualitative characteristic of *verifiability*.

Adjustments aren't usually made to a balance sheet for inflation, so the original cost of an asset is kept on the books until the asset is sold. This original cost also satisfies the demands of *faithful representation*. The real-world economic event in this case is the purchase of an asset, and supporting documents should always be available. For example, if an asset is purchased for cash, evidence of the transaction would be available in the form of a tax invoice from the supplier or perhaps an EFT document, which proves that a cash payment had been made. This allows for a verifiable amount to be reported in the balance sheet, thus satisfying *faithful representation*.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [3.1]** The balance sheet is an accounting report that shows the financial position of a business entity at a particular point in time. The report has three main sections: assets, liabilities and owner's equity. The relationship between these is the accounting equation: $\text{assets} = \text{liabilities} + \text{owner's equity}$ ($A = L + OE$).
- [3.2]** Balance sheets are generally presented in one of two formats. The horizontal T-form report presents assets on one side, and liabilities and owner's equity on the other. The narrative-form report presents the information vertically, emphasising the owner's equity.
- [3.3]** Classified balance sheets use headings to differentiate between different sets of information. Assets can be classified as current (to be used up within 12 months) or non-current (lasting longer than 12 months). Similarly, liabilities are classified as current (to be paid off within 12 months) or non-current (taking longer than 12 months to settle). Classified reports can also help to determine the liquidity and working capital of a business.
- [3.4]** Every transaction a business makes has a twofold effect on its balance sheet; that is, two items in the report will change in value.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Accounting equation

Calculate the missing information in each of the following situations.

- a Assets \$80 000, liabilities \$15 000 and owner's equity \$?
- b Liabilities \$40 000, owner's equity \$75 000 and assets \$?
- c Owner's equity \$50 000, assets \$95 000 and liabilities \$?

2 Simple balance sheet

The following information relates to McColgan's Meats, a small business owned by Ken McColgan, as at 31 July 2028.

• Inventory of meat	\$28 000
• Accounts payable	\$1 500
• Family home	\$540 000
• Accounts receivable	\$1 400
• Cash at bank	\$1 200
• Refrigeration equipment	\$22 000
• Shop equipment	\$18 000
• Business loan from bank	\$30 000
• Cash on hand	\$200

- a Calculate the owner's equity for McColgan, using the accounting equation.
- b Prepare a T-form balance sheet as at 31 July 2028.
- c Prepare the balance sheet in narrative form.
- d Explain your treatment of the item 'Family home'. Refer to a qualitative characteristic and an accounting assumption.

3 Classified balance sheet

Bianca Ross, the proprietor of Accurate Editorial, supplies the following information concerning her business as at 31 August 2028.

• Business bank account	\$200
• Personal bank account	\$12 000
• Accounts payable	\$1 280
• Computer equipment	\$7 000
• Accounts receivable	\$1 330
• Loan from bank (due 31/12/2029)	\$5 000
• Loan from parents (due 1/6/2029)	\$1 000
• Photocopier	\$16 000
• Office furniture	\$5 200

- a Calculate Ross's capital using the accounting equation.
- b Explain how you applied the accounting entity assumption in your answer to part a.
- c Prepare a classified balance sheet as at 31 August 2028.



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4 Evaluation of liquidity

A small business has current assets of \$6400 and current liabilities of \$4800.

- Calculate its working capital.
- Define 'liquidity'.
- Describe the business's liquidity situation, with reference to part **a**.



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5 Evaluation of liquidity

If Business A has current assets of \$44 000 and Business B has current assets of \$25 000, which firm has the better liquidity? Explain your answer fully, using examples of data to prove your point.



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6 Balance sheet and liquidity

Nick Papadopoulos, owner of Nick's Pizza Supreme, supplies the following information regarding his business as at 30 September 2028.

• Premises	\$820 000
• Mortgage loan from bank	\$480 000
• Inventory	\$12 500
• Accounts payable	\$11 500
• Bank overdraft	\$1 200
• Cash on hand	\$100
• Furniture	\$4 900
• Fittings	\$16 500
• Refrigeration equipment	\$18 000
• Capital	\$379 300

- Prepare a classified balance sheet as at 30 September 2028.
- Calculate the business's working capital and working capital ratio. Write a brief comment on its liquidity.



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7 Balance sheet and liquidity

Orla McLynskey owns and operates Suburban Lawn Mowing. The following information is available regarding her business as at 31 October 2028.

• Vehicle	\$38 000
• Mowing equipment	\$5 200
• Trailer	\$2 600
• Cash on hand	\$100
• Cash at bank	\$2 600
• Loan from Easy Finance Co.	\$12 000 (repayable at \$2000 per year)
• Accounts payable	\$300
• Computer	\$2 100
• Accounts receivable	\$700

- Prepare a classified balance sheet as at 31 October 2028.
- Explain your treatment of the loan from Easy Finance Co.
- Calculate the business's working capital and working capital ratio.
- Comment on the business's liquidity by referring to your calculations in part **c**.

8 Transactions and the balance sheet

Ted Cowell had the following transactions in his first week of trading as TC Plumbing.

2028

- Aug 1 Banked \$30 000 to commence business
- 2 Borrowed \$10 000 from the National Bank
- 3 Bought a truck from Geelong Ford for \$25 000 cash
- 4 Bought plumbing materials on credit from General Plumbing for \$1200

- a Prepare a balance sheet after each of the above transactions has occurred (i.e. four separate balance sheets).
- b State the accounting equation for each of the statements prepared in part a.

9 Transactions and the balance sheet

Michelle Clarke has started a small business under the name of Suburban Steam Cleaning. The transactions below occur in her first week's trading in 2028.

- Sep 1 Deposited \$10 000 in a separate bank account in the business's name
- 2 Bought cleaning equipment for \$2000 cash
- 3 Purchased office furniture on credit for \$500
- 4 Borrowed \$5000 from ELC Finance Co.
- 5 Withdrew \$1000 from the business for personal use

Prepare a balance sheet and an accounting equation after each transaction.

10 Transactions with opening balances

The following report, prepared on 30 September 2028, is for an existing landscaping business owned by Frank Serratore.

Assets	\$	\$	Liabilities	\$	\$
Current assets			Current liabilities		
Cash at bank	3 000		Accounts payable	800	
Accounts receivable	2 000		Loan EZ Finance	12 000	12 800
Inventory of supplies	500	5 500			
Non-current assets					
Furniture	14 000		Owner's equity		
Equipment	36 000	50 000	Capital		42 700
		55 500			55 500

The following transactions occurred during October 2028.

- Oct 1 Purchased new equipment for cash at a cost of \$1500
- 2 Accounts receivable paid \$1000 of the amounts owing
- 3 Bought supplies on credit for \$400
- 4 Paid \$2000 off the loan from EZ Finance
- 5 Owner contributed an additional \$6500 as capital

Prepare a new balance sheet after each transaction.



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11 Transactions with opening balances

E Truong, the proprietor of Glenroy Laundry, has provided the following statement as at 31 March 2028.

Assets	\$	\$	Liabilities	\$	\$
<i>Current assets</i>			<i>Current liabilities</i>		
Cash at bank	6 000		Accounts payable	3 400	
Accounts receivable	4 000		Loan	6 000	9 400
Inventory – detergents	1 000	11 000			
<i>Non-current assets</i>					
Machinery	18 000		Owner's equity		
Computer	6 000	24 000	Capital		25 600
		35 000			35 000

The following transactions occurred during April 2028.

Apr 1	Purchased an additional computer for cash for \$950
2	Paid accounts payable \$400
3	Bought detergents for cash \$800
4	Received \$1500 cash from accounts receivable
5	The owner withdrew \$1000 for personal use

Prepare a new balance sheet after each transaction.



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ACCOUNTING IN THE REAL WORLD

This question can be answered using either a spreadsheet or a manually prepared table.

Visit the websites of the following public companies. Locate the balance sheet from the latest annual report of each company and extract the information stated below.

 Coles	mea.digital/coles_12
Harvey Norman	mea.digital/harveynorman
Myer	mea.digital/myer_12
Wesfarmers	mea.digital/wesfarmers

If you can't find details for any of the companies, visit the Australian Securities Exchange (ASX) website.

 Australian Securities Exchange	mea.digital/asx

PART 1:

- From the balance sheets, state the total assets figure for each business.
- List the four companies in descending order, according to the value of their total assets.
- Comment briefly on your findings.

PART 2:

- For each company, state the totals for current assets and current liabilities from its balance sheet.
- Calculate each company's working capital ratio.
- Comment on the liquidity of the four companies. Which company has the highest liquidity and which has the lowest?

EXAM-STYLE QUESTIONS

Question 1 (3 marks)

State three examples of non-current assets for a window cleaning business.

Question 2 (2 marks)

The owner of Ultra Clean Car Wash has calculated the working capital ratio of her business as 450%. Should she be concerned? **Justify** your answer and **explain** what this ratio indicates.

Question 3 (2 marks)

A business owner was advised that their 10-year loan should be reported under two classifications in a balance sheet. **Explain** how this is possible.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



Single entry accounting for a small business

In this chapter, you will learn about the documents relevant to single entry accounting. You will also consider what other elements a small business might require from its accounting system.

Learning objectives

By the end of this chapter, you will be able to:

- **define** single entry accounting [4.1]
- **explain** the role of cash journals in single entry accounting [4.1]
- **identify** source documents used by a small business [4.2]
- **identify** other documents used by a small business [4.3]
- **describe** a basic accounting system for a small business [4.4]
- **identify** the information flows that occur between businesses [4.4]
- **explain** the role of computers in small business accounting [4.4]

KEY TERMS

Single entry accounting
Cash journal
Source documents
EFT payment
Receipt
EFTPOS terminal
EFTPOS receipt
Invoice
Credit note
Purchase order
Delivery document
Statement of account
Bank statement

PRIOR KNOWLEDGE

CHAPTER 2 Accounting for small business

CHAPTER 3 Balance sheets for a small business



Estimated time required: 1 week



4.1 Single entry accounting



Many small businesses use **single entry accounting** to satisfy their accounting needs. With this system, as its name indicates, one entry is made in the accounting records for each transaction that occurs. Single entry accounting is a relatively simple process that doesn't require an accounting background and can be maintained at very little cost. Importantly, it will also supply the information the government requires for taxation purposes.

single entry accounting
a simple accounting system in which one entry is made for each transaction

Cash journals

A single entry accounting system consists of two records known as **cash journals**. These journals are multi-column records that show details of all cash receipts and cash payments over a period.

Business owners can design their cash journals to suit the particular needs of their business. Figure 4.1 is an example of a *cash receipts journal* set up for Coburg Car Wash.

cash journal a multi-column record used to record the daily receipts or payments of cash

Figure 4.1 Cash receipts journal

Date	Details	Receipt no.	Bank \$	Sales – car wash \$	Sales – detailing \$	Sundries \$	GST \$
Jan 2	Fees received	651	33	30			3
3	Fees received	652	33	30			3
4	Fees received	653–4	66	60			6
4	Interest received	–	50			50	
5	Fees received	655–6	99	30	60		9
6	Capital	–	5 000			5 000	
7	Fees received	657	66		60		6
	Totals		5 347	150	120	5 050	27

Document no. may be used as an alternative to Receipt no.

A 'Sundries' column caters for infrequent or unusual transactions.

Columns that are suitable for a car wash business probably won't be suitable for a pharmacy. The columns should be used for items that occur regularly or frequently. Coburg Car Wash receives cash fees for washing and detailing vehicles. These events are expected to occur very frequently, so special columns are provided for them.



The owner of a small business such as a car wash should consider which transactions are likely to occur frequently.

However, interest received (see 4 January) and the receipt of capital from the owner are included in the 'Sundries' column, which is used to record details of the business's less frequent receipts. As a total is easily calculated for a given period, a summary of frequent receipts or payments (e.g. sales from washing cars) is readily available at the bottom of the record.

Note also that Coburg Car Wash recorded each occasion when it has received the Goods and Services Tax (GST) in addition to its fee for washing and/or detailing cars. This tax, fixed at 10% of the fee that the business collects, should always be recorded in a separate column, because it must be passed on to the Australian Taxation Office (ATO).

In addition to recording the cash it receives, a small business may set up a second cash journal to record its cash payments. Figure 4.2 shows a multi-column *cash payments journal* designed to meet the needs of Coburg Car Wash.

Figure 4.2 Cash payments journal

Document no. may be used as an alternative for EFT no.

Date	Details	EFT no.	Bank \$	Wages \$	Drawings \$	Advertising \$	Sundries \$	GST \$
Jan 2	Drawings	100	500		500			
4	Advertising	101	440			400		40
5	Wages	102	100	100				
6	Insurance	103	880				800	80
6	Stationery	104	55				50	5
7	Drawings	105	600		600			
7	Wages	106	120	120				
	Totals		2 695	220	1 100	400	850	125

Both journals should always include a column for GST. This helps the business to calculate how much GST it owes to the ATO.

Special columns may be used for cash payments, just like those used for cash receipts. Coburg Car Wash has columns for wages, drawings and advertising, indicating that the owner expects to make these payments regularly. If the owner makes any other types of payment (e.g. for insurance or stationery), they will be recorded in the 'Sundries' column (see 6 January in Figure 4.2).

The details of cash payments can be easily checked, as the bank verifies all transactions when they issue a bank statement. This independent check is valuable to a business owner, as it is another way of ensuring that all information has been recorded accurately.

As with cash receipts, if a business pays GST on any of its cash payments, it must record this separately.

These two cash journals are the essence of single entry accounting. When a financial event takes place, such as a receipt or a payment, a single entry is made in one of these two records. Cash journals are also ideal records for computer spreadsheets, as transactions can be added up automatically to give progressive totals for all columns.

Because of its simplicity, single entry accounting is very popular with small business owners. However, it can be expanded to deal with more complex situations.

4.2 Source documents



Source documents are business documents that provide evidence of financial transactions. They contain the raw data of transactions, which is used to create business records.

It's important to be able to identify business documents and to explain their purpose. The entire accounting system relies on the correct identification and recording of data contained in business documents. The following are the most common source documents for a small business:

- EFT payment records
- receipts
- copies of EFT receipts
- invoices
- credit notes.

source documents business documents such as receipts and credit notes that are used as sources of financial information

EFT payments

Electronic funds transfers have replaced cheques for many small business owners. **EFT payments** can be processed quickly online both during and outside of business hours.

When an EFT is completed online, the person making the payment should complete the reference details before submitting the request to the bank. The EFT details are then used to complete the entry in the cash payments journal.

To make an EFT to an employee or supplier, the business needs details of their BSB and bank account numbers. The six-digit BSB number identifies the bank, state and branch that an individual or business uses for their banking (see Figure 4.3).

EFT payment a payment made online that transfers cash funds from one business to another

 ACME Bank	
CONFIRMATION OF PAYMENT	
Transfer to	BSB 007-910
A/C number	8188-919-900
Date/time	5/1/28, 9:57:30
Authorisation	81822
TOTAL AUD	\$300.00
Reference	S Proud Wages

Figure 4.3 Confirmation of payment by EFT



Receipts

receipt a document used to verify the receipt of cash by a business

Receipts verify that a business has received cash. Some small business owners still use handwritten receipts, but most now have computerised cash registers that generate detailed receipts. (The barcode system used by supermarkets is a good example of this.)

In either case, it's important to have a copy of the document once a receipt is given to the customer, to ensure that cash received ends up in the till at the end of the day. A business owner should always check the takings and the total receipts issued, to reduce the likelihood of fraud or theft. Figure 4.4 shows two common forms of receipt.

Figure 4.4 Receipts

(a) Computer-generated receipt

Coburg Car Wash
 ABN 74 548 860 008

Receipt 657 Date 7/1/28

TAX INVOICE

1 car – full detailing

Wash & wax	\$60.00
+ GST	\$6.00
Total payable	\$66.00

Cash received	\$70.00
Change	\$4.00

With thanks

(b) Handwritten receipt

Coburg Car Wash
 707 Sydney Road, Coburg VIC 3058
 ABN 74 548 860 008

TAX INVOICE
 Receipt No: 657

Received from	S Earle	Date	7/1/28

The amount of	Sixty-six dollars	\$	60.00

For	Car detailing	GST	\$ 6.00

TOTAL RECEIVED		\$	66.00

Signed	N Kokinos

Whichever type of receipt is used, the following key pieces of data need to be accurately recorded:

- receipt number
- date of the receipt
- amount received
- what the cash was received for
- the amount of GST received from the customer.

When a business sells goods or provides a service for cash, it isn't necessary to record the customer's name, although some businesses do.

Both receipts in Figure 4.4 include an Australian Business Number (ABN). A unique ABN is issued to each registered business in Australia. A business needs an ABN for various purposes, including to register for GST. The ABN enables the ATO to keep track of all of a business's GST transactions. A business should print its ABN on any document it issues.

EFTPOS receipts

Just as EFT transactions have replaced cheques for many businesses, EFTPOS transactions have changed the nature of receipts for many firms. EFTPOS (Electronic Funds Transfer at Point Of Sale) allows businesses to accept credit cards, debit cards and even some gift cards as if they were cash.

For a monthly fee, a business can rent an **EFTPOS terminal** from its bank. EFTPOS transactions are as good as cash for the business, as the bank takes responsibility for chasing up slow payers if a credit card has been used. EFTPOS transactions are therefore recorded as 'cash sales' in the cash receipts journal, as the approval of the bank occurs through the EFTPOS terminal and the funds are usually transferred to the bank account of the business within 24 hours.

The EFTPOS terminal produces a 'customer copy' and a 'merchant copy' of the **EFTPOS receipt**. The business owner should keep the merchant copy until the money is confirmed in its bank account the next day. Figure 4.5 shows a typical merchant copy of an EFTPOS receipt.

EFTPOS terminal a machine rented by a business owner from a bank to make EFTPOS transactions

EFTPOS receipt a document created by an EFTPOS terminal when a customer has paid by credit card, debit card or gift card

ACME BANK Coburg Car Wash 707 Sydney Road Coburg VIC 3058	

CUSTOMER COPY	

Merchant number:	450900
Terminal number:	AW693

PURCHASE	
DEBIT:	MasterCard XXXXXX2544
Date/time:	07/01/28 9:30:30
Authorisation:	1828366

TOTAL:	AUD \$66.00

Figure 4.5 Receipt from a sale using EFTPOS



Invoices

invoice a document used to verify that a credit sale or credit purchase has taken place

An **invoice** is used to verify that either a credit sale or a credit purchase has taken place. A sales invoice is issued to a customer when a credit sale is made, while a business owner receives a purchase invoice when it makes a credit purchase from a supplier.

As the invoice is the evidence of a sale with a promise to pay at a later date, the details are vital. There is always some risk of slow payers or non-payers, so it's important to have a record of all details in case of queries about the amount owing. Figure 4.6 shows a typical sales invoice.

Figure 4.6 Sales invoice

Coburg Car Wash			
707 Sydney Road		Tax Invoice	No. 162
Coburg VIC 3058		Date	14/2/28
ABN 74 548 860 008			
A/C name	Thomastown Taxi Company	Credit terms	30 days
Details			
5 vehicles – full detailing	5	×	\$60.00
			\$300.00
Plus GST (10%)	5	×	\$6.00
			\$30.00
Total of this invoice			\$330.00
Credit terms	Strictly 30 days	Signed	<i>J. Wilkinson</i>

The invoice is used to provide full details of goods or services sold on credit. Once again, a document number is used for future reference. When providing credit, it's important to inform the customer of your credit terms. Also, keep and file a copy of the invoice to ensure that the customer pays it sometime in the future.

Unlike a cash receipt, it's essential when writing an invoice to include the name of the customer. This enables the business owner to keep track of all their credit customers and how much each of them owes at a particular date. Otherwise, it may be impossible to track down the overdue accounts, which can be very costly to the business if they are not paid.

It doesn't matter if a service is provided for cash or on credit. The details of the transaction should be recorded as soon as the services have been provided.



Credit notes

A **credit note** is issued when goods are returned because they are faulty or damaged, or the wrong size, the wrong brand or even the wrong colour. A credit note has a negative effect against an invoiced amount owing. That is, if you sold \$100 worth of goods to a customer and, due to a faulty product, they returned \$20 worth, the \$20 comes off the \$100 owing, leaving the customer to pay \$80.

Figure 4.7 shows a credit note received from Don's Detergents, a supplier of cleaning products to Coburg Car Wash. Like the other documents, the credit note has a number for future reference. Details of claims should be kept, as they may indicate that customers are dissatisfied with a particular brand or product.

 Don's Detergents	Credit note 76
1901 Bell Street	Date 3/3/28
Pascoe Vale VIC 3044	
ABN 8765005432	
Credit Coburg Car Wash	
Reason Damaged containers – leaking lids	
Credit allowed	2 × \$15 = \$30
GST applicable	\$3
Total credit granted	\$33

credit note a document issued by a business to verify that goods have been returned

Figure 4.7 Credit note

A credit note will usually include the reason for returning goods.

4.3 Other business documents



Almost every small business uses the business documents described so far. There are several other documents that businesses may use. Most of these are not considered source documents, because they are not records of transactions.

Purchase orders

Some businesses use a formal **purchase order** to place orders with their suppliers. Others simply order by phone or email, or through the supplier's sales representative. The advantage of a purchase order is that the firm has a record of goods ordered, which it can cross-check against the goods actually delivered. An order form includes a description of the goods required, the quantity, and any other appropriate information such as size, range and colour. It is also recommended to include a desired delivery date.

purchase order a document used to confirm a request to a supplier to provide goods or services

Purchase orders aren't entered in accounting records, because they may be altered or cancelled or the supplier may not fulfil the order.

Delivery dockets

Goods delivered by a supplier will usually come with a **delivery docket**. The purchaser normally signs one copy to acknowledge that the delivery has occurred. The delivery docket will include a description of the goods and the quantity supplied. It can be checked against an order form (if used).

delivery docket a document that may come with goods when they are delivered

Delivery dockets aren't recorded in the accounting system, because they don't usually show the dollar amount of the transaction.

Statements of account

statement of account

a document that informs a business's customers of all their transactions over the previous month

It's important to keep track of when businesses buy goods on credit, return goods and pay amounts owing. A monthly **statement of account** lets a business inform its customers of all their transactions over the preceding month. Customers should check all invoices, credit notes and EFT transactions against the statement to ensure they have all been recorded accurately. The final figure on a monthly statement is the current amount owing.

Figure 4.8 shows a typical monthly statement of account, issued by Don's Detergents to Coburg Car Wash.

Figure 4.8 Statement of account

 Don's Detergents 1901 Bell Street Pascoe Vale VIC 3044 ABN 8765005432				
Statement of Account for Coburg Car Wash 707 Sydney Road Coburg VIC 3058			Date 31/3/28	
Date	Details	Debit \$	Credit \$	Balance \$
Mar 1	Previous balance owing			1200
2	Sale – Invoice 1512	303		1503
3	Return – Credit note 76		33	1470
11	Sale – Invoice 1522	330		1800
21	EFT Payment – thank you		1200	600
28	Sale – Invoice 1534	400		1000
Final balance owing				\$1 000
Credit terms Strictly 30 days				

Check each entry in a statement of account from a supplier against your own records to ensure that every transaction has been recorded accurately.

This document provides a neat summary of all transactions between the two businesses over the previous month. Note how the balance owing has increased on the three occasions that Don's Detergents made a sale to Coburg Car Wash (2, 11 and 28 March). When goods were returned on 3 March, the credit note issued reduced the balance owing by \$33. Finally, when a cash payment of \$1200 was made on 21 March, the account also decreased. The balance owing at the end of the month is also clearly shown on the statement of account. When Coburg Car Wash receives this document, it should check all entries to ensure that they are accurate before making a payment to Don's Detergents.

Bank statements

bank statement a summary of all the deposits and withdrawals from a bank account during the preceding period

A monthly **bank statement** summarises all of a business's transactions (deposits and withdrawals) with its bank during the preceding period. It is an excellent source of information, as it can be used to check all cash transactions in the receipts and payments journals. This helps to satisfy the characteristic of *verifiability*, as the bank prepares the statement independently of the business owner. In this way, the business records can be checked against the bank's records, picking up any recording errors that may have been made during the month.

4.4 Designing a small business accounting system



The role of an accounting system is to record transactions (i.e. the flow of information) during a reporting period and produce the required reports for management and/or the owner. The business documents and multi-column cash journals shown in this chapter make up the basic accounting system that many small businesses use.

A flowchart is useful for showing the flow of information through the accounting system. Figure 4.9 represents a typical accounting system for a small business, based on single entry accounting.

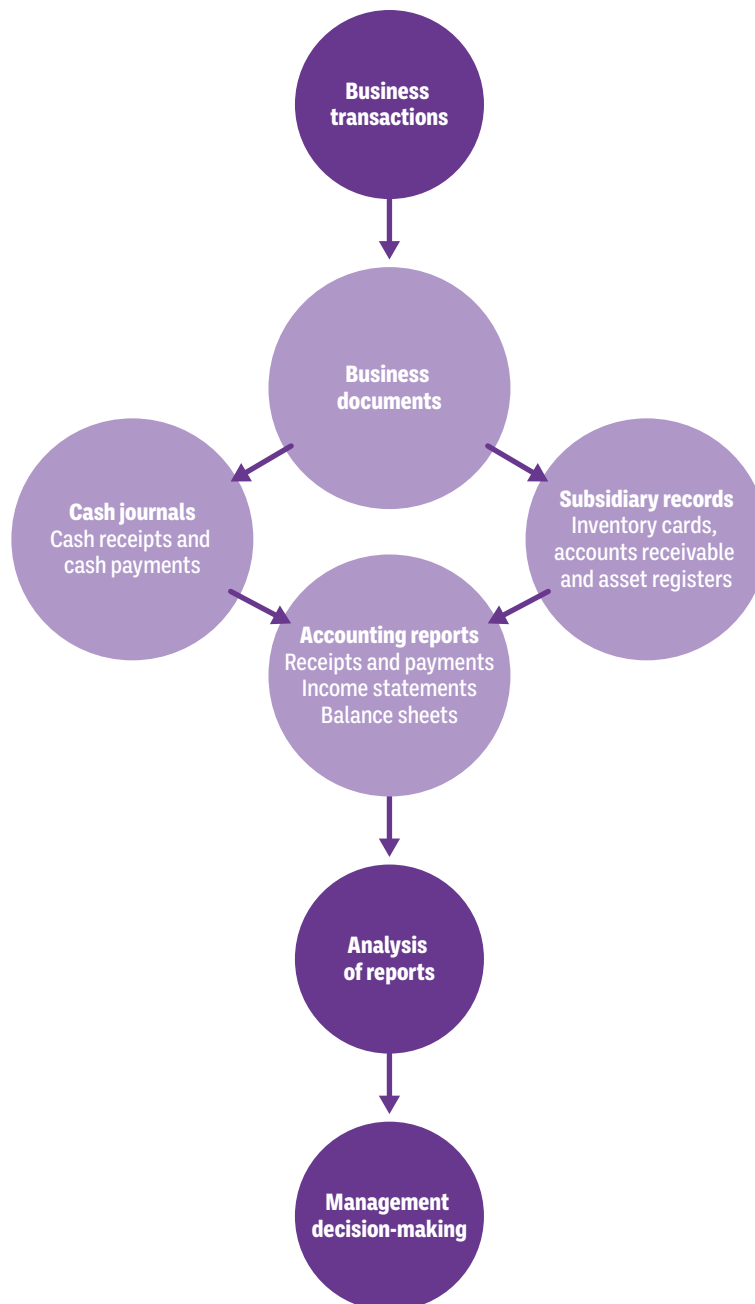


Figure 4.9 Flowchart: Single entry accounting system

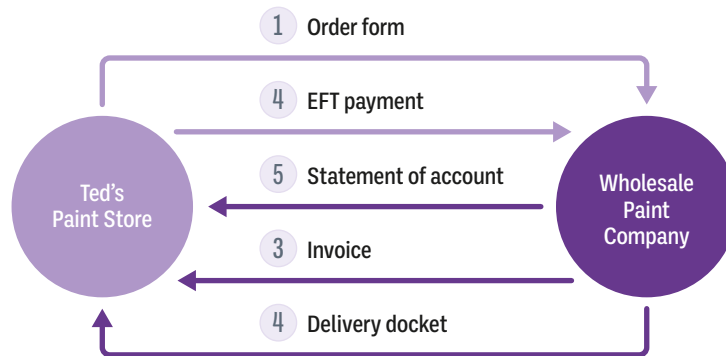
All accounting systems start with business transactions. These events are processed through several steps. Financial reports can then be prepared to assist decision-making by management.

Flows of information

An accounting system records information concerning business transactions between two separate entities. Business documents record details of these financial transactions and are used to transmit information from one entity to the other. Accounting records are the end product of these flows of information.

Figure 4.10 shows the exchange of documents between two businesses, one selling goods to the other.

Figure 4.10 Document flow diagram



The information flows in this order:

- 1 Ted's Paint Store sends an order form to the Wholesale Paint Company providing details of goods required.
- 2 When the goods ordered are delivered, Ted's Paint Store signs a delivery docket.
- 3 After it confirms the delivery of the goods, the Wholesale Paint Company sends an invoice to Ted's Paint Store giving details of prices of the goods supplied.
- 4 After it checks the details of the invoice, Ted's Paint Store makes an EFT payment to the supplier.
- 5 The supplier issues a statement of account summarising all the transactions for the current month.

Note

Flows 4 and 5 may often occur in reverse order.

This flow diagram doesn't represent every situation. For example, if a firm returned faulty goods and a credit note was issued, an additional flow would be created.

Standard practice is to retain a copy of all business documents issued for future reference or in case of queries. They may also be stored to record the information required for the accounting records.

All transactions involving the movement of physical items should be recorded promptly and accurately.



Computerised accounting systems

An accounting system must track information flows accurately, and the business owner must be able to use the system without difficulty. For many owners, this means using a computerised system.

Computers have an important role to play in accounting and small business. It's no longer necessary to record business transactions manually in daily record books. Many small business owners use affordable commercial accounting packages to record their daily transactions. They can then refer the details to their accountant periodically and seek advice as required.

Many software packages are used in small business, including:

- detailed accounting packages such as QuickBooks, Xero and Mind Your Own Business (MYOB)
- financial spreadsheet packages such as Microsoft Excel
- word-processing packages for business communications, such as Microsoft Word
- databases for customer records, mailing lists, etc., such as Microsoft Access.



Computerised accounting systems help small business owners, as many don't have accounting qualifications.

Computers make it simple to record and store large volumes of data, as is required for accounting purposes. Computerised accounting has four main advantages.

- 1 Data storage is reliable and convenient through the use of devices such as external hard drives and USB sticks, or through cloud-based solutions.
- 2 Computerised records are extremely accurate, with built-in checking procedures.
- 3 Computers can process data much faster than a manual processing system.
- 4 Computers are more cost-effective than employing staff to record all details manually.

Before purchasing a computer package for business purposes, a small business owner should compare the costs of setting up a system with its expected benefits. The needs of the business should determine if a computer is necessary and, if so, which software to purchase.

Some small business owners simply use spreadsheets as their accounting system. Since the cash payments and cash receipts journals consist of multi-column tables, they can easily be designed using a spreadsheet. Totals can be determined automatically for each column using simple formulas.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [4.1]** Many small businesses use single entry accounting. The system consists of two multi-column cash journals that record relevant transactions for a period. The cash receipts journal records money coming in, while the cash payments journal records money going out.
- [4.2]** Source documents provide evidence of financial transactions and are used to create business records. The most common source documents for a small business are EFT payment records, receipts, invoices and credit notes.
- [4.3]** Businesses may also use other types of business documents, such as purchase orders, delivery dockets, statements of account and bank statements. Most of these are not considered source documents, but some may be used to verify transactions.
- [4.4]** The purpose of an accounting system is to track the flow of information and produce financial reports. Some small businesses use manual accounting systems, but many now use simple, affordable software packages and resources.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Business documents: Credit

The owner of Mal's Mowing received the following document.


VICTA MOWERS
Main Road, Mount Waverley VIC 3149
ABN 78 463 529 976

NO. 1897
DATE 1/4/28
SOLD TO Mal's Mowing

QUANTITY	DESCRIPTION	PER UNIT	TOTAL
20	15 cm mower blades	\$5.00	\$100.00
	GST (10%)		\$10.00
	TOTAL OWING		\$110.00

CREDIT TERMS Strictly 30 days

- a What is the name of this business document?
- b Would Mal's Mowing receive the original document or a copy? Explain your answer.
- c Describe the purpose of this document.
- d What does 'Credit terms: Strictly 30 days' mean?
- e In a balance sheet prepared for Mal's Mowing, under what heading would you likely find Victa Mowers?

2 Business documents: Credit

The following document is from the offices of Mal's Mowing.


Mal's Mowing
Central Avenue
Caulfield VIC 3162
ABN 83 128 473 008

Account name Barry & Morello – CPAs
15 Dandenong Road
Malvern VIC 3144
No. AB7223
Date 31/5/28

Description of services provided	Charge
Maintenance of grounds – March 2028	\$200.00
GST (10%)	\$20.00
Total charge	\$220.00

Credit terms Strictly 30 days

- a What is the name of this business document?
- b Who would receive the original of this document?
- c Who would keep a copy?
- d Describe the business transaction that is evidenced by this source document.



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3 Business documents: Returns

The owner of Complete Computer Solutions received the following document.

ABC Computers
 100 Mullers Road
 Doncaster VIC 3108
 ABN 15 369 192 816

Credit Complete Computer Solutions
 1040 Royal Parade, Carlton VIC 3053

Reason Incorrect specification – 8 GB ordered

Quantity	Description	Cost	Total
10	4 GB USB memory sticks	\$5	\$50
	GST		\$5
Total credit granted			\$55

- a What is the name of this business document?
- b Describe the business transaction that is evidenced by this document.
- c Would Complete Computer Solutions have the original or a copy of this document? Explain your answer.
- d Under what balance sheet classification would you expect to find ABC Computers in a report prepared for Complete Computer Solutions? Explain your answer.



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4 Business document flows

The following document was received by Michael Knight, the owner of Domestic Steam Cleaning.

ACE MACHINERY REPAIRS & PARTS
 25 Main Road, Kew VIC 3101
 ABN 57 673 246 434

TO Domestic Steam Cleaning **DATE OF ISSUE** 31/3/28
 2 Fairway Drive, North Parkville VIC 3052

DATE	DETAILS	DEBIT \$	CREDIT \$	BALANCE \$
Mar 1	Balance past due			500
6	Invoice 32765	80		580
10	Invoice 32772	200		780
12	Credit note 534		50	730
21	Payment – thank you (EFT)		500	230
30	Invoice 32781	120		350

- a State the name of the supplier of goods involved in this document.
- b What is the name of this business document?
- c Explain the purpose of this document.
- d Explain the transactions that occurred on 10 March, 12 March and 21 March.
- e Refer to Figure 4.10 (page). Prepare a similar diagram that shows the flow of documents between the two businesses named above. Include in your diagram all the documents listed above, plus any others that may have been used.

5 Business documents: Cash

Katrina Janzen is the owner of ACHIEVE Tutoring Services. She has the following document in her possession.

 ACHIEVE Tutoring Services 747 Airport Drive, Flemington VIC 3031 ABN 22 223 128 607		NO 194
RECEIVED FROM	<u>J Nicholl</u>	DATE <u>7/1/28</u>
THE AMOUNT OF	<u>One hundred and fifty-four dollars</u>	\$ <u>140.00</u>
FOR	<u>Double lesson</u>	GST \$ <u>14.00</u>
		TOTAL RECEIVED \$ <u>154.00</u>
SIGNED	<u>Katrina Janzen</u>	

- What is the name of this business document?
- Describe the transaction that is evidenced by this document.
- Would Katrina have a copy of this document or the original? Explain your answer.
- Explain the role of documents in a single entry accounting system.
- What is an ABN? Explain why a business owner should register for an ABN.

6 Business documents: EFT

Brian Moloney is the proprietor of Malvern Menswear. He has provided you with the following document.

CBC BANK MALVERN MENSWEAR 554 High Street Malvern VIC 3144	

MERCHANT COPY	

Merchant number:	3122
Terminal number:	XY1420

PURCHASE	
DEBIT:	Visa XXXXXXXXXXXX1300
Date/time:	14/02/28 14:20
Authorisation:	910299

TOTAL:	AUD \$143.00

- Describe the transaction that would result in this document being issued.
- Would another copy of this document exist? Explain your answer.
- Moloney has indicated that there are both advantages and disadvantages in using an EFTPOS terminal in his business. Give an example of each.



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7 Business documents: EFT

Westside Data is owned and operated by Skyla White. She has provided the following document from her files.



CONFIRMATION OF PAYMENT

Transfer to	BSB 155-550
A/C number	213-438-002

Date/time	25/02/28 11:24
Authorisation	42556

TOTAL AUD	\$660.00

Reference	AAMI Insurance

- Describe the transaction supported by the above document.
- This method of payment has replaced a traditional document for many businesses. What document has it replaced?
- State two advantages of paying expenses using the document shown above.



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CASE STUDY

Ben Wilson established a small business trading under the name Bayside DJ Services. He specialises in the latest music trends, and his business plan includes providing music for school events and private parties. However, he's uncertain about the accounting requirements of his business. A friend advised him to keep copies of all documents used on a regular basis. Wilson expects that most of his clients will pay cash, but he may offer some credit accounts to friends and regular customers.

Wilson has been involved with local bands for several years and has built up a list of contacts in the music industry. These include several companies that provide bulk sales of recorded music. Wilson expects his suppliers to provide him with trade credit terms of 30 days, but he's unsure about what credit terms to offer to his potential credit customers.

He has asked you to provide advice on the following to assist him with his business planning.

- List the business documents Wilson will need in order to operate his business efficiently. Briefly explain the relevance of each document to his business.
- Which of the business documents you listed in part **a** will run in sequential order according to their document numbers? Explain why this is so.
- Explain why it's important to make multiple copies of business documents when they are created.
- If Wilson does provide credit terms to his friends and regular customers, what terms do you think he should offer? Justify your answer.
- Make a list of the assets and liabilities that you would expect to find in a balance sheet prepared for Bayside DJ Services. (Dollar values are not required.)

ETHICAL CONSIDERATIONS

Ben Wilson, having started his DJ business, needs to organise his office stationery. He has purchased a small laser printer and is considering which paper to purchase. He is very keen to keep his costs down.

When he was last at the office suppliers, he noticed that recycled paper was selling for \$6 a ream (500 sheets), while non-recycled paper was only \$4 a ream. Wilson is unsure which paper he should purchase and has asked for your advice, because he expects to use up to 20 reams of paper over the course of a year.

In a written report, discuss the pros and cons of both alternatives and then recommend what Wilson should do.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Explain how business documents can be used to help meet the demands of the qualitative characteristic of *verifiability*.

Question 2 (2 marks)

Explain why it's vital that business documents record GST on all relevant transactions.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



Establishing a small business

In this chapter, you'll consider the different ownership structures small businesses can have, the reasons why they succeed or fail, and what entrepreneurs can do to help minimise the risks.

Learning objectives

By the end of this chapter, you will be able to:

- **list** some reasons why people go into business [5.1]
- **classify** small businesses according to the nature of their operation [5.2]
- **outline** the advantages and disadvantages of the various forms of ownership [5.3]
- **describe** the advantages and disadvantages of operating a franchise [5.4]
- **identify** some reasons why small businesses succeed or fail [5.5]

KEY TERMS

Trading firm
Service firm
Manufacturing firm
Sole proprietorship
Partnership
Company
Incorporation
Private company
Public company
Franchise
Franchisee
Franchisor
Feasibility study

PRIOR KNOWLEDGE

CHAPTER 2 Accounting for small business

CHAPTER 3 Balance sheets for a small business



Estimated time required: 1 week



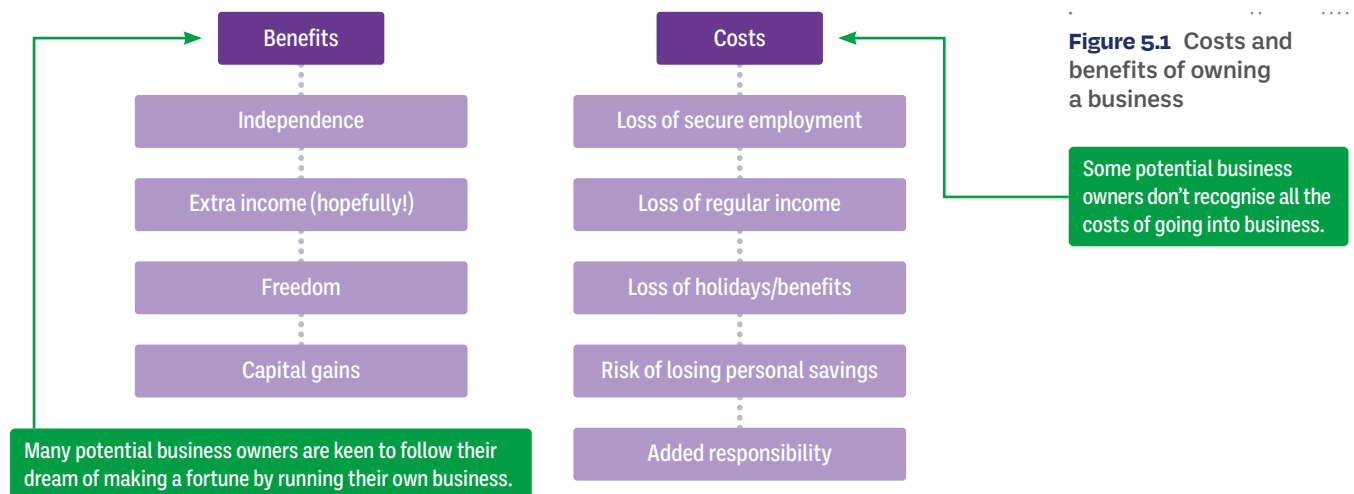
5.1 Why do people go into small business?



There are many reasons why someone might decide to set up their own business. They include:

- the wish to be independent
- dislike of working for an employer
- the challenge of creating a successful business
- the freedom to choose their working hours
- new market opportunities
- the opportunity to make more money than they could earn as an employee.

The chance to create a profitable business tends to drive the decision to go into business. Unfortunately, many business owners ignore the risks of being self-employed. For this reason, it's important to do a cost-benefit analysis before commencing a business. Figure 5.1 shows the costs and benefits of owning a business, rather than working for an employer.



Being an employee, rather than a small business owner, has many benefits, so you need a strong desire to be self-employed to ignore these. Ultimately, it's a personal choice: to take a risk and possibly earn more money, or to work for someone else and earn a regular but possibly lower income.

5.2 Types of small business operations



Small businesses can be classified by either the nature of their operation or their ownership structure. 'Nature of operation' refers to the type of business activity a firm carries out. Figure 5.2 shows three broad classifications of small business operation.



trading firm a business that earns its revenue from buying and selling goods

service firm a business that earns its revenue from providing services to its customers

manufacturing firm a business that uses raw materials to make products, which it then sells

Trading firms include businesses that buy goods and resell them, usually at a higher price (e.g. convenience stores, clothing boutiques and supermarkets). Larger businesses operating as trading firms include Harvey Norman, JB Hi-Fi, Myer and Coles.

Service firms don't sell goods. They provide a service to their customers, for which they charge a fee (e.g. accountants, plumbers, lawyers and electricians).

Manufacturing firms are involved in the actual physical production of goods. Such firms usually buy a variety of raw materials and manufacture a finished product.

Many firms are a combination of some of these classifications. For example, a petrol station is a trading firm because it sells petrol, oil and other products. However, it may also provide services such as car washing, engine tuning and car repairs. Therefore, a petrol station could be classified as a trading/service firm. It's even possible for a small business to involve all three operations – consider a brewery that makes its own beer (manufacturing), hires out its premises for functions (service) and sells products on site (trading).



5.3 Forms of business ownership

Businesses can also be classified according to their type of ownership structure. Figure 5.3 shows the three basic forms.

Figure 5.3 Forms of business ownership



Sole proprietorships

sole proprietorship a business owned by a single person

Sole proprietorships (or sole traders) are businesses owned by a single person. While the *accounting entity assumption* demands that a business be treated as a separate *accounting* entity from its owner, a sole proprietorship is *not* a separate *legal* entity. No legal distinction exists between the owner and their business.

There are several advantages of operating a business as a sole proprietor.

- *A sole proprietorship is easy to set up.* Legal requirements are minimal. Some businesses require special licences, but most sole traders only need to apply for an Australian Business Number (ABN) and to register for the Goods and Services Tax (GST). Both of these are straightforward processes. However, it's a good idea to register your business name so that it's protected for the future and others can't use it.
- *The business's profits aren't shared with anyone.* As a sole trader, you get to keep all the profits.
- *The owner has complete control over the business.* The owner is responsible for all decision-making and isn't answerable to anyone. (Some may see this as a disadvantage.)



Being a sole proprietor also has disadvantages.

- *Starting capital is limited.* Initial business funding must come from the owner's personal funds, which are usually limited.
- *Borrowing opportunities are limited.* Sole proprietors aren't separate legal entities, and financial institutions will only lend limited amounts to individuals.
- *There are limited skills.* Many small businesses have few, if any, employees, so the owner must have the skills needed to manage the business on a day-to-day basis.
- *The workload is heavy.* A single owner often makes a time commitment well beyond the 'normal' working week (e.g. many business owners work 60–80 hours per week).
- *Holidays may be minimal or not possible.* Some sole proprietors have to close their business to take a holiday. This may cost the business customers and reduce its profits.
- *One person suffers all the losses.* Just as all profits go to one person, that same person must carry all the business losses.
- *Liability is unlimited.* If a sole proprietor suffers heavy losses and has outstanding debts, the owner is held liable for all such debts. The business isn't a separate legal entity, which means the owner can be forced to liquidate their personal assets (e.g. their private home, car and personal bank accounts) to repay all the business debts.

Partnerships

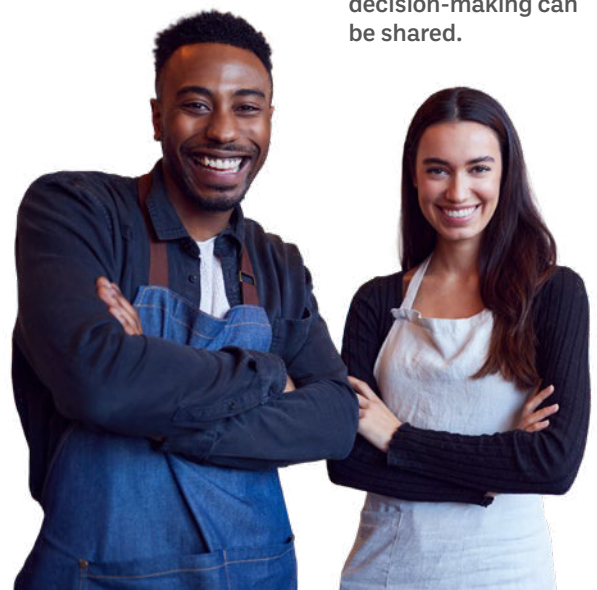
Partnerships are businesses co-owned by several individuals who share a common profit motive. There are usually between 2 and 20 owners in a partnership.

Partnerships have several advantages as a form of business ownership.

- *They are easy to set up.* Partnerships can be formed by a simple handshake between owners. However, it's wise to draw up a formal agreement in case of future disputes. Like sole proprietorships, partnerships have few legal requirements, but it's still advisable to register the business name, apply for an ABN and register for the GST.
- *Capital contributions can be combined.* A partnership has greater access to capital funds from owners because it has more owners with capital to contribute.
- *Skills can be combined.* By combining the talents of all the partners, a viable business may be created that wasn't possible with just one owner.
- *Workloads can be shared.* With several owners, day-to-day duties can be shared, and working hours and holidays can be negotiated among the partners.
- *Decision-making is shared.* The old saying 'two heads are better than one' is true for partnerships. Hopefully, better decisions can be made when two or more people are involved.
- *There may be tax benefits.* For family partnerships, the income from the business can be split between the owners. Under the progressive taxation system, this may reduce the tax payable by the owners on profits earned.
- *Losses are shared.* Unlike sole proprietors, if a loss is made by a partnership business, it doesn't all fall on one person.

partnership a business co-owned by several individuals

With partnerships, skills, workload and decision-making can be shared.



Partnerships also have some major disadvantages.

- *Profits are shared.* An individual cannot expect to receive all the profits once a partnership is created.
- *The partners may not always agree.* Although two heads *can* be better than one when making decisions, disputes may occur when partners don't agree on major decisions. This can lead to serious problems and may even destroy the business.
- *The partners have unlimited liability.* As with sole proprietors, partners have unlimited liability for their business's debts. A huge disadvantage is that a single partner can be held liable for other partners' debts if they cannot pay their share of the partnership debt.
- *The business has a limited life.* A partnership is dissolved if a partner dies or leaves the partnership.
- *The business has limited capital and borrowing ability.* Although partnerships are able to raise more funds than a sole proprietor, they are still restricted in how much capital they can borrow from banks and other financial institutions or raise from other sources.

Companies

company a business owned by shareholders that is a distinct legal entity

incorporation the process of constituting a company as a legal corporation

private company a business owned by 2–50 shareholders, which is registered with 'Proprietary Limited' (Pty Ltd) in its name

public company a business with at least five shareholders and 'Limited' (Ltd) in its name, which is limited only by the number of shares registered during its creation

Companies come into existence when a business is incorporated. **Incorporation** means that a legal entity is created that is separate from its owners.

Private companies have 2–50 owners (shareholders) and are registered with the words 'Proprietary Limited' (often abbreviated to 'Pty Ltd') at the end of the company's name. **Public companies** have a minimum of five shareholders and are only limited by the number of shares registered when the company was formed. Public companies have the word 'Limited' (abbreviated to 'Ltd') in their name.



Companies can employ their own team of specialists, including qualified accountants.

There are many advantages of forming a company.

- *Shareholders have limited liability.* Once owners have fully paid for their shares, they are protected from further debt. Their personal assets are safe from liquidation if the company has outstanding business debts.
- *Access to capital is increased.* This applies particularly to public companies, which can raise funds from the general public.
- *Specialised skills are available.* As companies are usually a larger scale of business, they can afford their own specialist employees such as managers, accountants and lawyers.
- *The company exists in law.* A company is a separate legal entity from its owners, so it can sue or be sued in its own name.
- *Ownership is transferable.* Unlike partnerships, a shareholder can sell their shares without affecting the existence of the business. The company carries on as if nothing has happened.

The main disadvantage of operating a business as a company is the loss of personal input into decision-making. With potentially thousands of shareholders, a board of directors is appointed to manage the business. When a business becomes a large corporation, the opportunity for one person to make decisions is often lost, along with the personal touch that's possible with a sole proprietorship or a partnership.

5.4 Franchises



Someone thinking of starting a small business will consider what type of business to establish and which form of business ownership to adopt. A further decision they must make is whether to operate as an independent business or as part of a franchise.

In a **franchise** business, the entity operates as part of a group of businesses with a common set of rules. In many cases, businesses operating as franchise members look identical, because their operating rules are extremely rigid. A business owner (the **franchisee**) applies to be a member of the group and usually pays a substantial membership fee. The head of the group (the **franchisor**) may be a registered company – a structure well beyond the definition of a small business.

Consider these well-known franchises:

- Bakers Delight
- Gloria Jean's
- Jim's Mowing
- Starbucks
- McDonald's
- Red Rooster
- Subway.

These popular business organisations are instantly recognisable. McDonald's is the classic case of franchising in Australia, and indeed the world. Its restaurants are basically the same across the country, selling the same range of products at the same prices. Most other franchise businesses operate in the same way.

franchise a form of business in which the owner agrees to run the business as a member of a group, with all franchise members operating as similar businesses

franchisee a business owner who has agreed to be part of a franchise group

franchisor the parent business in a franchise group, which establishes the rules of the group and usually receives a fee from all members

A franchise group offers many benefits for small business owners.

- *Customers are already familiar with the brand name and the product or service.*
- *They have a greater chance for success than with a business started from scratch.*
- *They have opportunities for mass advertising, including television.* A single, independent small business may not be able to afford mass advertising. All franchisees benefit from centralised advertising.
- *Some franchise groups find customers for their franchisees.* Customers contact head office, which then issues work to a franchisee in the customer's local area. This is usually restricted to businesses that offer services such as lawn mowing, steam cleaning and vehicle services.
- *Most decisions are made by experienced managers in the head office.* Some small business owners lack the relevant experience.
- *There is access to bulk buying.* Franchisees all receive their goods at a competitive price because the franchise group can purchase the items in bulk.

Operating a business as a franchise also has disadvantages.

- *There are establishment fees.* Franchisees must usually pay a fee to join a franchise group. These fees may be high, particularly if the group already has many successful members.
- *Membership fees are ongoing.* Franchisees usually pay a regular fee to remain part of the franchise, whether or not the individual business is successful.
- *Franchisees have little control over the business.* All franchise members must follow a set of established rules, which can restrict the decisions the franchisee can make. This varies from one franchise to another, but the rules are sometimes extremely strict. Some franchisees have no choice about the product range they can sell, the prices they charge or any special promotions they can offer.
- *There is a lack of individuality.* Franchise businesses are basically clones of one another. Many small business owners want to be independent and to run their business their own way. Such people are probably not suited to running a franchise, as all franchisees must accept the rules of the group.

As with all small business proposals, a prospective franchisee should weigh up the advantages and disadvantages of joining a franchise group. The costs of joining a well-known franchise may be extremely high, but the chances of a business being successful will often improve when it is part of a franchise. The lack of choice as an owner may be restrictive, but a recognisable brand name is a significant advantage. It may simply be a matter of personal choice (and sometimes of finances) whether a small business is established as an independent firm or as part of a franchise group.

.....
The takeaway food franchise Red Rooster operates identical businesses in Australia and New Zealand.



5.5 Success and failure of small businesses



There is no single reason why some business owners are highly successful while others go bankrupt. Yet successful business owners often have:

- a willingness to work hard and to learn from their mistakes
- a positive outlook and an enthusiastic approach to the business
- good managerial skills
- the ‘people skills’ to deal with customers.

External factors can affect the success of a business. Owners should consider factors such as:

- Is the market for our products likely to grow or shrink?
- What competition exists now and is likely in the future?
- Will our suppliers continue in business in the future?
- Will government decisions affect the future of our business? (For example, taxes and tariffs affect the demand for many products.)



‘People skills’ are essential in customer-facing small businesses.

Why businesses fail

A small business can fail to achieve the owner’s dream of being successful. One reason for this is *insufficient starting capital*. Many owners put in enough cash to buy the assets required to start the business, but they underestimate how long it will take for the business to establish itself. Most new businesses fail to make a profit in the first year of trading, and they often run out of cash while trying to get established.

Poor management skills are another common cause of failure. Not everyone knows how to control inventory, accounts receivable and employees. These specialist skills must be learnt, and not every owner adjusts to these demands. Added to this is the general problem of controlling the business’s running costs.

Another cause is *insufficient professional advice*. Some people consult accountants or other advisers when they start a business, but then think they can reduce their costs by doing that specialist work themselves.

Unrealistic predictions often cause businesses to fail. People see an opportunity to start a business and get carried away. They may not even consider the possibility of failure. Often, they are trying to cash in on a booming market – such as in the early 2000s, when internet cafés were opening every week. Technology changed and the need for such businesses largely disappeared.

Potential owners must try to remain realistic in their predictions for their business. One way to do this is to carry out a feasibility study.

Feasibility studies

feasibility study

an investigation into the potential problems and the probability of success or failure of a project such as establishing a small business

A **feasibility study** evaluates all the possibilities of a business proposal. The objective is to produce a report that informs the potential business owner of all the items they need to consider before making a final decision. It doesn't guarantee success, but a well-informed individual is more likely to make a good decision.

A full feasibility study would usually involve consulting with professionals such as accountants, lawyers and bankers. The study should cover the following areas.

1 Business type • Service • Trading • Combination of service and trading	6 Inventory requirements (if a trading firm) • Suppliers • Local or imported products? • Make goods or buy them? • Complementary products (e.g. shirts, ties) • Product range (e.g. quantity, variety)
2 Form of ownership • Sole trader • Partnership • Company	7 Finance requirements • Capital required • Loans required • Sources of finance
3 Nature of business • Franchise member • Independent business	8 Accounting requirements • Record keeping • Computer requirements • Professional advice • GST requirements
4 Legal requirements • State government regulations • Local council laws • Others (e.g. Department of Health)	9 Future possibilities • Future demand for product or service • Likelihood of a profitable venture
5 Building requirements • Location • Competition • Single shop or regional centre? • Lease or buy?	



Practise and apply

5



REVISION: SUMMARY OF KEY CONTENT

- [5.1]** People may decide to start their own small business for different reasons. Most want to explore market opportunities and to have the freedom to work for themselves. However, many risks are involved, so it's important to do a cost-benefit analysis before commencing a business.
- [5.2]** Small businesses can be classified by the nature of their business operations. Trading firms buy goods and resell them at a higher price. Service firms provide a service to their customers. Manufacturing firms are involved in the actual physical production of goods.
- [5.3]** Businesses can also be classified according to ownership structure. Sole proprietorships are owned and operated by an individual. Partnerships are owned and operated by 2–20 people. Companies are incorporated as distinct legal entities and may have hundreds or thousands of shareholders.
- [5.4]** In a franchise business, the entity operates as part of a group of businesses with a common set of rules. Franchising can offer small businesses the security of being part of a group, but being a member has a high cost and the owner (franchisee) loses a lot of control.
- [5.5]** Many small businesses fail, even if the owner works hard. Many external factors contribute to a business's success or failure. Conducting a feasibility study before starting a business helps potential business owners to consider all the possible factors.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



Workbook
p. 36



XL template

1 Local businesses

Visit your local shopping centre and identify three small businesses. Interview their business owner (or manager). For each business, answer the following questions.

- What is the name of the business?
- What is the form of ownership?
- What is the type of business activity (trading/service/manufacturing)?
- What were the owner's motives for going into small business?
- What does the owner (or manager) believe are the three most important characteristics of a successful business owner?



Workbook
p. 36



XL template

2 Feasibility study

You're considering building new premises on a vacant block of land and intend to start a new business as a motor mechanic.

- List the items you need to consider as part of a feasibility study for this project.
- Prepare a balance sheet for your new business, listing all its likely assets and liabilities. (Dollar amounts aren't required.)



Workbook
p. 37



XL template

3 Setting up a business

You've inherited \$300 000 from a rich aunt and decide to go into business. To cater to the busy lifestyles of others, you've decided to offer a range of home services such as lawn mowing, ironing and gardening.

- What factors should you consider before you set up your business?
- What form of ownership should the business take? Explain your answer.
- List three reasons why your business would be successful.
- List three possible reasons why your business could fail in the first couple of years.



Workbook
p. 38



XL template

4 Buying a small business

Jeremy Eid has an opportunity to take over an established business that specialises in window cleaning for business properties. He currently works for a large bank and earns \$80 000 per annum. Eid is 30 years old and has a \$190 000 mortgage on his small suburban home. He also owes \$10 000 on a personal loan that he used to finance his car.

The current owner of the business is a good friend and has agreed to sell it for \$270 000, payable in three instalments of \$90 000 over the next three years. According to the current owner, the business has earned a profit of \$100 000 each year for the past two years. This sounds very attractive to Eid, as it exceeds his current income. He's keen to resign from the bank and buy his friend's business. He has asked for your help in making this decision.

- Make a list of the things Eid should check before deciding.
- What reasons support his decision to buy the business?
- Why might he decide to stay in his job with the bank?
- What would you decide? Make a recommendation to Eid and explain why you believe he should either stay with the bank or buy the business.

ACCOUNTING IN THE REAL WORLD

The cost of setting up a franchise operation is an important consideration for prospective business owners. Some franchises require a minimum amount of cash before allowing an individual to join the franchise group. They may also specify the amount of investment required in order to buy into a franchise.

The Franchise Business website provides a lot of interesting material about franchises in Australia.



mea.digital/franchisebusiness

Visit the website, search the franchises listed and select four of them for your research. Answer the questions for each in your workbook or using a spreadsheet.

- a** State the franchise's name.
- b** When was the franchise established?
- c** How many franchise stores are in the family group?
- d** Who are the franchise's main competitors?
- e** What is the average investment required to buy into this franchise group?

EXAM-STYLE QUESTIONS

Question 1 (4 marks)

State and explain two advantages and two disadvantages of operating a small business as a sole proprietor.

Question 2 (4 marks)

Matt Mills has noticed that coffee shops have been popping up everywhere in his local area. In response to this, he is thinking of opening a café of his own as a sole proprietor. He has heard that being part of a franchise ensures business success.

Discuss the benefits of being a member of a franchise in this situation.



Workbook
p. 39



XL template



Workbook
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XL template

Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



Investment opportunities

This chapter describes some types of investments that are popular with small business owners, including the share market, which is easily accessible to both small business owners and private individuals.

KEY TERMS

Investing
Term deposit
Online investment account
Government bonds
Share market
Shares
Debenture
Unsecured notes
Trust
Superannuation
Speculation
Rate of return
Simple interest
Compound interest
Par value
Market price
Stockbroker
Dividend
All Ordinaries Index
Dividend yield

Learning objectives

By the end of this chapter, you will be able to:

- **outline** the advantages and disadvantages of different investments [6.1]
- **distinguish** between 'investment' and 'speculation' [6.2]
- **explain** the relationship between risk and returns [6.2]
- **calculate** a rate of return on an investment [6.3]
- **calculate** both simple and compound interest [6.4]
- **describe** how the Australian Securities Exchange works [6.5]
- **report** and **interpret** movements in share prices [6.5]

PRIOR KNOWLEDGE

CHAPTER 5 Establishing a small business



Estimated time required: 1 week



6.1 What is ‘investing’?



Investing is the act of putting economic resources (usually money) into something with the intention of making a monetary gain. Individuals, wage and salary earners, small business owners and companies all get involved in investing at one time or another.

Investors may put their cash into a variety of schemes, with two basic objectives.

- To earn a *cash return* – that is, to be paid money directly from the investment. Some investments generate a cash return monthly, quarterly or yearly.
- To make a *capital gain* – that is, to earn a profit when the investor resells the investment, which has gained in value over time.

The most suitable type of investment depends on the investor’s objectives. Some seek a steady cash return; others hope to make a capital gain. Some investments can generate both types of gains for the investor.

investing contributing economic resources with the intention of making a monetary gain

Types of investment opportunities

Individuals who want to get the best possible return on their money need to be aware of the different types of investments available, shown in Figure 6.1.

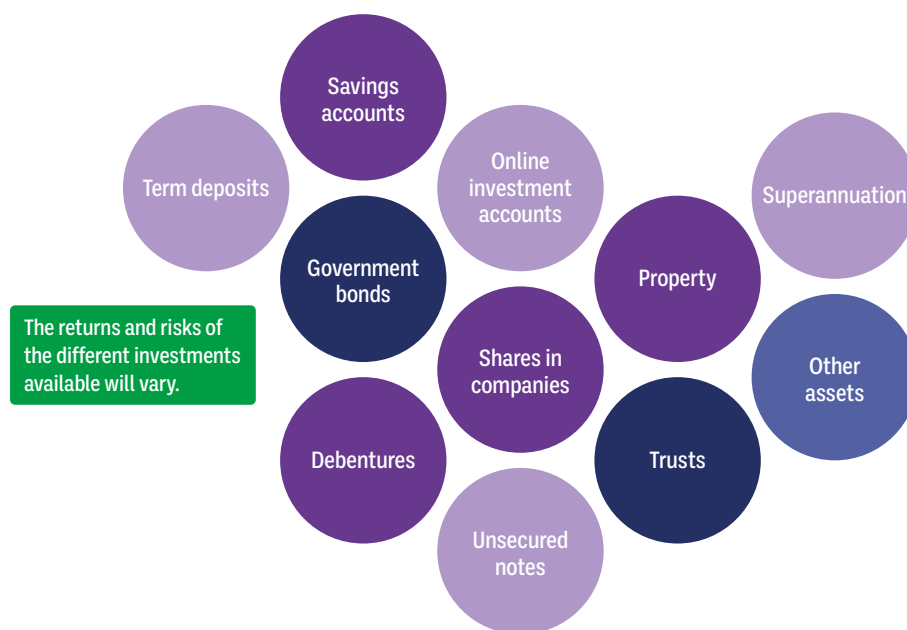


Figure 6.1 Types of investment opportunities available to individuals

Savings accounts

Many people start investing money at a young age through a personal savings account with a bank. Most wage and salary earners have their income deposited directly into such accounts. The advantage of basic savings accounts at a bank is that they are very secure investments with little, if any, risk. The disadvantage is that they tend to earn a very low rate of interest, or no interest at all.

Building societies, friendly societies and credit cooperatives also offer savings accounts. These institutions compete with banks, often by offering higher interest rates or other benefits to appeal to customers. Savings accounts are usually ‘at call’, meaning the investor can withdraw money from the account whenever they wish.

term deposit a secure form of investment that returns a specific rate of interest on the condition that the cash is tied up for a fixed period

online investment account a bank account accessible online that earns a higher rate of interest than a basic savings account

government bonds a form of investment in which the general public lends money to a government body and receives a fixed rate of interest

share market a financial market that allows buyers and sellers to make bids to buy and sell shares at specific prices

shares an investment in a company which may entitle the owners (shareholders) to receive a dividend from the company if its performance results are satisfactory

Term deposits

An individual with cash available to invest for an extended period of time may prefer a **term deposit**. With this investment, the investor deposits cash for a specific period – such as three months, six months or perhaps a year – and may not withdraw any of the money invested during this time. In return for tying up the cash, the investment offers a higher interest rate than a savings account.

Online investment accounts

Online banking is very popular among bank customers because of its convenience. **Online investment accounts** are attractive to banks as well, because their costs are reduced. (If fewer customers visit branches, or they visit them less often, banks require fewer staff to assist them.) Online investment accounts often have similar interest rates to term deposits, with the added advantage that cash is available at call via online transfer. The disadvantage for some individuals is having to use the internet for their banking transactions. Computer fraud is an ongoing issue, and some people are reluctant to use online banking for this reason.

Government bonds

The federal and state governments, and government utilities, often raise funds from the public by issuing ‘bonds’. This government-guaranteed form of investment represents a secure, long-term investment for both individuals and companies. **Government bonds** are generally taken over several years at a set rate of interest, with the interest paid periodically. They are usually advertised in newspapers, and a formal application form is provided for interested investors.

Shares in companies

Some people may wish to invest in the **share market** (also known as the stock market). Buying **shares** involves much more risk than investing money with a bank, but the rewards may also be higher. Individuals can purchase shares in a public company through a stockbroker, who acts as the investor’s agent. They can also purchase stocks online by setting up a *trading account*, which is usually linked to one of their bank accounts. The Commonwealth Bank provides such a service through CommSec, while the National Bank operates its share trading system through nabtrade. By buying shares in a company, the investor becomes a part-owner of the business and may be entitled to a share of any profit (a dividend). However, it’s also possible that the company will make a loss and the investor may receive a zero return.

The other reason people buy shares is to make a capital gain; that is, if the market price of the shares increases over time, the investor can sell them at the higher price. However, instead of rising, the shares may fall in price or even become worthless. Investors can lose all the money they invested if a company collapses and closes down completely.

Debentures

A **debenture** is a loan by a member of the public to a company. Unlike shares, an investor who takes out a debenture isn't a part-owner of the company. The company records debentures as liabilities, because they are loans that it must repay. A debenture is generally for a fixed period (e.g. one, three or five years) and interest is normally paid at regular intervals (e.g. once or twice a year).

Debentures are usually secured, because they are backed by the company's assets. This means that debentures are as secure as the company the investor is lending to. There is some risk that the money may not be repaid, so the interest on debentures will usually be higher than the interest banks offer on term deposits.

To take out a debenture, the investor must complete a formal application form, which is usually included as part of a document known as a prospectus. A prospectus sets out the purpose of the debenture issue and provides details of interest rates payable and the legal obligations of both parties.

debenture a form of investment in which the general public lends money to a company, with the funds secured by the company's assets

Unsecured notes

Unsecured notes are another form of investment involving companies. As the name implies, unsecured notes have no security in terms of the money that is repaid to the investor. For example, if a company is wound up, investors in its debentures will be repaid before investors in its unsecured notes. Because of this, unsecured notes usually pay slightly more interest than debentures. Like for a debenture issue, companies issue a prospectus to invite applications for unsecured notes.

unsecured notes an investment in which the general public lends money to a company, but the company's assets are not used as security

Property

Land and buildings are a popular long-term investment. People often buy property with the plan of building a family home. This type of investment is made not for a specific return of interest but to achieve financial security in the future.

Another type of individual who buys property is the speculator. Property may not pay interest, but property values generally increase over time. This makes property an obvious target for the investor who is trying to make a capital gain over several years.

Speculators often buy properties that will also generate income each year through rent. Apartments or units, especially in the inner city, are popular investments. They provide two opportunities for a return on their investment: regular cash flow through rental income, which can provide a return almost immediately; and the possibility of a capital gain through increased property values.



Some people buy property as a long-term investment that may provide financial security.

trust a form of investment consisting of a fund of assets controlled by a trustee, who represents the individual investors

Trusts

People use **trusts** to gain the benefits of a variety of investments made by a trustee. The investor buys a specified number of units in a trust and then, as a unit holder, is eligible to receive a share of what the trust managers have earned for the trust over a period of time. For example, a trust may invest in government securities, in a portfolio of shares (several different companies) or in several properties (for rent and/or speculation).

The net returns earned by the trust are calculated periodically and distributed to the unit holders of the trust. The investment return to the individual isn't guaranteed and depends on the success of the decisions the trustee makes.

Superannuation

superannuation a long-term investment strategy, aimed primarily at ensuring that an individual will have sufficient cash to live comfortably in retirement

This form of investment has become more important to many people in recent years. **Superannuation** is a long-term investment that aims to provide financial security in retirement. Employers are required to make superannuation contributions on behalf of their employees, and individuals may also make additional contributions themselves.

Individuals don't invest in superannuation for the purpose of receiving interest payments each year. However, they should make sufficient contributions to their fund for the fund managers to invest wisely to ensure the fund earns a reasonable amount of interest each year. The contributions plus interest accumulate over many years so that the individual has enough money to live comfortably during their retirement.

Other assets

There are many other assets in which an investor can invest their money. Items such as classic cars, stamps, coins, jewellery, artworks and antiques all involve huge markets and can be valuable investments. However, these forms of investment are often speculative and sometimes represent more of a hobby than a true investment.



6.2 Speculating or investing?

A person who is considering making an investment must first decide whether to speculate, or to invest for a specific return. If the investor wants a specific return, they may consider a term deposit or a government bond. Such investments pay a specified amount of interest each year and are relatively secure.

Some investors are willing to speculate on the possibility of making a large profit, but this usually involves significant risk. Over time, the price of shares can go up and down quite quickly.



Other investors prefer **speculation**, which means taking a gamble on an investment that has uncertain chances with the hope of making a large profit. For example, buying shares in a mining company because of a rumour about a new oil discovery is basically gambling. Such shares may be cheap in price and appear to be an attractive investment – but if no oil deposit is found (i.e. if the rumour had no basis), the shares may become worthless.

speculation making an investment on the chance that its value will grow over time

Speculative investments can be attractive, but they shouldn't dominate an individual's investments. When making up a portfolio (i.e. a combination of investments), always be wary of too much speculation. Take a balanced approach when making investment decisions. If you want to take a chance on a speculative investment, balance it with other secure investments such as government bonds to guarantee some returns. This provides room for error and helps to cover losses if the speculative investment doesn't achieve the results predicted.

Another thing to consider is the needs of the individual. Some investments tie money up for an extended period. Others are flexible and allow investors to access their money if required. There is little value in chasing high interest rates by locking your money away for five years if you will likely need your cash in 12 months' time. Budgeting helps investors to determine the types of investments they need at a particular time.

Risk versus return

As a rule, there is an inverse relationship between the security of an investment and the returns it earns. That is, for those who are prepared to invest in 'risky' investments, there is the chance to earn a higher return. In theory, this higher return is the reward for taking the risk. For conservative investor, on the other hand, the return is smaller. This relationship is shown in Figure 6.2.

If an investor has money in government-guaranteed savings accounts, they must expect a smaller return. On the other hand, if the investor is prepared to lend money to a company with little security, they may expect that their investment will earn a higher rate of interest.

As mentioned before, an investment portfolio should strike a balance between these two extremes.



Figure 6.2 Returns on investments versus security

6.3 Calculating rates of return on investments



The rate of return is an evaluation tool that provides information about the success (or failure) of an investment. If money is invested in a term deposit, the return will be known at the time of investment. For example, 4% may be paid on term deposits with a bank. However, the rate of return is most useful when evaluating other forms of investment.

A financial indicator can be used to evaluate returns on investments. The **rate of return** measures the percentage return made on an investment over a period.

rate of return the percentage return earned on an investment over a specific period

$$\text{Rate of return} = \frac{\text{Profit earned}}{\text{Amount invested}}$$

EXAMPLE 6.1

Rory Phelan purchased a coin collection on 1 March 2027 for \$1500. One year later, Phelan sold the collection for \$1650. To evaluate his investment, the profit made (\$150) can be compared with the original investment, giving a rate of return of:

$$\begin{aligned}\text{Rate of return} &= \frac{\text{Profit earned}}{\text{Amount invested}} \\ &= \frac{\$150}{\$1500} = 10\% \text{ p.a.}\end{aligned}$$

In this example, Phelan can compare the return earned (10%) with alternative investment opportunities. He may decide that, because the return is significantly above that available through banks or bonds, he will attempt to purchase more such collections.

The point Phelan must keep in mind is that his speculation paid off this time, but next time he may not be so lucky. However, he has accounting information regarding his investment and, because he is informed, he is able to make sound financial decisions.

Taxation and inflation

Income earned on investments is normally part of an individual's taxable income. While you don't need a detailed knowledge of tax for your Accounting course, the impact of taxation on investments is relevant to the rate of return.

EXAMPLE 6.2

Sophie Deering invested \$4000 in a term deposit at 5% p.a. She pays tax at the rate of 37 cents in the dollar, which means that if she earns additional income she must pay 37% of that income to the Australian Taxation Office.

Deering's rate of return on her investment before tax is obviously 5%, but the effect of taxation on her return can be shown as follows:

Interest earned (5% of \$4000)	\$200
Less: Tax payable (37% of \$200)	\$74
Interest earned after tax	\$126

Therefore:

$$\begin{aligned}\text{Rate of return after tax} &= \frac{\text{Profit after tax}}{\text{Amount invested}} \\ &= \frac{\$126}{\$4000} = 0.0315, \text{ or } 3.15\% \text{ p.a.}\end{aligned}$$

The same figure can be determined by multiplying the taxation rate by the interest rate being earned. That is, 37% of 5% = 1.85% lost through taxation.

This means that, after considering the tax that Deering would have to pay, she is in effect only earning 3.15% return on her investment.

Another factor to keep in mind when considering an investment is inflation. In times of rising prices, the real value of money decreases. That is, the purchasing power of the dollar falls in times of inflation because it costs more to buy goods or services.

If, for example, there is 3% inflation over the past year, investments must earn *at least* 3% just to maintain the value of the money invested. If an investment earns less than the current inflation rate, the investor's money is actually worth less than before. If an investor earns income at a rate higher than the inflation rate, they are said to have achieved growth in their net worth.

EXAMPLE 6.3

Looking at Sophie Deering's investment, an inflation factor could be introduced. The effect of this is shown below.

Rate of return before tax	5.00%
Less: Tax payable	1.85%
Rate of return after tax	3.15%
Less: Inflation rate	3.00%
Rate of return after tax and inflation	0.15%

The above calculations indicate to Deering that, in real terms, she is earning 0.15% p.a. on her investment. This is more realistic than the figure of 5% that the bank pays her.

Taxation is a fact of life, and interest on bank deposits is usually taxable. Inflation can have a dramatic impact on the real value of an individual's money and therefore must also be taken into account. In Example 6.3, Sophie Deering's investments are only just keeping pace with inflation, so she may want to investigate other possibilities to try to improve the growth potential of her investment dollar.

6.4 Simple interest versus compound interest



Normally, the interest being earned on personal investments is calculated using **simple interest**, which is a flat rate of interest multiplied by the amount invested.

simple interest a flat rate of interest paid upon the original investment

EXAMPLE 6.4

Sophie Deering received 5% from her bank on her term deposit of \$4000, so the interest earned was \$200.

If the term deposit was for a period of three years, Deering's interest would be calculated each year at 5% of the amount invested, and she would receive \$200 each year for three years.

Year 1	5% of \$4000 = \$200 interest
Year 2	5% of \$4000 = \$200 interest
Year 3	5% of \$4000 = \$200 interest
Total interest earned	\$600



Simple interest is a flat rate of interest paid on an investment each year, so the amount of interest received is the same amount each year.

compound interest interest that is paid both on the original investment and on the interest added to it

Compound interest is when the interest earned in the first year isn't paid to the investor, but instead becomes part of the total investment. This means that the total investment compounds every year – the interest earned each year applies to both the original investment *and* any interest earned to date.

Because compound interest is applied to an ever-increasing amount of money, it obviously generates a greater return than simple interest.

EXAMPLE 6.5

Let's assume that Sophie Deering's term deposit had a 5% compound interest rate. From the second year onwards, Deering would receive interest on both her original \$4000 and her accumulated interest. The investment continues to compound until maturity, when she receives the full amount of the interest earned. Here's the effect of compounding Deering's interest each year:

Year 1	5% of \$4000 = \$200.00 interest
Year 2	5% of (\$4000 + \$200 = \$4200) = \$210.00 interest
Year 3	5% of (\$4200 + \$210 = \$4410) = \$220.50 interest
Total interest earned	\$630.50

In this example, Deering earned an additional \$30.50 in interest, even though the term of the investment remained at three years. The longer the term of the investment, the greater the impact of compound interest.

Compound interest pays on the original investment as well as the interest added onto it, so it compounds, or increases.



Interest rate periods

Compound interest will give even greater benefits if the interest is compounded more often than once a year.

Consider an investment of \$10 000 for five years earning 8% p.a. We can calculate the interest for four different scenarios.

1 8% p.a. simple interest

$$\begin{aligned} 0.08 \times \$10\,000 &= \$800 \text{ interest p.a.} \times 5 \text{ years} \\ &= \$4000 \text{ total interest} \end{aligned}$$

2 8% p.a. compounding yearly

After 1st year	$0.08 \times \$10\,000.00 = \$800.00$
2nd year	$0.08 \times \$10\,800.00 = \$864.00$
3rd year	$0.08 \times \$11\,664.00 = \$933.12$
4th year	$0.08 \times \$12\,597.12 = \$1\,007.77$
5th year	$0.08 \times \$13\,604.89 = \$1\,088.39$
Total interest	\$4693.28

Note how the interest increases more and more as the years go by.

3 8% p.a. compounding half-yearly

To compound half-yearly, 8% p.a. equates to 4% per half-year. Therefore, interest will be calculated over 10 periods.

Period 1	$0.04 \times \$10\,000.00 = \$400.00$
2	$0.04 \times \$10\,400.00 = \$416.00$
3	$0.04 \times \$10\,816.00 = \$432.64$
4	$0.04 \times \$11\,248.64 = \$449.95$
5	$0.04 \times \$11\,698.59 = \$467.94$
6	$0.04 \times \$12\,166.53 = \$486.66$
7	$0.04 \times \$12\,653.19 = \$506.13$
8	$0.04 \times \$13\,159.32 = \$526.37$
9	$0.04 \times \$13\,685.69 = \$547.43$
10	$0.04 \times \$14\,233.12 = \$569.32$
Total interest	\$4802.44

4 8% p.a. compounding quarterly

To compound quarterly, 8% p.a. equates to 2% quarterly. Therefore, interest will be calculated over 20 periods. We won't show all 20 calculations here, but the total interest received works out to be \$4859. We can summarise the data as follows.

	Type of interest	Total interest earned
1	8% simple interest	\$4000
2	8% compounding yearly	\$4693
3	8% compounding half-yearly	\$4802
4	8% compounding quarterly	\$4859

The more compounding periods, the greater the return to the investor

As you can see, compound interest will accumulate more interest over a given period than simple interest, and an investment compounding half-yearly or quarterly will earn more interest than one that compounds annually.

Personal investors should keep in mind that compound interest is *not* paid to the investor each period. If the objective of an investment is to receive interest in 12 months' time and then to use this interest to purchase an asset, compound interest won't satisfy this aim.

The purpose of compound interest is to create an accumulating fund to provide a one-off payment at maturity, as is the case with superannuation. Superannuation funds can provide very large payments on retirement because an employee puts money away over a period of decades and allows it to compound yearly.

If you are interested in maths, the compound interest formula is:

$$\text{Future value} = P(1 + I)^n$$

Where:

P = principal invested, I = interest rate per period, and

n = number of compounding periods

Compound interest and annual yields

When banks and financial institutions offer investments involving compound interest, it's common practice to state both the actual interest being paid (called the *nominal rate*) and the effective *annual yield* earned. This yield is the rate at which the investment effectively earns interest once the compounding of interest is considered. For example, if an investment earns 5% p.a. payable monthly, that equates to 5.1164% as an annual yield when the interest is compounded every month. Knowing this, the investor can compare this rate to other investments paying simple interest over the same period.

Compound interest equates to a higher effective rate only if two things occur:

- 1 The interest rate doesn't change over the stated period. (Some investments have fluctuating interest rates.)
- 2 The funds are left in the investment for the entire period. If an investor chooses to withdraw funds during the year, the effective yield won't be achieved.



6.5 The share market

At first glance, the daily media coverage of the share market – a page full of numbers in small text – looks complicated and difficult to understand. The changes in the 'All Ordinaries' mentioned on the nightly news mean little to most people. However, once you get past the jargon and numbers, it isn't too difficult to understand the basic workings of the share market.

Key terms

Before you look at the daily listing from the markets, you need to become familiar with the specific terms and language they use.

Shares

When an individual purchases shares, they become part-owner of a company. A share certificate (sometimes called a holding statement) is issued to the shareholder, stating how many shares they own. A large company may have millions of shares available, but an individual shareholder may own just a few hundred of them.

Registered capital

This is the maximum amount of capital that a company may raise from its shareholders. It's registered when the company is originally formed and it includes a statement about the types and numbers of shares available. For example, a company may have registered capital of one million \$1 ordinary shares.

Par value and market price

par value the original price at which a share was first issued

market price the current price at which a particular share is being traded

Par value is the original value of the shares when they were first created. **Market price** is the price at which shares are currently being sold on the open market. It will go up and down depending on the company's success or failure and the demand for that particular share.

Stockbrokers

A **stockbroker** acts as an agent for a person wanting either to buy or to sell shares.

Someone wanting to buy into a company tells their broker what company's shares to buy at what price, and the quantity to buy. The broker then registers the bid to buy at this particular price. Meanwhile, a person who owns shares in the same company may have decided to sell. Their broker receives similar instructions – the company to sell, the quantity of shares for sale and a desired selling price.

Obviously, the seller wants the highest price possible, while the buyer looks for the lowest price. When both parties agree on a price, a transaction can take place.

The share market acts the same way as any other market: buyers and sellers are both looking for the best price. However, by law, individuals buying or selling shares *must* use a broker.

Online share trading has become very popular, with individuals able to trade in shares for a relatively small fee (around \$10–25 per trade). However, organisations that offer online trading (e.g. CommSec and nabtrade) actually play the stockbroker role; they act as an agent on behalf of the buyer or the seller.

The internet has streamlined share market transactions because offers to buy and sell can be received from anywhere and at any time from all over the country. Investors can also receive up-to-date information on shares from the Australian Securities Exchange (ASX) website. This is an invaluable source of information for investors: share prices, company results, company histories and special announcements are all available at any time.

stockbroker a person who acts on behalf of an individual wanting to sell or buy shares

 ASX mea.digital/asx

Brokerage fee

This is the fee paid by both buyers and sellers of shares to their stockbroker. Some brokers charge a minimum fee for small parcels of shares. Others charge a commission, which is a percentage of the total dollar value of the transaction.

Dividend

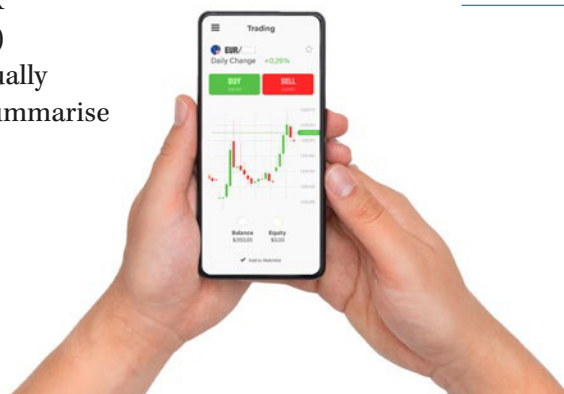
A **dividend** is a payment to shareholders as their share of the profit being distributed among the owners. For example, a dividend paid may be 20 cents per share for each share owned. There is no set rate for dividend payments, and shareholders may not receive a dividend at all if profit results were disappointing (or non-existent).

dividend a share of a company's profits paid to shareholders as a return on investment

All Ordinaries Index

The **All Ordinaries Index** is a measure of the overall state of the market after a day's trading. Essentially, it's an average of the changes in share prices. If most shares increase in value, the All Ordinaries will increase. If the market is depressed and most shares fall in price, so too will the index. The index is a guide to the confidence (or lack of confidence) that investors have in the financial market. It's usually quoted on evening television and radio news to summarise the change in the stock market on that day.

All Ordinaries Index a measure of the overall trend in the Australian Securities Exchange on a particular day



Reading a share market report

Many media outlets and websites report on the activities of the share market every day. Knowing the terminology of the market is the first step in understanding these reports, but you must also become familiar with the financial information they present.

Figure 6.3 is a typical share market report. It's based on actual data and uses some well-known companies as examples. Each column in the report provides a different piece of data.

Figure 6.3 Share market report

Share	ASX code	Close	Move	12-month		Volume	Dividend yield
				High	Low		
A2 Milk	A2M	5.26	– 0.05	7.12	3.70	5 899 800	0
Dominos	DMP	39.79	+ 0.41	72.66	38.88	282 400	1.08%
JB Hi-Fi	JBH	63.96	+ 3.38	60.79	41.36	1 370 600	4.51%
NAB	NAB	32.93	+ 0.28	32.84	25.10	3 327 600	5.11%
Reject Shop	TRS	5.20	– 0.09	5.98	3.58	14 400	1.23%

Source: Market Summary, 14 February 2024

Share

This is simply the name of the company (or an abbreviation). Some companies trade under different or multiple titles.

Close

This is the closing price at the end of the day's trading – the last price at which shares were sold on that day. For example, in Figure 6.3, A2 Milk closed at \$5.26 per share, while shares in NAB closed at \$32.93 per share.

Move

This is the change in share price (if any) from the previous day's trading. For example, shares in Dominos Pizza gained 41 cents during this day's trading, while The Reject Shop lost 9 cents per share by the end of the day.

12-month high and 12-month low

The constant questions for investors are 'Will the price go higher?' or 'Is there a chance the price will fall this week?' These two columns may help investors predict future trends in the market. Figure 6.3 shows that, at this time, JB Hi-Fi was trading at a 12-month high, while Dominos was trading close to its lowest price over the past year. Dominos may appear as a good buy at its listed price, because it's currently at a low point and may rise. But then again, it may drop even further!

Volume

This column shows the turnover in shares for the day. In the press, the volume is often shown in hundreds ('00s) or in thousands ('000s). It can be used to gauge the general level of interest in a company's shares. Figure 6.3 indicates that 3 327 600 shares in NAB were sold and 1 370 600 JB Hi-Fi shares changed hands in one day's trading. The NAB turnover means that about \$109 million changed hands in one day for just that one company!

Dividend yield

Dividend yield is a financial indicator similar to the rate of return on investment. It compares the latest declared dividend from the company with its latest selling price per share.

The dividend yield is calculated by the following formula.

$$\text{Dividend yield} = \frac{\text{Dividend share price}}{\text{Current market price}}$$

The dividend yield is used to indicate an approximate rate of return if shares are purchased at the quoted price. As the market price goes up (i.e. as the shares become more expensive to buy), the dividend yield will fall. If the market price falls, the dividend yield will rise.

It's important to be cautious when considering dividend yields, as the latest dividend per share may be from the company's previous accounting period. If business takes a turn for the worse this year, the company may decide to reduce the dividend or simply not pay one at all.

Always keep in mind that the share market works on the basic laws of supply and demand, and that prices of shares can go up or down on any given day. A company's dividend yield will change daily, depending on the movement in its share price.

Referring again to Figure 6.3, NAB has the best dividend yield from the four companies listed (5.11%), while A2 Milk was showing zero as a dividend yield. This indicates that no dividend was paid to A2 Milk shareholders in the previous period. The dividend yields for Dominos and The Reject Shop were both below 2% and some investors may shy away from these companies because of their low dividend return. However, even with A2 Milk's zero dividend, nearly 6 million shares were traded on one day! Some investors may be hopeful for an improved company performance that will give them a capital gain on their purchases. Then again, if the company improves, there might be a dividend paid next year. Always remember that dividends aren't guaranteed in any given year and neither is the market price of shares. These are the risks that investors take on whenever they purchase shares in public companies.

dividend yield a ratio used to determine the percentage return that may be earned on particular shares





Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [6.1]** Investing is the act of putting economic resources (usually money) into something with the intention of making financial gain. Common forms of investment include savings accounts, term deposits, government bonds, company shares, debentures, unsecured notes, trusts, superannuation and buying assets such as property.
- [6.2]** A person making an investment must decide whether to speculate or to seek a specific return. Investments that offer a specific return pay a specified amount of interest each year and are relatively secure. Speculative investments may pay out much larger sums, but they carry some degree of risk that they won't pay anything. Investors need to balance risk versus return.
- [6.3]** The rate of return ($\text{profit earned} \div \text{amount invested}$) measures the percentage return made on an investment over a period. Income earned on investments is taxed, and this needs to be taken into account when considering the rate of return. Inflation can also have a negative effect on return.
- [6.4]** Investments usually earn simple interest, which is a flat rate multiplied by the amount invested. Some investments earn compound interest, which is earned on both the initial investment and the additional interest. Compound interest generates a greater return than simple interest, especially if the interest is compounded more than once a year.
- [6.5]** Publicly listed companies offer shares as investments to buyers. The value of shares rises and falls in line with interest from buyers and offers to sell from owners. Sales of shares are conducted on the share market and managed by licensed stockbrokers.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Rate of return

Robert Valvo purchased a stamp collection on 1 January 2028 for \$400. He sold the collection on 31 December 2028 for \$460.

- a Calculate the rate of return Valvo earned on his investment. Express your answer as a percentage per annum.
- b Would your answer be different if Valvo had purchased the collection on 1 January 2027? What would his rate of return have been?
- c Explain how the rate of return calculation can be used to evaluate investments.

2 Rate of return after tax

Sachi Tanaka invested \$8000 in a one-year government bond paying 6% p.a. Her marginal tax rate is 19 cents in the dollar. The inflation rate over the year is 2.5%.

- a What is Tanaka's rate of return before tax?
- b What is her rate of return after tax?
- c What is her rate of return after allowing for inflation?
- d How much interest (in dollars) will Tanaka receive on the bond, and how much of this will go in taxation?

3 Rate of return after tax

Logan Faulkner took out a three-year \$12 000 debenture earning 7% p.a. His marginal tax rate is 45%.

- a How much interest will Faulkner receive:
 - i per year?
 - ii in total?
- b How much of the interest earned will Faulkner have to pay in tax?
- c Calculate his rate of return after tax.
- d If inflation was 2% p.a., what net gain does Faulkner's investment achieve in real terms?
- e State one advantage and one disadvantage of debentures as an investment for individuals.

4 Rate of return after tax

Nicole McLachlan has \$7000 invested in a term deposit over four years. She receives interest of \$455 once a year and pays personal income tax at the rate of 37 cents in the dollar.

- a What interest rate is McLachlan earning on her money?
- b How much will she pay each year in tax on her interest?
- c Calculate McLachlan's rate of return after taxation.
- d If inflation is running at 4% p.a., comment on McLachlan's investment in terms of maintaining her spending power.



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5 Comparing investments

Consider the following advertisements:

A

B

- a Explain why the interest offered in advertisement **B** is higher than that in advertisement **A**.
- b Explain the meaning of the term 'at call' as it has been used above.
- c Why do some financial institutions demand a minimum deposit in some types of investments?
- d State one advantage and one disadvantage of each of the investments shown above.
- e Some institutions pay interest on the minimum monthly balance in an account. In advertisement **A**, the interest is calculated daily. Which method has more advantages for the investor? Explain why.
- f Explain the implications of taking up the offer advertised in **B** above. Make a list of things to consider before taking out such an investment.



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6 Comparing investments

An investor is considering the following possible investments.

Term deposit	Government bonds	Debentures	Unsecured notes
NAB	State government	ABC Finance Co.	ABC Finance Co.
3 months	12 months	1 year	1 year
4%	6%	7%	8%

- a Explain why the investor may prefer to invest in the term deposit rather than the other alternatives.
- b State one reason why government bonds pay less interest than the company debentures.
- c Distinguish between a debenture and an unsecured note.
- d Explain why an investor may decide to put some money into each of the above investments.
- e Comment on the following statement: 'The highest interest rate is always the best investment.' Refer to the above alternatives in your answer.



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7 Simple or compound interest?

Kevin Buckley has \$10 000 to invest. He has been offered 6.5% simple interest over three years, or 6% compound interest (compounding yearly) over the same time period. He has asked your advice about the two alternatives. *Note:* Round down all calculations to the nearest dollar in this question.

- a Calculate the total interest receivable under each of the options.
- b Which alternative should Buckley accept? Explain your answer.
- c Would your answer be different if the period was four years? Explain your answer.

8 Simple or compound interest?

Maree Johnson isn't convinced about the benefits of compound interest. She has \$15 000 to invest and can get 8% interest in the money market for a four-year investment.

Note: All calculations may be rounded down to the nearest dollar.

- If the 8% was simple interest, calculate the amount of interest earned per annum and for the total investment period.
- Assuming the interest was compounded yearly, calculate the total interest earned over the four years.
- If the interest is compounded half-yearly, what is the additional benefit to Johnson?
- State one disadvantage to Johnson of accepting an investment involving compound interest.

9 Nominal rates and effective yield

The following advertisement was printed in the financial press.

 CASH MANAGEMENT ACCOUNT		
EFFECTIVE RATES 1/6/2028		
	Nominal rate (%)	Effective annual yield (%)*
\$5 000–9 999	3.45	3.51
\$10 000–19 999	3.75	3.82
\$20 000–49 999	4.80	4.91
\$50 000 +	5.25	5.38

* Based on monthly interest reinvested at current rates.

- Distinguish between 'nominal rate' and 'effective annual yield'.
- List two reasons why the effective yield may not be achieved.
- Explain why the rates on offer increase in line with the amount invested.

10 Dividend yields

Paul Douglas is thinking about investing in the share market. He is considering three different companies and has asked for your assistance. He has provided the following information.

Company name	Current share price	Dividend per share
Only Jeans	\$1.20	7.5 cents
National Beneficial	\$2.50	8.75 cents
Wool Stores	\$5.12	17 cents

- Calculate the dividend yield for each of the three companies.
- In which company would you advise Douglas to invest? Justify your answer.
- State three other factors Douglas should consider before selecting one of the three companies.
- Douglas's friend Janette has told him that dividend yields are based on history and that he shouldn't consider them when selecting shares for investment. Do you agree? Explain your answer.



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11 Share prices: 2024 to now

Refer to Figure 6.3 (page). The share prices in the table were actual market prices quoted in February 2024, so they can now be used as a comparison with current prices.

- Using the ASX website or the daily press, determine the latest closing price for each of the five companies listed.
- Calculate the change in the share price for each company.
- Express the change in selling price in percentage terms.
- In terms of capital gains, which of the five companies was the best buy in 2024? Explain your answer.



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12 Let's buy some shares!

You've just inherited \$80 000 from a rich aunt and decide to purchase a portfolio of shares. Your broker recommends that you spread your investment over four different companies, with a minimum of \$10 000 in each company.

- Using a newspaper or the internet as a reference, state the four companies you would select for investment purposes.
- Calculate how many shares you would buy in each of the four companies. Complete the following table in a spreadsheet or your workbook.

Company name	Current price (\$)	Number of shares purchased	Amount invested in each company (\$)
1			
2			
3			
4			
		Total invested	

- Follow the share prices for your four companies over the next two weeks (or four weeks, if time permits) and record the movements in a spreadsheet. Using this data, show the daily movements on a graph. Use the x-axis for the days observed and the y-axis for the closing share price.
- At the end of your observation period, calculate the total value of your share portfolio. Write a brief report on the success or otherwise of your investment decisions.

ACCOUNTING IN THE REAL WORLD

The Australian Securities Exchange is Australia's share market. It's a publicly traded company with an average daily turnover of more than \$4.5 billion.

Visit the ASX website, enter the company codes from the table below and use the latest information about each company to complete the table. (Or select your own five companies.)



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Company	ASX code	Closing price					Volume '000s				
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 1	Day 2	Day 3	Day 4	Day 5
ANZ Bank	ANZ										
BHP Billiton	BHP										
Coles	COL										
Harvey Norman	HVN										
Woolworths	WOW										

Perform this task for five consecutive days, after trading has concluded for the day.

After five days, write a short report on what has happened during the week. Your report should include answers to the following questions.

- Which shares were traded the most over the five days?
- Calculate the total value of shares sold in the week in the company you named in part **a**.
- Which share made the greatest gain in the week's trading? Determine the increase in value in dollars and as a percentage.
- Which share performed the worst over the week? Determine the decrease (or increase) in value in dollars and as a percentage.

Comment on any other significant events that occurred during the week's trading in relation to these five companies.

ETHICAL CONSIDERATIONS

For a number of years, you have owned some mining company shares in your investment portfolio. However, you have just read that one of these companies has decided to start mining for uranium in an overseas country. You have a significant sum of money invested in this company, and its future is very promising, but you keep hearing about potential environmental issues. The announcement has had a lot of media coverage, and some people are protesting that the new business venture may destroy areas of forest and contaminate major waterways.

How would you respond in this situation? Discuss this ethical dilemma fully, covering both sides of the issue.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Describe the two ways individuals can earn a return on their investments.

Question 2 (2 marks)

Some advice in relation to investing is that 'you should never put all your eggs into one basket'.

Explain what this statement means in relation to investing, using examples in your answer.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 7

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Recording and reporting cash flows

This chapter introduces the techniques used to record and report the cash that flows into and out of a business. You'll learn how to design and use the different recording journals, how to summarise the records into a report, and how to record payments of the Goods and Services Tax.

KEY TERMS

Cash receipts
Cash payments
Cash receipts journal
Multi-column journal
Statement of receipts and payments
GST liability
GST refund
Double entry accounting

Learning objectives

By the end of this chapter, you will be able to:

- **distinguish** between cash receipts and cash payments [7.1]
- **record** transactions in simple and multi-column cash receipts journals [7.2]
- **record** transactions in simple and multi-column cash payments journals [7.3]
- **prepare** a statement of receipts and payments from a firm's cash records [7.4]
- **calculate** and **record** GST obligations [7.5]
- **explain** the limitations of the single entry accounting system [7.6]

PRIOR KNOWLEDGE

CHAPTER 2 Accounting for small business

CHAPTER 3 Balance sheets for a small business

CHAPTER 4 Single entry accounting for a small business



Estimated time required: 1 week



7.1 Cash receipts and cash payments: Introduction



An organised accounting system classifies financial transactions so that similar transactions are grouped together. Breaking down large volumes of data into different groups makes it easier to record and process.

The first of these groups is **cash receipts**. A business may receive money in a variety of ways. For example, it may:

- sell goods for cash
- provide services for cash
- receive interest on investments
- collect money owed from accounts receivable
- borrow from banks and other institutions
- sell unwanted assets for cash
- receive cash contributed by the owner as capital (which, under the entity principle, is also a cash receipt).

cash receipts inflows of cash received from individuals or businesses



Most small businesses have daily cash transactions (including via EFTPOS terminal).

A business may also make a variety of **cash payments**. For example, it may:

- buy goods for cash
- pay for services in cash (e.g. wages, cleaning)
- pay interest on loans
- pay accounts payable
- repay loans
- purchase non-current assets for cash
- pay cash to the owner as a withdrawal from the business.

cash payments outflows of cash paid to individuals or businesses

Cash transactions are expected to occur many times in the day-to-day operations of a business. All cash receipts and payments must be recorded accurately.



7.2 Recording cash receipts

cash receipts journal

a daily record of the details of all cash receipts

Accounting records aim to create a history of the details included on business documents. A **cash receipts journal** records all cash receipts from any source. A journal is also known as a day book because it records transaction details on a daily basis. (*Note:* Journals may be prepared using spreadsheets, rather than physical books.)

The journal needs to include the relevant details of each receipt, including the date when it was received, the receipt number or EFTPOS details, the nature of the transaction, the amount received and the GST. Figure 7.1 shows a basic cash receipts journal for Jack Rio – Cabinetmaker.

Figure 7.1 Cash receipts journal

Every small business owner must record their GST transactions accurately, even if they use the simplest form of a cash receipts journal.

JACK RIO – CABINETMAKER: CASH RECEIPTS JOURNAL (BASIC)

Date	Details	Receipt no.	Amount banked \$	Amount received \$	GST received \$
Sep 1	Capital	EFT	9 000	9 000	
3	Kitchen cupboards	1001	660	600	60
5	Bookshelves	1002	209	190	19
9	Bookshelves	1003	209	190	19
11	Student desk	EFT	275	250	25
12	Bookshelves	1004	220	200	20
13	Student desk	1005	275	250	25
14	Kitchen cupboards	EFT	605	550	55
15	Loan – NAB	EFT	3 000	3 000	
18	Student desk	1006	330	300	30
21	Kitchen cupboards	1007	869	790	79
24	Student desk	1008	308	280	28
28	Bookshelves	EFT	242	220	22
30	Student desk	1009	308	280	28
30	Totals		16 510	16 100	410

Note that all receipts can be verified either by checking the bank statement (for EFT receipts) or by reference to the receipt numbers listed.

The total of the last two columns must equal the total amount banked for the period.

This cash receipts journal serves its purpose, as it records all cash received by the business.

- The *Date* column tracks when the transaction took place.
- The *Details* column notes the nature of each receipt transaction.
- The *Receipt no.* column notes the number of the source document in case of queries in the future. Rather than a receipt number, the abbreviation ‘EFT’ can also be noted for all transactions done by EFTPOS.
- The total cash received is recorded in the *Amount banked* column.
- The last two columns break down the amount of cash received into the amount that goes to the business and the GST collected (if relevant). Note that no GST is received on 1 September (the capital contributed by the owner) or on 15 September (the loan taken out from the bank).

When Jack Rio completes a job for a customer, he simply copies the amount of cash he receives, as stated on the source document, into the *Amount received* column. He also records in a separate column the GST he receives from customers, calculated at 10% of the fee recorded on the receipt.

Always check that the total of the amount received and the GST received equals the amount recorded in the *Amount banked* column. (For example, Figure 7.1 shows \$16 100 + \$410 = \$16 510). If the check is performed at the end of each month, recording errors can be identified early. Internal checks should be built into every accounting system to achieve *verifiability* and ensure that all information is reliably recorded.

A business with cash customers may simply issue a cash register receipt when making a sale or providing a service. A receipt number may not be available for every transaction, so the entry in the cash journal may simply say 'CRS', meaning 'cash register summary'. Once the tapes are removed from the cash registers at the end of a day's trading, this summary acts as the source document for the day's receipts.

Multi-column cash receipts journals

While Figure 7.1 serves its purpose as a basic receipts journal, a **multi-column journal** is often more useful. A multi-column journal has a series of columns that summarise a business's most frequent transactions.

The columns used depend on the type of business. A cabinetmaker won't use the same columns as an accountant or a clothing boutique, because the basic receipts will differ for each business. The special columns should be used for frequent transactions. Infrequent receipts are entered in the *Sundry receipts* column. For example, transactions such as a receipt from a loan wouldn't occur frequently, so they wouldn't need a special column.

Figure 7.2 shows Jack Rio's journal redesigned as a multi-column cash receipts journal that reflects the items Rio makes most frequently.

multi-column journal a daily record subdivided into special columns to cater for frequent cash receipts and payments

Figure 7.2 Multi-column cash receipts journal

The columns used in a multi-column journal should be based on what are expected to be the business's most common transactions.

JACK RIO – CABINETMAKER: CASH RECEIPTS JOURNAL (MULTI-COLUMN)								
Date	Details	Receipt no.	Amount banked \$	Sales			Sundry receipts \$	GST rec'd \$
				Kitchen cupboards \$	Bookshelves \$	Student desks \$		
Sep 1	Capital	EFT	9 000				9 000	
3	Kitchen cupboards	1001	660	600				60
5	Bookshelves	1002	209		190			19
9	Bookshelves	1003	209		190			19
11	Student desk	EFT	275			250		25
12	Bookshelves	1004	220		200			20
13	Student desk	1005	275			250		25
14	Kitchen cupboards	EFT	605	550				55
15	Loan – NAB	EFT	3 000				3 000	
18	Student desk	1006	330			300		30
21	Kitchen cupboards	1007	869	790				79
24	Student desk	1008	308			280		28
28	Bookshelves	EFT	242		220			22
30	Student desk	1009	308			280		28
30	Totals		16 510	1 940	800	1 360	12 000	410

GST is NOT recorded on capital contributions by an owner or on loans taken out by a business.

The special columns in a multi-column cash receipts journal allow different types of businesses to show clearly their most frequent types of transactions. A cabinetmaker's multi-column cash receipts journal enables desks, bookshelves and cupboards to be itemised more easily.

The special columns in a multi-column cash receipts journal allow different types of businesses to record their most frequent types of transactions clearly and accurately. A cabinetmaker's cash receipts journal might itemise receipts from desks, bookshelves and cupboards.



A multi-column cash journal has several advantages over a simple cash journal. First, a total can be quickly calculated for each special column in the journal. If a spreadsheet is used, this total can be calculated automatically and the performance of the business tracked throughout the period. These totals can also be used at a later stage to prepare a summary of the journal (covered later in this chapter).

Second, a multi-column cash journal has a more effective checking system built into its design. Once the special columns have been totalled, the totals can be checked against the total in the *Amount banked* column. In Figure 7.2, the total of \$16 510 can be checked with the totals of \$1940 + \$800 + \$1360 + \$12 000 + \$410. If these don't match, a recording error has been made somewhere in the journal. Such errors must be found and corrected before proceeding any further.

Once again, the demands of *verifiability* require that all records are accurate. In this case, the amounts received can be checked against source documents. If errors are detected, all entries should be re-checked against the receipts. The business owner should always ensure that details have been entered accurately.



7.3 Recording cash payments

cash payments journal
a daily record of the details
of all cash payments

The **cash payments journal** records all payments by a business, whatever their nature. It can be designed along the same lines as the cash receipts journal. The difference is that this journal is used to record all outflows of cash, rather than cash inflows (which are recorded in the receipts journal).

Cash payments are usually made by EFT. Copies of EFT payments will be the source of the financial information entered into a cash payments journal. Figure 7.3 shows the simple version of a cash payments journal, once again using the example of Jack Rio – Cabinetmaker.

Figure 7.3 Cash payments journal

JACK RIO – CABINETMAKER: CASH PAYMENTS JOURNAL (BASIC)					
Date	Details	EFT no.	Total paid \$	Amount paid \$	GST paid \$
Sep 1	Electric tools	7001	583	530	53
2	Timber	7002	440	400	40
3	Wages	7003	300	300	
5	Advertising	7004	275	250	25
7	Drawings	7005	200	200	
9	Timber	7006	330	300	30
10	Wages	7007	280	280	
13	Timber	7008	110	100	10
14	Drawings	7009	200	200	
17	Wages	7010	300	300	
18	Timber	7011	264	240	24
21	Drawings	7012	200	200	
24	Wages	7013	300	300	
27	Insurance	7014	528	480	48
28	Drawings	7015	250	250	
30	Totals		4 560	4 330	230

This cash payments journal is structured in a similar way to the simple cash receipts journal.

- The *Date* column tracks when the payment was made.
- The *Details* column notes the nature of each payment.
- The *EFT no.* column notes the number of the source document, which provides evidence of the EFT payment.
- The *Total paid* column shows the total amount paid by the business, while the remaining columns break that amount down into the base amount and the GST (if any).

The EFT payments should all be numbered to ensure that no transaction is missed and all have been accounted for.

Multi-column cash payments journals

If a business has repetitive cash payments, a multi-column journal may be suitable. The headings used in the special columns will depend on the nature of the business. When special columns are created for recurring items, a total can be calculated quickly, because all similar payments will be grouped together. Items not provided for by a special column should always be recorded in a *Sundry payments* column.

As with cash receipts, Jack Rio's business experiences certain cash payments more often than others – he frequently buys timber and other assets, pays wages and withdraws cash for personal use. Figure 7.4 shows how the simple journal in Figure 7.3 can be redesigned as a multi-column cash payments journal to reflect those recurring payments.

Figure 7.4 Multi-column cash payments journal

JACK RIO – CABINETMAKER: CASH PAYMENTS JOURNAL (MULTI-COLUMN)									
Date	Details	EFT no.	Total paid \$	Timber \$	Wages \$	Drawings \$	Assets \$	Sundry payments \$	GST paid \$
Sep 1	Electric tools	7001	583				530		53
2	Timber	7002	440	400					40
3	Wages	7003	300		300				
5	Advertising	7004	275					250	25
7	Drawings	7005	200			200			
9	Timber	7006	330	300					30
10	Wages	7007	280		280				
13	Timber	7008	110	100					10
14	Drawings	7009	200			200			
17	Wages	7010	300		300				
18	Timber	7011	264	240					24
21	Drawings	7012	200			200			
24	Wages	7013	300		300				
27	Insurance	7014	528					480	48
28	Drawings	7015	250			250			
30	Totals		4 560	1 040	1 180	850	530	730	230

While a business such as cabinetmaking would probably conduct some business on credit, you will consider only cash transactions in this chapter. To minimise recording errors, check the entries in the multi-column cash payments journal by totalling the special columns and reconciling these with the *Total paid* column. If this journal is prepared as a spreadsheet, all regular payments can be conveniently summarised at the end of the month.

7.4 Statements of receipts and payments

Cash journals exist to record the daily details of cash receipts and cash payments. However, once a business has been operating for some time, the cash journals will cover numerous pages and be difficult to understand. A transaction summary is therefore needed. A **statement of receipts and payments** is a report that summarises cash receipts and cash payments over a period of time. A cash journal prepared on a multi-column basis helps in preparing a statement of receipts and payments, because the most frequent transactions are already totalled.

Figure 7.5 shows a statement of receipts and payments for September for Jack Rio's business. Note that the heading includes the name of the business and the period covered.

statement of receipts and payments a summary of a firm's receipts and payments over a stated period of time

Figure 7.5 Statement of receipts and payments

JACK RIO – CABINETMAKER: STATEMENT OF RECEIPTS AND PAYMENTS FOR MONTH ENDED 30 SEPTEMBER 2028		
Cash receipts	\$	\$
Sales – Kitchen cupboards	1 940	
– Bookshelves	800	
– Student desks	1 360	
Capital contribution	9 000	
Loan – NAB	3 000	
GST collected	410	16 510
Cash payments		
Timber	1 040	
Wages	1 180	
Drawings	850	
Purchase of assets	530	
Advertising	250	
Insurance	480	
GST paid	230	4 560
Excess of receipts over payments		11 950
Bank balance (1 September 2028)		Nil
Bank balance (30 September 2028)		11 950

Total of cash receipts for the month.

Total of cash payments for the month.

The increase or decrease in the bank account over the period.



All cash receipts and all cash payments over a period of time should be reported in a statement of receipts and payments.

Statements of receipts and payments should be prepared on a regular basis (e.g. monthly) to allow comparisons with previous periods. The statement provides important information about the sources of cash receipts and how the cash was used. Although financial indicators such as the working capital ratio can be used to evaluate a firm's liquidity, a statement of receipts and payments can help to identify *causes* of a change in liquidity.

Note that the items recorded under *Sundry payments* in the cash payments journal have been listed individually in the statement of receipts and payments. This is done to provide as much information as possible to the users of this report, in accordance with the qualitative characteristic of *relevance*.

Try experimenting with the design of cash journals, and the related statement of receipts and payments, when completing the practical exercises in this chapter.



7.5 Reporting for the GST

During any period of trading, a business will experience many transactions involving the GST. If it is registered for the GST, it must collect 10% GST on all sales made to customers. It will also pay 10% GST on many of its cash payments. The statement of receipts and payments in Figure 7.5 included two items relating to the GST:

Cash receipts:	GST collected	\$410
Cash payments:	GST paid	\$230

At the end of each accounting period, the difference between the GST received and the GST paid should be calculated.

Business owners have an obligation to record all GST events accurately, as they may have a debt to the Australian Taxation Office.



GST liability

A business collects the GST on behalf of the government, so it is owed to the Australian Taxation Office (ATO) at the end of the period. However, if the business has paid GST during the same period, this amount can be deducted from the amount collected, with the net amount then being payable. Figure 7.5 shows that \$410 was collected and \$230 was paid during the period, so \$180 ($\$410 - \$230$) is owed to the ATO.

This amount should be shown in the balance sheet of the business as a current liability, because GST is usually payable either monthly or quarterly (i.e. every three months). This item may be referred to as a **GST liability** or GST debt, and is reported as follows:

Current liabilities:	
GST liability	\$180

A GST liability to the ATO is usually payable every month or every quarter and therefore should always be classified as a current liability.

GST liability an obligation to the Australian Taxation Office that exists because the GST collected by a business exceeds the GST it paid to its suppliers

GST refund

A second possibility is that a business pays more GST in a period than it collects from its customers.

Consider the following information, which has been extracted from a statement of receipts and payments:

Cash receipts:	GST collected	\$300
Cash payments:	GST paid	\$400

In this situation, the business paid more GST than it collected, so it is entitled to a **GST refund**. Once again, because most businesses report GST either monthly or quarterly, if a firm is entitled to a GST refund this should be reported under the heading of *Current assets*.

GST refund a current asset that exists because a business has paid more GST to its suppliers than it has collected from its customers

Current assets:	
GST refund	\$100





7.6 Evaluating single entry accounting for a small business

As you have seen, single entry accounting involves making one entry in a cash journal for each business transaction. Many small business owners use cash journals to record their payments and receipts, and then call on a professional accountant to prepare their accounting reports. The design of the cash journals must suit the needs of that particular business.

The basic single entry system demonstrated in this chapter is suitable for many small businesses – but not all of them. A business that deals only on a cash basis may only need a simple accounting system like this. However, as a business increases its turnover and becomes more complex, there is more pressure on the system to provide additional information.

This information may be required because:

- the business buys goods or services on credit
- the business sells goods or services on credit
- the owner requires details of all inventory being held
- the owner requires details of all assets owned by the firm.

Single entry accounting can be modified to cater for these needs, but the more complex the business becomes, the more likely it is to adopt a system of **double entry accounting**. This system is called 'double entry' because two entries are recorded for each transaction: a debit and a credit.

Double entry accounting is the focus of Units 3 & 4 of the VCE Accounting course, which deal with more complex systems, so we won't discuss it in this text. The rest of this book concentrates on single entry accounting and how it can be expanded for use in a variety of situations.

double entry accounting

an accounting system in which two entries, a debit and a credit, are made for each transaction

Many small business owners use single entry accounting. However, as a business becomes more complex, it may introduce double entry accounting.





Practise and apply

7



REVISION: SUMMARY OF KEY CONTENT

- [7.1]** There are two major cash flows relevant to any small business – cash coming in (cash receipts) and cash going out (cash payments). These transactions will occur many times in the day-to-day operations of a business. All cash receipts and payments must be recorded accurately.
- [7.2]** A cash receipts journal records all cash receipts, whatever their source, on a daily basis. It needs to include the relevant details of each receipt. A multi-column journal is like the standard journal but includes a series of columns that summarise the business's most frequent receipts.
- [7.3]** Similarly, the cash payments journal records all cash payments on a daily basis. The multi-column version includes columns that summarise the business's most frequent payments, such as wages or the purchase of manufacturing materials.
- [7.4]** A statement of receipts and payments is a report that summarises cash receipts and cash payments over a period of time. A cash journal prepared on a multi-column basis helps in preparing a statement of receipts and payments, because the most frequent transactions are already totalled.
- [7.5]** A business registered for the GST must collect 10% GST on all sales made to customers and will also pay 10% GST on many of its cash payments. At the end of each accounting period, the difference between the GST received and the GST paid should be calculated to determine whether the business has a GST liability or is owed a refund from the ATO.
- [7.6]** A single entry accounting system is suitable for many small businesses. However, the larger a business becomes, the more it needs a system that provides additional information. Many businesses prefer to use a double entry accounting system, which is covered in Units 3 & 4 of the VCE Accounting course.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Cash journals: Simple format

The following transactions relate to Olinda Office Cleaners for the first two weeks of September 2028.

Receipts		\$
Sep 1	Capital (EFT)	10 000
4	Fees (Rec. 51)	180 + 18 GST
5	Loan NAB (EFT)	5 000
8	Fees (Rec. 52)	160 + 16 GST
11	Fees (Rec. 53)	180 + 18 GST
13	Fees (Rec. 54)	160 + 16 GST
14	Fees (Rec. 55)	190 + 19 GST

Payments		\$
Sep 1	Advertising (EFT 101)	500 + 50 GST
2	Equipment (EFT 102)	800 + 80 GST
3	Cleaning materials (EFT 103)	290 + 29 GST
9	Advertising (EFT 104)	140 + 14 GST
11	Drawings (EFT 105)	600
14	Cleaning materials (EFT 106)	280 + 28 GST

- Prepare a simple cash receipts journal, with columns for Date, Details, Receipt number, Total received, Amount received and GST received.
- Prepare a simple cash payments journal, with columns for Date, Details, EFT number, Total paid, Amount paid and GST paid.
- Prepare a statement of receipts and payments for the two weeks ended 14 September 2028, showing a summary of the firm's cash transactions and the bank balance at that date.

2 Cash journals: Simple and multi-column formats

Malvern Motor Mechanics had \$2400 in the bank on 1 October 2028 and had the following transactions during the first two weeks of that month.

Oct	1	Received \$250, plus \$25 GST, from Ace Couriers for a tune-up (Rec. 11)
	2	Received \$350 for a service, plus \$35 GST (Rec. 12) from D Crosby
	3	Paid weekly rent \$820, plus GST of \$82 (EFT 941)
		Received \$250, plus \$25 GST, from S Stills for a tune-up (Rec. 13) and \$360, plus \$36 GST for a service from G Nash (Rec. 14)
	4	Purchased spare parts \$190, plus \$19 GST (EFT 942)
	5	Received \$360 + \$36 GST from D Bowie for a service (Rec. 15)
	7	The owner withdrew \$900 for personal use (EFT 943)
	9	Purchased spare parts \$680, plus GST of \$68 (EFT 944)
	10	Paid weekly rent \$820, plus \$82 GST (EFT 945)
	11	Received service fees from N Young \$360, plus GST of \$36 (Rec. 16)
	13	Received \$290, plus \$29 GST from J Mitchell for a tune-up (Rec. 17)
	14	The owner withdrew \$800 (EFT 946)

- Prepare simple versions of the cash receipts and cash payments journals for Malvern Motor Mechanics.
- Redraft your journals in part **a** to a multi-column format.
- Prepare a statement of receipts and payments for the fortnight ended 14 October 2028.
- List two advantages of using multi-column cash journals.

3 Multi-column cash journals

Eddie's Electrical Services is a small business that repairs digital radios and televisions. On 1 November 2028, the firm had a \$300 overdraft. The following transactions occurred during the first two weeks of that month.

Nov	2	Received from Flemington High School \$120 for radio repairs, plus GST of \$12 (Rec. 189)
	3	Paid assistant's wages \$850 (EFT 281)
	5	Received \$360, plus \$36 GST for TV repairs, and \$80, plus \$8 GST for repairs to a digital radio
	7	Purchased spare parts \$530 + \$53 GST (EFT 282)
	8	Received \$160 from N Hariman for radio repairs, plus GST of \$16
	9	Received \$100 + \$10 GST for radio repairs
	10	Paid assistant's wages \$750 (EFT 283) and advertising \$380, plus GST of \$38 (EFT 284)
	12	Princes Hill Secondary College paid \$420 for work done on its digital radios and paid an additional \$42 GST
	13	Received \$180 from M Long, plus \$18 GST for TV repairs, and the owner withdrew \$650 via EFT payment 285
	14	Received \$100 for radio repairs, plus \$10 GST, and purchased spare parts \$420 plus GST of \$42 (EFT 286)

- Design multi-column cash journals for Eddie's Electrical Services and then record the above transactions in these journals. *Reminder:* The numbers on EFT payments receipts used by Eddie will run in numerical sequence.
- Prepare a statement of receipts and payments to summarise the fortnight's cash transactions.
- Using the financial information recorded in your journals, what is the GST situation of this business after two weeks of November's operations? Explain your answer.



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4

Documents to journals

VCE Tutoring Services provides tutoring in accounting, economics and legal studies. On 1 March 2028, the business had assets of \$400 Cash at Bank and \$600 Equipment. The following documents were used to evidence transactions during March 2028.

VCE Tutoring Services

Date 2/3/28
Received from S Woodman
For Accounting
Amount \$80.00
GST \$8.00
Total \$88.00

RECEIPT NO: 278001

VCE Tutoring Services

Date 4/3/28
Received from X Crone
For Economics
Amount \$80.00
GST \$8.00
Total \$88.00

RECEIPT NO: 278002

VCE Tutoring Services

Date 4/3/28
Received from E Gulbis
For Legal Studies
Amount \$80.00
GST \$8.00
Total \$88.00

RECEIPT NO: 278003

VCE Tutoring Services

Date 7/3/28
Received from A Smillie
For Economics
Amount \$100.00
GST \$10.00
Total \$110.00

RECEIPT NO: 278004

VCE Tutoring Services

Date 9/3/28
Received from S Woodman
For Accounting
Amount \$80.00
GST \$8.00
Total \$88.00

RECEIPT NO: 278005

VCE Tutoring Services

Date 11/3/28
Received from X Crone
For Economics
Amount \$80.00
GST \$8.00
Total \$88.00

RECEIPT NO: 278006

VCE Tutoring Services

Date 11/3/28
Received from E Gulbis
For Legal Studies
Amount \$80.00
GST \$8.00
Total \$88.00

RECEIPT NO: 278007

VCE Tutoring Services

Date 14/3/28
Received from C Ross
For Accounting
Amount \$100.00
GST \$10.00
Total \$110.00

RECEIPT NO: 278008

VCE Tutoring Services

Date 19/3/28
Received from E Gulbis
For Legal Studies
Amount \$80.00
GST \$8.00
Total \$88.00

RECEIPT NO: 278009

VCE Tutoring Services

Date 22/3/28
Received from S Woodman
For Accounting
Amount \$80.00
GST \$8.00
Total \$88.00

RECEIPT NO: 278010



 **VCE Tutoring Services**

Date 25/3/28
Received from X Crone
For Economics
Amount \$80.00
GST \$8.00
Total \$88.00

RECEIPT NO: 278011

Date 2/3/28
To Promo Ads
For Advertising
Amount \$170.00
GST \$17.00
Total \$187.00

EFT no. 471

Date 5/3/28
To Quickcopy
For Photocopying
Amount \$60.00
GST \$6.00
Total \$66.00

EFT no. 472

Date 13/3/28
To Acme Supplies
For Equipment
Amount \$100.00
GST \$10.00
Total \$110.00

EFT no. 473

Date 15/3/28
To Cash
For Drawings
Amount \$400.00
GST \$
Total \$400.00

EFT no. 474

Date 16/3/28
To Promo Ads
For Advertising
Amount \$180.00
GST \$18.00
Total \$198.00

EFT no. 475

Date 19/3/28
To Quickcopy
For Photocopying
Amount \$70.00
GST \$7.00
Total \$77.00

EFT no. 476

Date 29/3/28
To Cash
For Drawings
Amount \$350.00
GST \$
Total \$350.00

EFT no. 477

- a Prepare multi-column cash journals for VCE Tutoring Services for the month of March 2028. Use appropriate columns for recurring items and check that all transactions are entered in chronological order.
- b Prepare a statement of receipts and payments for the month of March 2028.



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5 Documents to journals

Jake Riccardi provides a range of home services. He needs your help to design his cash journals. He provides the following documents from his last month of trading.

HANDYMAN JAKE	RECEIPT NO. 2061
DATE	2/4/28
RECEIVED FROM	T Smyth
FOR	Lawn mowing
AMOUNT	\$60.00
GST	\$6.00
TOTAL	\$66.00

HANDYMAN JAKE	RECEIPT NO. 2062
DATE	7/4/28
RECEIVED FROM	N Ross
FOR	Painting – lounge
AMOUNT	\$880.00
GST	\$88.00
TOTAL	\$968.00

HANDYMAN JAKE	RECEIPT NO. 2063
DATE	8/4/28
RECEIVED FROM	D Pell
FOR	Plumbing repairs
AMOUNT	\$400.00
GST	\$40.00
TOTAL	\$440.00

HANDYMAN JAKE	RECEIPT NO. 2064
DATE	9/4/28
RECEIVED FROM	H Smyth
FOR	Lawn mowing
AMOUNT	\$60.00
GST	\$6.00
TOTAL	\$66.00

HANDYMAN JAKE	RECEIPT NO. 2065
DATE	11/4/28
RECEIVED FROM	B Stepien
FOR	Painting – ceilings
AMOUNT	\$550.00
GST	\$55.00
TOTAL	\$605.00

HANDYMAN JAKE	RECEIPT NO. 2066
DATE	12/4/28
RECEIVED FROM	T Smyth
FOR	Lawn mowing
AMOUNT	\$70.00
GST	\$7.00
TOTAL	\$77.00

HANDYMAN JAKE	RECEIPT NO. 2067
DATE	14/4/28
RECEIVED FROM	N Ross
FOR	Painting – garage
AMOUNT	\$450.00
GST	\$45.00
TOTAL	\$495.00

HANDYMAN JAKE	RECEIPT NO. 2068
DATE	18/4/28
RECEIVED FROM	T Line
FOR	Painting – lounge
AMOUNT	\$540.00
GST	\$54.00
TOTAL	\$594.00

HANDYMAN JAKE	RECEIPT NO. 2069
DATE	22/4/28
RECEIVED FROM	H Smyth
FOR	Lawn mowing
AMOUNT	\$70.00
GST	\$7.00
TOTAL	\$77.00

HANDYMAN JAKE	RECEIPT NO. 2070
DATE	24/4/28
RECEIVED FROM	M Harvey
FOR	Painting – 2 rooms
AMOUNT	\$850.00
GST	\$85.00
TOTAL	\$935.00



»

HANDYMAN JAKE		RECEIPT NO. 2071
DATE	28/4/28	
RECEIVED FROM	C Rutland	
FOR	Plumbing	
AMOUNT		\$280.00
GST		\$28.00
TOTAL		\$308.00

Date	3/4/28
To	Caltex
For	Petrol
Amount	\$160.00
GST	\$16.00
Total	\$176.00

EFT no. 956

Date	8/4/28
To	Leader Newspapers
For	Advertising
Amount	\$320.00
GST	\$32.00
Total	\$352.00

EFT no. 957

Date	11/4/28
To	Caltex
For	Petrol
Amount	\$150.00
GST	\$15.00
Total	\$165.00

EFT no. 958

Date	16/4/28
To	Wattyl Paints
For	Paint
Amount	\$900.00
GST	\$90.00
Total	\$990.00

EFT no. 959

Date	18/4/28
To	Caltex
For	Petrol
Amount	\$150.00
GST	\$15.00
Total	\$165.00

EFT no. 960

Date	22/4/28
To	Cash
For	Drawings
Amount	\$500.00
GST	
Total	

EFT no. 961

Date	27/4/28
To	Wattyl Paints
For	Paint
Amount	\$650.00
GST	\$65.00
Total	\$715.00

EFT no. 962

Date	30/4/28
To	Bendigo Bank
For	Loan Repayment
Amount	\$800.00
GST	
Total	

EFT no. 963

- Design an appropriate cash receipts journal for Jake's business and record the relevant transactions for the month of April 2028.
- Design a multi-column cash payments journal for Handyman Jake and complete the journal for April 2028.
- Prepare a statement of receipts and payments to summarise the cash transactions of the business for the month, given that the Cash at Bank account balance was \$393 on 1 April 2028.



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CASE STUDY

Jackie Di Mieri is the proprietor of Tents R Us, a small business that hires out tents and camping equipment to its customers.

Jackie has asked for your assistance in designing a single entry accounting system. A friend of hers, who also runs a small business, uses an accounting system based on spreadsheets. He simply enters the daily receipts and payments in cash journals, and the spreadsheet automatically generates a statement of receipts and payments at the end of the month. Jackie would like to use a similar system.

In Jackie's business, customers place orders for three sizes of tents – small, medium and family. Customers pay cash up-front for their orders and GST of 10% is collected on all orders. Jackie purchases her tents and camping equipment from two suppliers. She pays cash on delivery to all her suppliers, plus the required GST.

Jackie has one assistant to help her with customers' enquiries and she pays her wages every week. She runs weekly advertisements through Google Ads, which are increasingly helpful in gaining new customers. From time to time, Jackie has to purchase non-current assets for the business, such as tools and ladders. She usually pays cash for such items because she is already committed to a loan that requires weekly repayments. She also makes a cash withdrawal each week, as she feels confident about making a profit on a regular basis.

- a** Use a spreadsheet to design multi-column cash journals that Jackie could use each month in her business. Consider the operations of Tents R Us before designing the system. The cash journals should include formulas to add up automatically any special columns that you create.
- b** Within the same spreadsheet, prepare a pro-forma statement of receipts and payments. This report should be prepared automatically as receipts and payments are entered in the cash journals. Note that Jackie should enter the balance of the Cash at Bank account at the start of the month. (That is, this figure isn't created automatically by the spreadsheet.)
- c** Explain how the single entry system that you have created for Tents R Us would satisfy the qualitative characteristic of *verifiability*.
- d** Is there a link between a statement of receipts and payments and the balance sheet? Explain fully.



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EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Explain the purpose of the *Sundries* column in a cash journal. Use an example in your explanation.

Question 2 (3 marks)

The following information is provided in relation to the GST events of a small business:

- GST owing as at 1 May 2028 \$3 200
- GST collected during May 2028 \$2 300
- GST paid during May 2028 \$2 850

Calculate the GST owing to the ATO as at 31 May 2028. Explain how to report this amount in the balance sheet prepared at that date.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

Income statements for a service firm

KEY TERMS

Income statement
Profit
Revenue
Expenses
Accounting period

In this chapter, you will learn how to design and prepare an income statement, which is an effective tool for comparing a business's revenue and expenses for a reporting period.

Learning objectives

By the end of this chapter, you will be able to:

- **outline** the six characteristics of accounting reports [8.1]
- **define** profit, revenues and expenses [8.1]
- **distinguish** between cash and profit [8.2]
- **prepare** an income statement for a service firm [8.3]

PRIOR KNOWLEDGE

CHAPTER 1 Let's go accounting!

CHAPTER 2 Accounting for small business

CHAPTER 7 Recording and reporting cash flows



Estimated time required: 2 weeks





8.1 Understanding the income statement

The distinction between an accounting record and an accounting report may not be clear, especially when working with spreadsheets. It's relatively simple to create a spreadsheet that records data and reports on it at the same time – but that doesn't mean they're the same thing.

This chapter introduces another general purpose accounting report – the income statement. Before we get into the details of that report, it's worth revisiting what accounting reports are and why they are so important.

Accounting reports revisited

The important thing to keep in mind is that a *record* is just raw data that has been stored in a basic fashion. A *report* draws connections between those pieces of data so that they generate meaning for the manager of a business or for another user of the report. It might be possible for an experienced or skilled user to draw out that meaning just from the records, but it's the job of an accounting system – and of an accountant – to make this possible for all users.

As you learnt in Chapter 2, accounting reports should be prepared on the basis of the following six qualitative characteristics so that they can be a valuable tool for the user.

- *Timeliness*: Reports must be produced in a timely fashion to be useful to their users.
- *Understandability*: Reports should be easy to understand for as many people as possible.
- *Relevance*: Only information relevant to the particular business entity that's being examined should appear in its reports.
- *Faithful representation*: The information in reports must faithfully represent the economic events it covers.
- *Comparability*: Reports should be able to be compared easily with the reports of other similar entities and with similar information about the same entity.
- *Verifiability*: Accounting information should come from source documents; this factual evidence enables the information to be verified (i.e. checked).

The statement of receipts and payments is an example of an accounting report that should have these characteristics.

- In the case of cash flows, the *relevant* information is all the cash receipts and cash payments for a specific period of time.
- To satisfy *verifiability*, the cash inflows can be checked against the cash receipts issued by the business and copies of EFTPOS documentation, while the cash payments can be verified with EFT documents or bank statements.
- This report has a simple layout, so the demand for *understandability* is easily satisfied.
- If the statement is prepared in the same way at the end of each month, results can be easily compared, satisfying the demand for *comparability*.
- If monthly reports are being prepared, they should be finalised as soon as possible to meet the requirement of *timeliness*.
- Finally, information contained in the report must *faithfully represent* the economic events of the month under review.

Always keep these six characteristics in mind when preparing an accounting report.

Revenues and expenses

The statement of receipts and payments is a summary of all cash inflows and outflows. However, when reporting on the profit performance of a business, not all cash transactions are considered.

An **income statement** is a report that compares the revenues and expenses that occur within one reporting period. The final result of such a report is shown as a net profit or a net loss for the period. **Profit** is the excess of revenues over expenses. A loss will occur if the expenses for the period are greater than the revenues.

But what, exactly, are revenues and expenses?

Revenue is an increase in assets (other than contributions from the owner) or a decrease in liabilities that results in an *increase* in owner's equity. Revenue is recognised if a business provides goods or performs a service and receives cash for doing so, because the business receives an economic benefit (cash) that increases its assets.

If the service is provided on a credit basis, rather than for cash, it's still viewed as revenue because the customer's promise to pay is a future economic benefit that also leads to an increase in assets. However, in this case, cash isn't affected: the asset that increases is Accounts Receivable. Similarly, if a trading firm sells goods for cash or on credit, an amount of revenue is created.

Note that cash contributed by an owner doesn't qualify as a revenue transaction.

Expenses are decreases in assets (other than withdrawals by the owner) or increases in liabilities that result in a *decrease* in owner's equity. An expense is recognised if a business pays for services (e.g. paying wages) during a period. The payment of wages results in a decrease in an asset, as cash is being paid out. Such reductions will eventually reduce the owner's equity in the business. Similarly, a trading firm hands over physical goods when it makes a sale. The cost of the goods reduces the inventory of the business, which is an asset.

Rather than reducing an asset, an expense may increase a liability. For example, if a business places an advertisement in a local paper, it may be arranged on a credit basis. This transaction doesn't reduce the firm's assets; instead, it increases its liabilities in the form of Accounts Payable. The definition is still satisfied, so it's recognised as an expense.

income statement

an accounting report that states revenues, expenses and the resulting profit or loss for a reporting period

profit the excess of revenues over expenses for a specific period of time

revenue increases in assets or decreases in liabilities that result in an increase in owner's equity, achieved by providing goods or services to customers

expenses decreases in assets or increases in liabilities that result in a decrease in owner's equity

8.2 Cash versus profit



Before preparing an income statement, it's important to recognise the differences between this report and a statement of receipts and payments. While these two reports might seem similar on the surface, they contain mostly different items and have entirely different purposes.

- The statement of receipts and payments examines the cash inflows and cash outflows for the **accounting period**. Its final result is the cash balance at the end of that period.
- The income statement reports on the revenues and expenses for the accounting period. Its final result is a net profit (or loss) for that period.

The qualitative characteristic of *relevance* is important when preparing any accounting report. The definition of cash receipts and payments, and of revenues and expenses, determines what should or shouldn't be included in each report.

The comparison in Table 8.1 of transactions that occur during one reporting period demonstrates some of the differences between the two types of reports.

accounting period the period of time over which revenues are compared with expenses in order to determine profit (or loss)

Table 8.1 Cash flows compared to revenues and expenses

Cash inflows	Revenues
Cash received from customers	Sale of goods to customers (cash or credit)
Cash contributions by the owner	Provision of services to customers (cash or credit)
Money borrowed from a bank	
Cash outflows	Expenses
Cash paid to suppliers	Inventory (goods) sacrificed to earn sales
Cash paid to employees	Services used by the business
Cash withdrawn by the owner	(cash or on credit)
Loan repayments to the bank	Materials used by a service business when providing its services (e.g. timber used by a carpenter)

Note that an item may sometimes be shown in *both* reports. For example, if a business sells goods for cash, a cash inflow has occurred, so this transaction is relevant to the statement of receipts and payments. However, the business has also experienced an inflow of economic resources in the form of an increase in assets. This inflow also increases equity, so it qualifies under the definition of revenue.

Compare this to a loan taken out from a bank. Although this is a cash inflow (the business has received cash), the transaction also increases liabilities and doesn't increase the equity of the owner. The loan therefore doesn't qualify as a revenue item.

A similar situation may exist with cash payments and expenses. If a business pays cash out for employee wages, a cash outflow has occurred and is reported in the statement of receipts and payments. Wages represent an economic sacrifice that decreases the owner's equity, so the transaction would also be reported as an expense in the income statement.

However, the situation is different in the case of a loan repayment. In this case, a cash payment has still occurred, but it doesn't create an expense item. This is because the repayment reduces the future obligation to a liability but doesn't affect the owner's equity.

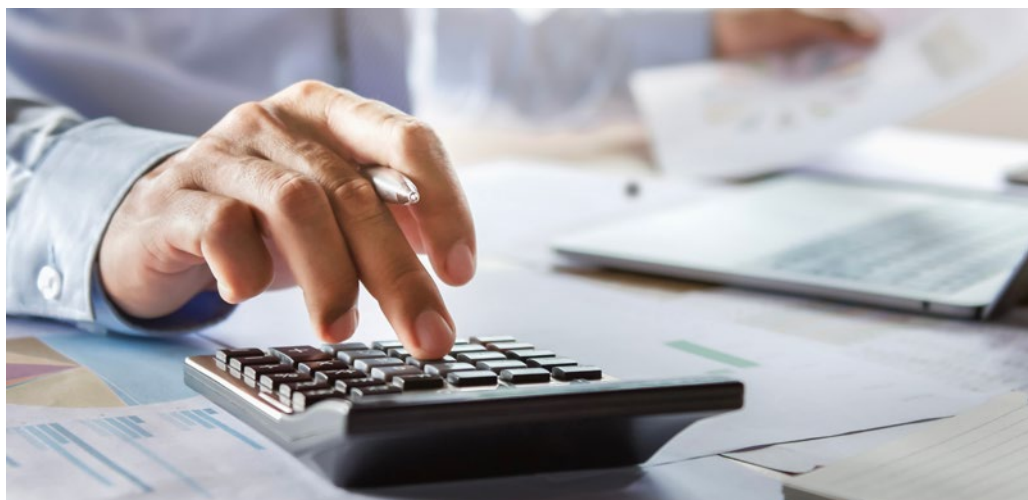
The format of the two accounting reports may be summarised as follows.

Statement of receipts and payments:

$$\begin{aligned}\text{Cash receipts} - \text{cash payments} &= \text{excess of receipts over payments} \\ &+ \text{bank balance at beginning} \\ &= \text{bank balance at end}\end{aligned}$$

Income statement:

$$\text{Revenue} - \text{expenses} = \text{profit for the period}$$



8.3 Preparing an income statement



The income statement tells the owner or manager whether the business has made a profit or a loss over a period of time. For this reason, it's one of the most important accounting reports for a small business.

The statement follows the *period assumption*, in which revenue for a specific period of time is compared to the expenses over that same period in order to determine whether a profit or a loss has occurred. These two classifications provide the basic format of the income statement.

To demonstrate this format, let's look back to Chapter 7 and the example of Jack Rio – Cabinetmaker. In that chapter, you saw a statement of receipts and payments for his business (page 91), and that statement is repeated here as Figure 8.1.

Figure 8.1 Statement of receipts and payments

**JACK RIO – CABINETMAKER: STATEMENT OF RECEIPTS AND PAYMENTS
FOR MONTH ENDED 30 SEPTEMBER 2028**

Cash receipts	\$	\$
Sales – Kitchen cupboards	1 940	
– Bookshelves	800	
– Student desks	1 360	
Capital contribution	9 000	
Loan – NAB	3 000	
GST collected	410	16 510
Cash payments		
Timber	1 040	
Wages	1 180	
Drawings	850	
Purchase of assets	530	
Advertising	250	
Insurance	480	
GST paid	230	4 560
Excess of receipts over payments		11 950
Bank balance (1 September 2028)		Nil
Bank balance (30 September 2028)		11 950

This statement should be used to provide summarised data about all receipts and payments.

Under the definitions of revenue and expenses, the six highlighted items in Figure 8.1 wouldn't be included in an income statement, for the following reasons.

- *Capital contribution* represents assets of \$9000 put into the business by the owner, so it's part of owner's equity, not revenue.
- *Loan – NAB* doesn't represent an inflow of economic resources that increase the owner's equity. When a loan is taken out, the asset cash at bank increases. A corresponding increase occurs in the firm's present obligations (i.e. liabilities). The loan is therefore treated as an increase in liabilities, not as revenue.
- *Drawings* is cash withdrawn by the owner for personal use. This represents a distribution of equity funds to the owner, so it's not a decrease in assets according to the definition of expenses. It should never be treated as an expense.

- *Purchase of assets* is clearly an increase in the assets of the business. An item classified as an asset shouldn't be treated as an expense until it's used up in order to increase owner's equity. For example, the cost of an asset will be treated as an expense when it's sold, because cash received for its sale will be treated as a revenue item.
- *GST collected* and *GST paid* should never be part of an income statement. GST is collected from customers on behalf of the government; it doesn't belong to the business owner. Its collection creates a liability, not an increase in owner's equity. The GST paid by a business simply reduces the amount the business owes to the government, so GST paid is never reported as an expense. GST transactions for a period should always be reported in the balance sheet of a business as either a GST liability or a GST refund.

Now that you understand why some items aren't relevant to an income statement, the report can be prepared as shown in Figure 8.2.

Figure 8.2 Income statement

JACK RIO – CABINETMAKER: INCOME STATEMENT FOR MONTH ENDED 30 SEPTEMBER 2028		
Revenue	\$	\$
Sales – Kitchen cupboards	1 940	
– Bookshelves	800	
– Student desks	1 360	4 100
Less: Expenses		
Timber	1 040	
Wages	1 180	
Advertising	250	
Insurance	480	2 950
Net profit		1 150

Whereas the statement of receipts and payments summarises all cash transactions, the income statement only shows information in relation to revenues and expenses.

Many service-type businesses rely on specialist skills, but all business owners also require an understanding of financial matters.



Note the following important things about the income statement.

- As with all accounting reports, the heading should always state the name of the entity and the period being examined. In the case of Jack Rio – Cabinetmaker, the report clearly states that it’s for one month’s operations. (When evaluating a profit figure, it’s essential to know the length of time taken to earn that profit.)
- To improve *understandability*, it’s common practice to use subheadings to show totals for revenue and expenses.
- The final figure should be labelled clearly. In this case, a profit of \$1150 has been earned for the month of September 2028.

Once a profit or loss figure is calculated, this amount is transferred to the owner’s equity section of the balance sheet. A profit will increase the owner’s equity, while a loss will decrease the equity. In addition to the profit figure, any withdrawals made by the firm’s owner must be shown under owner’s equity, as drawings decrease the owner’s claim on the business.

The balance sheet for Jack Rio – Cabinetmaker in Figure 8.3 demonstrates these points.

Figure 8.3 Balance sheet, including the net profit for the period

JACK RIO – CABINETMAKER: BALANCE SHEET AS AT 30 SEPTEMBER 2028				
Assets	\$	Liabilities	\$	\$
Bank	11 950	Loan – NAB	3 000	
Electric tools	530	GST liability	180	3 180
		Owner’s equity		
		Capital	9 000	
		Plus: Net profit	1 150	
			10 150	
		Less: Drawings	850	9 300
	12 480			12 480

Both these statements have a simple format designed to suit the needs of a service business with only a few expense items. In later chapters, you’ll examine the needs of a more complex business, as well as reporting for a trading firm.

Keep in mind that all accounting reports must be designed so that they are *useful* to the users of that report. Therefore, changes can (and should) be made to the format of an income statement to meet the needs of its users.



Small business owners have diverse accounting needs, so accounting reports should be designed to meet their particular needs.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [8.1]** An accounting record is raw data that has been collected, while an accounting report draws connections between those pieces of data so that they are meaningful. Accounting reports should be prepared on the basis of the six qualitative characteristics of accounting.
- [8.1]** Revenues are increases in assets or decreases in liabilities that result in an increase in owner's equity. Expenses are decreases in assets or increases in liabilities that result in a decrease in owner's equity. If revenues are greater than expenses for an accounting period, the business generates a profit. If expenses are greater than revenues for a period, the business suffers a loss.
- [8.2]** Cash inflows aren't necessarily the same as revenues, and cash outflows aren't necessarily the same as expenses. This is because some inflows and outflows don't change the owner's equity. Only cash flows that change owner's equity affect overall profit and loss.
- [8.3]** An income statement is an accounting report that compares revenues and expenses for one reporting period. This allows the user to determine the profit or loss for the business in that period. Once a profit or loss figure is calculated, the amount is transferred to the owner's equity section of the balance sheet.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Preparing an income statement

The following accounting report has been provided by Christian Malivindi, owner of Learn to Play Guitar, who has \$25 000 capital as at 1 January 2028.

LEARN TO PLAY GUITAR: STATEMENT OF RECEIPTS AND PAYMENTS FOR MONTH ENDED 31 JANUARY 2028

Cash receipts	\$	\$
Tuition fees – Individual customers	3 250	
Tuition fees – groups	2 450	
Interest from bank	220	
Loan – NAB	4 500	
GST collected	570	10 990
Cash payments		
Hire of room	980	
Wages	1 600	
Office expenses	140	
Drawings	930	
Advertising	550	
Purchase of equipment	1 280	
GST paid	295	5 775
Excess of receipts over payments		5 215
Bank balance (1 January 2028)		3 420
Bank balance (31 January 2028)		8 635

- Prepare an income statement for Learn to Play Guitar for the month of January 2028.
- Prepare the owner's equity section of the balance sheet as at 31 January 2028.
- State four items that appear in the above statement that you didn't include in the income statement. Explain why you excluded those items from your report.
- What is the GST situation for this business as at 31 January 2028? Explain your answer.



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2

Preparing an income statement

Bonnie Blyth, the proprietor of Blyth Mechanical Repairs, has \$40 000 capital as at 1 April 2028 and has provided the following information.

BLYTH MECHANICAL REPAIRS: STATEMENT OF RECEIPTS AND PAYMENTS FOR QUARTER ENDED 30 JUNE 2028

Cash receipts	\$	\$
Fees – Brakes	7 480	
Fees – Tune-ups	5 460	
Fees – General services	3 200	
Capital injection	5 000	
Commission on sale of batteries	850	
GST received	1 699	
Interest – Term deposit	420	
Loan – Trusty Finance	1 500	25 609
Cash payments		
Spare parts used	1 980	
Wages – Mechanic	6 800	
Postage	180	
Drawings	5 400	
Advertising	590	
Cleaning of garage	840	
GST paid	1 987	
Rent of garage	14 000	
Purchase of computer	2 280	34 057
Excess of payments over receipts		(8 448)
Bank balance (1 April 2028)		6 428
Bank balance (30 June 2028)		(2 020)

- Prepare an income statement for Blyth Mechanical Repairs for the quarter.
- Prepare the owner's equity section of the balance sheet as at 30 June 2028.
- Explain your treatment of the following items: 'Commission on sale of batteries', 'Capital injection', 'Wages – Mechanic' and 'Purchase of computer'.
- Comment on the performance of this business for the reporting period being examined.

3 Statement of receipts and payments and income statement

Cavalieri's Computer Services is a small business that provides repairs and general servicing of computers and printers. On 1 April 2028, the firm had a bank balance of \$430, a GST debt of \$560 and owner's equity of \$36 000. The following transactions occurred during April 2028.

Apr	2	Received from D Hughes \$420, plus \$42 GST, for computer repairs (Rec. 892)
	3	The owner contributed \$7500 to the business (EFT 21)
	5	Paid rent using EFT \$1450, plus \$145 GST
	8	Issued an EFT receipt for \$120 for repairs to a printer (plus \$12 GST)
	10	Paid wages \$630 using EFT and bought spare parts for cash \$440, plus \$44 GST (EFT)
	13	Received \$410 for computer repairs (plus \$41 GST) – paid using EFT
	14	Paid advertising \$170, plus GST of \$17, using EFT
	17	Received \$380, plus \$38 GST, from C Carly for computer repairs (receipt issued) and paid wages \$630 (EFT)
	18	Received \$90 for printer repairs (plus GST \$9) via EFT
	19	Purchased spare parts \$390, plus \$39 GST, using EFT
	24	Paid wages \$520 via EFT
	26	Received \$420 for computer repairs and \$150 for servicing a printer (plus GST of \$42 and \$15) – receipts issued to both customers
	28	The proprietor withdrew \$200 (EFT)
	29	Received interest from the bank \$150 (EFT)
	30	Received \$100 from L Carter, plus \$10 GST, for printer repairs using EFT

- a Design suitable cash journals for Cavalieri's Computer Services using a spreadsheet and record all the transactions for April 2028.
- b On your spreadsheet, prepare a statement of receipts and payments for the month ended 30 April 2028.
- c Prepare an income statement for the month of April 2028.
- d Show how the owner's equity section of the balance sheet would appear as at 30 April 2028.
- e Calculate the GST debt or refund that exists at 30 April 2028. Explain how to report this in the balance sheet as at this date.



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4

From documents to reports

Olive McRae owns Classic Photography, which provides a range of photographic services. On 1 May 2028, the business had the following assets: cash at bank \$1400 and equipment \$10 200. It also has a GST liability of \$650. The following documents were used to evidence transactions during May 2028.

CLASSIC Photography RECEIPT 187

Date	1/5/28
Received from	H Tatton
For	Passport
Amount	\$30.00
GST	\$3.00
TOTAL	\$33.00

CLASSIC Photography RECEIPT 188

Date	4/5/28
Received from	M & S Cafra
For	Wedding
Amount	\$840.00
GST	\$84.00
TOTAL	\$924.00

CLASSIC Photography RECEIPT 189

Date	8/5/28
Received from	M & J Payne
For	Wedding
Amount	\$750.00
GST	\$75.00
TOTAL	\$825.00

CLASSIC Photography RECEIPT 190

Date	12/5/28
Received from	R Flemming
For	Passport
Amount	\$30.00
GST	\$3.00
TOTAL	\$33.00

CLASSIC Photography RECEIPT 191

Date	15/5/28
Received from	P Carrier
For	Family portrait
Amount	\$110.00
GST	\$11.00
TOTAL	\$121.00

CLASSIC Photography RECEIPT 192

Date	18/5/28
Received from	C O'Dea
For	Passport
Amount	\$30.00
GST	\$3.00
TOTAL	\$33.00

CLASSIC Photography RECEIPT 193

Date	20/5/28
Received from	J & J Eid
For	Wedding
Amount	\$890.00
GST	\$89.00
TOTAL	\$979.00

CLASSIC Photography RECEIPT 194

Date	24/5/28
Received from	F Latina
For	Family portrait
Amount	\$160.00
GST	\$16.00
TOTAL	\$176.00

CLASSIC Photography RECEIPT 195

Date	27/5/28
Received from	A Liddle
For	Passport
Amount	\$40.00
GST	\$4.00
TOTAL	\$44.00

CLASSIC Photography RECEIPT 196

Date	30/5/28
Received from	M Nguyen
For	Passport
Amount	\$40.00
GST	\$4.00
TOTAL	\$44.00





 CLASSIC Photography RECEIPT 197	
Date	31/5/28
Received from	J & K Kelic
For	Wedding
Amount	\$740.00
GST	\$74.00
TOTAL	\$814.00

West Bank	
EFT 312	DATE 3/5/28
TO	City News
FOR	Advertising
AMOUNT	\$160.00
GST	\$16.00
TOTAL	\$176.00

West Bank	
EFT 313	DATE 6/5/28
TO	Canon
FOR	Enlargements
AMOUNT	\$120.00
GST	\$12.00
TOTAL	\$132.00

West Bank	
EFT 314	DATE 12/5/28
TO	Quicktrips
FOR	Courier fees
AMOUNT	\$50.00
GST	\$5.00
TOTAL	\$55.00

West Bank	
EFT 315	DATE 15/5/28
TO	O McRae
FOR	Drawings
AMOUNT	\$350.00
GST	\$
TOTAL	\$

West Bank	
EFT 316	DATE 19/5/28
TO	City News
FOR	Advertising
AMOUNT	\$160.00
GST	\$16.00
TOTAL	\$176.00

West Bank	
EFT 317	DATE 22/5/28
TO	Quicktrips
FOR	Courier fees
AMOUNT	\$60.00
GST	\$6.00
TOTAL	\$66.00

West Bank	
EFT 318	DATE 28/5/28
TO	Canon
FOR	Equipment
AMOUNT	\$400.00
GST	\$40.00
TOTAL	\$440.00

West Bank	
EFT 319	DATE 30/5/28
TO	Agfa
FOR	Enlargements
AMOUNT	\$70.00
GST	\$7.00
TOTAL	\$77.00

- Using a spreadsheet, prepare cash journals for Classic Photography for the month of May 2028, using appropriate columns for recurring items.
- Prepare a statement of receipts and payments for the month of May 2028.
- Prepare an income statement for the month of May 2028.
- Calculate the GST liability of the business as at 31 May 2028.
- Explain how the above business documents satisfy the demand for *verifiability*.



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5 Receipts and payments to income statement

Max Haas provides the following information in relation to his business, which trades as Maximum Mowing.

Summary of transaction data for February 2028:

Feb 1	Cash at bank as at 1 February – \$540, GST liability as at 1 February – \$840
4	The owner contributed \$2000 as capital
7	Cost of fuel for the month – \$320 paid in cash, plus \$60 still owing (GST paid \$32)
10	Equipment purchased for cash – \$2500, plus GST of \$250
12	Advertising costs paid – \$430, plus GST of \$43
18	Cash withdrawals made by the owner – \$750
21	Fees received from clients – \$1800, plus GST of \$180
24	Repairs to mowers – \$220, plus GST of \$22
27	Loan repayments – \$800
29	Telephone bill for the month – \$90 (not yet paid)

- Prepare a statement of receipts and payments for the month ended 28 February 2028.
- Prepare an income statement for the month ended 28 February 2028.
- With reference to the qualitative characteristic of *relevance*, explain your treatment of the item on 7 February in the two accounting reports prepared in this question.



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6 Receipts and payments to income statement

The following is a summary of the transactions experienced by Tan Ha, owner of a small business trading under the name Tan the Painter, during the month of June 2028.

Jun 1	Cash collected from customers for work done during June – \$7700, plus GST of \$770
2	The cost of paint used on jobs during June was \$1540. This was bought for cash, along with GST of \$154
3	Wages paid to the assistant during June – \$3200
4	\$40 was received for interest on the business bank account
5	Delivery costs of \$60 were paid during June, plus GST of \$6
6	The owner withdrew \$600 from the business for personal use
7	Tan organised for an advertisement to be run during June at a cost of \$480, plus GST. The paper hasn't sent an account yet and Tan thinks he will pay for this item early in July
8	During June, Tan placed an order for some new paintbrushes to be delivered in July. At this stage, he isn't sure how much they will cost, but he thinks it will be about \$200, plus GST

- Prepare a statement of receipts and payments for the month ended 30 June 2028. (The bank balance as at 1 June was \$240.)
- Prepare an income statement for June.

7 Recognition of expenses

The new owner of South Coast Jetski Hire, Linda Hawthorn, needs some advice.

Hawthorn has decided to rent a shop at a cost of \$30 000 per year, starting on 1 July 2028. However, the owner of the property offered her a deal: \$125 000 paid in advance for the next five years' rental. Hawthorn agreed to this offer and takes possession of the business property on 1 July 2028.

Hawthorn has decided that the accounting period for her business will conclude on 31 December each year. She has a basic understanding of accounting but isn't sure how to treat the rent expense in the accounting reports for the year 2028.

Her brother suggests that she treat the full amount of \$125 000 as an expense, because it was paid during that year. Her mother recommends that she should report one-fifth, or \$25 000, because 2028 is the first year of a five-year contract. Finally, her father suggests that, as the usual cost is \$30 000 per year, she should report this amount for 2028.

- a State one advantage and one disadvantage of the five-year payment for Hawthorn's business.
- b Consider the definition of expenses earlier in this chapter. Comment on each of the solutions offered by the members of Hawthorn's family.
- c How much rent expense (if any) do you think Hawthorn should report in her income statement on 31 December 2028? Give reasons for your answer. Refer to any relevant accounting assumptions and/or qualitative characteristics to support your findings.

8 Recognition of revenues

Bobby's Boats is a small business that designs and constructs custom-made boats.

On 1 May 2028, Bobby's Boats signed a contract with V Jackson to build a boat. The contract price was stated as \$50 000. A 10% deposit was required within 30 days of the signing of the contract and Bobby's Boats received this on 25 May 2028. Progress payments were then required as follows:

- 30/6/28: \$15 000
- 31/8/28: \$5 000
- 31/10/28: \$5 000
- balance on delivery.

The boat was delivered on 22 December to Jackson, who asked for 30 days to settle the final amount outstanding. Bobby's Boats works on a six-month accounting period.

- a How much revenue (if any) should Bobby's Boats report in relation to the contract with Jackson for the six months ended 30 June 2028? Explain your answer, with reference to the definition of revenue earlier in this chapter.
- b How much revenue should Bobby's Boats report for the six months ended 31 December 2028? Explain your answer.



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CASE STUDY

Gisborne Furniture Repairs is owned and operated by Brendon Fogarty, who established it on 1 September 2027. At that time, he deposited \$50 000 into a separate bank account to start the business.

During the year ended 31 August 2028, the following transactions occurred.

- Repair fees received in cash totalled \$53 000, plus GST of \$5300.
 - Fogarty borrowed \$18 000 from the bank.
 - The loan has to be repaid at the rate of \$250 per month. Fogarty paid back a total of \$3000 to the bank during the business's first reporting period.
 - Interest expense of \$900 on the loan was paid in cash.
 - The loan was used to buy office furniture (\$4000, plus \$400 GST) and equipment (\$11 000, plus \$1100 GST).
 - Advertising completed during the year cost \$1500 (plus \$150 GST) paid in cash.
 - Repair materials were purchased in order to complete customers' jobs. Materials costing \$18 600 were purchased for cash (plus \$1860 GST).
 - A part-time assistant was employed during the year, and their wages were \$10 000.
 - Rent of the repair shop cost Fogarty \$22 000, plus \$2200 GST.
 - Office expenses cost \$950 (plus \$95 GST); all of these were paid in cash.
 - Fogarty bought a computer for cash during the year for \$3000, plus GST of \$300.
 - Fogarty withdrew cash from the business on the last day of every month, for a total of \$8000 during the year.
- a** Select the items from the above list that are cash flows and prepare a statement of receipts and payments for the year ended 31 August 2028.
 - b** Identify the items that represent revenue and expenses and prepare an income statement for the year ended 31 August 2028.
 - c** Taking into account all the above information, prepare a balance sheet as at 31 August 2028.
 - d** Consider the results as reported in your statement of receipts and payments. Comment on the cash position of the business after one year of operation.
 - e** Using the results shown in your income statement, comment on the profit result achieved over the year.

MODELLING EXERCISE



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PART A:

In the Chapter 7 Case Study, you met the owner of Tents R Us, Jackie Di Mieri. She is now quite comfortable preparing her statements of receipts and payments but is unsure about how to prepare income statements. She is not clear whether she is making a profit and has provided the following information for your consideration:

Average hiring fee per customer	\$150
Average number of customers per month	45

Regular expenses:

• Monthly rent	\$2000
• Assistant's wages	\$600 per week
• Tent repairs	\$200 per month
• Interest on loan	\$100 per week
• Advertising	\$500 per week

Prepare an income statement for Tents R Us to determine the current net profit for a month and **comment** on the results.

PART B:

Given the disappointing result of her current business operations, Di Mieri is considering a few alternatives to try to improve her profit results. They are as follows:

- Option 1:** Drop her charges for tent hire by 10% for all customers. This is expected to increase the number of customers per month to about 60.
- Option 2:** Double the amount spent on advertising. This should boost the number of customers each month to 70. The charge per customer will be kept at the same level but wages would have to increase to \$800 per week.
- Option 3:** Increase advertising to \$750 per week but increase charges to an average of \$160 per customer. With better advertising, Di Mieri is expecting to have 50 customers per month and the extra charges should help cover the cost of the advertising.

Prepare income statements for each of the three options and **recommend** which option would likely generate the best profit result.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

The owner of A1 Car Wash has just purchased an office computer for her business for \$3000. The owner believes that this cost should be treated as an expense item.

Explain to the owner why the computer isn't an expense item and how it should be treated in the books of the business.

Question 2 (4 marks)

The owner of City Drycleaning is a little confused. The balance of cash at bank has increased from \$5000 to \$18 000 over the last 12 months. However, the business's accountant has just advised that City Drycleaning has made a net loss of \$25 000 for the period.

Explain, using two examples in your answer, how the business's bank account can increase in a year when it has made a net loss.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



Accounting for credit transactions

In this chapter, you will learn how to record credit transactions in a single entry accounting system, using subsidiary records and journals.

Learning objectives

By the end of this chapter, you will be able to:

- **distinguish** between cash and credit transactions [9.1]
- **define** the terms 'accounts receivable' and 'accounts payable' [9.1]
- **record** credit sales and purchases in appropriate records [9.2, 9.3]
- **maintain** subsidiary records for accounts receivable and accounts payable [9.2, 9.3]
- **prepare** accounts receivable and accounts payable schedules at the end of a period [9.4]
- **determine** GST liability, taking into account credit transactions [9.4]

KEY TERMS

Credit transaction
Invoice
Accounts receivable
Accounts payable
Subsidiary records
Purchases journal
Sales journal
Accounts receivable schedule
Accounts payable schedule

PRIOR KNOWLEDGE

CHAPTER 4 Single entry accounting for a small business

CHAPTER 7 Recording and reporting cash flows



Estimated time required: 1 week



9.1 Credit transactions



In a **credit transaction**, goods or services are supplied immediately, but payment follows later (anywhere from a few days to 30–60 days).

The period of time offered to credit customers to pay for goods or services, and the discounts available to them, make up the credit terms of a credit agreement. Typical credit terms include:

- 5/7 – meaning ‘5% discount if paid within 7 days’
- 2/30 – 2% discount if paid within 30 days
- n/60 – the net amount payable is due within 60 days (i.e. no discount).

Some businesses offer discounts as an incentive for prompt payment. These are called settlement discounts, because they encourage the customer to settle (pay off) their accounts quickly.

Credit transactions must be verified by source documents. An **invoice** informs a customer of the cost of a credit transaction and the credit terms. The supplier gives the original invoice to the customer and keeps a copy.

Figure 9.1 shows an invoice made out by Perfect Printers to Blake Editorial Services. Perfect Printers keeps a copy for its records.

credit transaction

a transaction in which goods or services are provided now, but payment follows later

invoice a business document used to provide evidence of a credit transaction

Figure 9.1 Sales invoice

 Perfect Printers 12 Sydney Street West Coburg VIC 3058 ABN 765-212-354	TAX INVOICE NO. T278 DATE 12/7/28		
SUPPLIED TO Blake Editorial Services 6 Main Road Malvern VIC 3144			
Details of goods supplied:			
QUANTITY	DESCRIPTION	COST PER UNIT	TOTAL \$
1000	Business cards as per sample	\$15.00 per 100	150.00
	GST (10%)		15.00
	Total amount owing		165.00
NOTE Credit terms: 5/7 n/30			

If Blake Editorial pays the invoice within the seven-day discount period, they can deduct a settlement discount of 5%. This reduced price helps Blake’s business but also benefits Perfect Printers, because slow-paying customers can be costly to businesses.

Accounts receivable and accounts payable

If you were keeping the books for Perfect Printers, you would classify Blake Editorial Services as an **account receivable**, because Perfect Printers has supplied goods or services to it on credit. Accounts receivable are usually classified as current assets in a balance sheet, because they are expected to pay their debts within the next 12 months (hopefully, within one or two months).

Accounts payable includes all individuals or businesses that have supplied goods or services to a business on credit. In the case of Perfect Printers, that might be a supplier of materials such as paper and inks, which Perfect Printers would purchase for use in its business.

accounts receivable

customers that owe a business money because they obtained goods on credit

accounts payable suppliers that a business owes money to after obtaining goods on credit

Accounts payable are usually classified as current liabilities, because they are considered to be a short-term source of finance. Accounts payable usually allow credit terms of 30 days (sometimes 60 days) and therefore meet the definition of current liabilities.

Perfect Printers may attract repeat customers by offering the 5/7 discount.



9.2 Recording credit purchases

subsidiary records

additional accounting records used to keep track of accounts receivable or accounts payable

Most single entry accounting systems rely on cash journals as the main accounting record. Therefore, **subsidiary records** need to be created if credit transactions occur frequently. These additional records are used to keep track of credit accounts. Some small business owners simply place invoices in a shoebox or desk drawer until they are paid. A more organised approach is recommended, particularly if a firm has many accounts receivable and accounts payable.

The purchases journal

purchases journal a daily record used to keep track of all credit purchases

The first step in organising credit transactions is to create a **purchases journal**. This simple record keeps a business's credit purchases together in one record and can be referred to later if there are any queries. Figure 9.2 shows such a record for a small business trading as Lisa the Landscaper.

Figure 9.2 Purchases journal

LISA THE LANDSCAPER: PURCHASES JOURNAL

Date	Accounts payable	Invoice no.	Garden supplies \$	Timber \$	Sundries \$	GST charged \$	Accounts payable \$
Aug 1	Reliable Lawn Supplies	32165	1 200			120	1 320
Aug 5	Wholesale Timber Co.	5409		950		95	1 045
Aug 8	Pots 'N' Plants	A890	1 320			132	1 452
Aug 14	Reliable Lawn Supplies	32289	650			65	715
Aug 19	Wholesale Timber Co.	5499		800		80	880
Aug 22	Tim's Timber Co.	BG023		400		40	440
Aug 28	Reliable Lawn Supplies	32365	300			30	330
Aug 31	Totals for month		3 470	2 150		562	6 182

The key details of each invoice should always be recorded in the purchases journal:

- date
- names of accounts payable
- invoice numbers
- value of the transaction
- GST charged
- total of each invoice.

The specific design of the journal depends on the needs of the business and what it purchases on credit. In this example, the business owner often purchases garden materials on credit, as well as timber to be used in their landscaping jobs.

It's also useful to include a column headed *Sundries*. This would be used for unusual credit purchases or purchases that occur infrequently. For example, Lisa the Landscaper may buy some office stationery on credit every six months. There is little point in having a column just for stationery, but if it's bought on credit, then an accounts payable entry should be made.

Although this record shows all purchases on credit for a particular period of time, it doesn't show the amount owing to each individual supplier.

Maintaining individual records

A business that deals on credit may also require individual accounts payable records, in order to keep track of different transactions and different suppliers.

The details in the purchases journal of Lisa the Landscaper have been used to create the individual accounts payable records shown in Figure 9.3.

Figure 9.3 Individual records for accounts payable

ACCOUNTS PAYABLE RECORD: RELIABLE LAWN SUPPLIES

Date	Details	Doc. no.	Amount \$	Balance \$
Aug 1	Garden supplies/GST	Inv. 32165	1 320	1 320
Aug 14	Garden supplies/GST	Inv. 32289	715	2 035
Aug 28	Garden supplies/GST	Inv. 32365	330	2 365

ACCOUNTS PAYABLE RECORD: WHOLESALE TIMBER CO.

Date	Details	Doc. no.	Amount \$	Balance \$
Aug 5	Timber/GST	Inv. 5409	1 045	1 045
Aug 19	Timber/GST	Inv. 5499	880	1 925

ACCOUNTS PAYABLE RECORD: POTS N' PLANTS

Date	Details	Doc. no.	Amount \$	Balance \$
Aug 8	Garden supplies/GST	Inv. A890	1 452	1 452

ACCOUNTS PAYABLE RECORD: TIM'S TIMBER CO.

Date	Details	Doc. no.	Amount \$	Balance \$
Aug 22	Timber/GST	Inv. BG023	440	440

In these accounts payable records, one entry is made each time a credit purchase occurs. Each entry includes the GST charged as part of the total transaction. Alternatively, the entries can be broken down into two parts: one for the cost price of the inventory being purchased, and one for the GST being charged.

Figure 9.4 shows how this approach could be applied to the Tim's Timber Co. account, rather than simply recording 'Timber/GST' as one item.

Figure 9.4 An alternative approach to individual records

ACCOUNTS PAYABLE RECORD: TIM'S TIMBER CO.				
Date	Details	Doc. no.	Amount \$	Balance \$
Aug 22	Timber	Inv. BG023	400	400
	GST charged		40	440

Both approaches are acceptable, as each satisfies the demand for *verifiability*. As long as the document numbers are stated, the invoices can be traced at a later date to answer any queries.

Posting from the purchases journal

The records for accounts payable break down all the individual credit purchases. The information is then *posted* (transferred) from the purchases journal to the individual records. The current amount owing to an accounts payable can be shown in the right-hand column each time the account is updated.

The headings a firm uses in its purchases journal should always reflect what it's likely to purchase on credit in the day-to-day running of its business. That information should also be noted when posting to individual records.

For example, two of the records in Figure 9.3 have an entry for 'Garden supplies/GST', but the record for Tim's Timber Co. has an entry for 'Timber/GST'. Why is this difference recorded? Many service businesses need to buy a variety of materials in order to provide their services to their customers. A landscaper may buy soil, potting mix, plants, seeds, timber and so on. A carpenter would require timber, nails, screws and glue. So, materials can be defined as goods purchased with the intention of using them to provide a particular service to a customer – as opposed to tools, which are used for general purposes and with multiple customers. The records should reflect this distinction, as the business owner may need to analyse their spending patterns in the future.

Plants and soil can be listed as 'garden supplies', as they will be used up when providing services to customers. The owner needs to keep track of all such expenses when preparing invoices for their clients.



Cash transactions in credit records

No matter how detailed, the individual records prepared above show only part of a typical business situation. Accounts payable will be paid cash eventually, so if some cash transactions are included, a more realistic picture can be seen.

Consider the cash journals maintained by Lisa the Landscaper, where the following two cash payments are located.

Aug 4	Paid Reliable Lawn Supplies \$1320 (EFT 320)
31	Paid Reliable Lawn Supplies \$715 (EFT 325)

If these cash payments were included in the individual accounts payable record for Reliable Lawn Supplies, the record would be as shown in Figure 9.5.

Figure 9.5 Accounts payable record with cash payment included

ACCOUNTS PAYABLE RECORD: RELIABLE LAWN SUPPLIES				
Date	Details	Doc. no.	Amount \$	Balance \$
Aug 1	Garden supplies/GST	Inv. 32165	1 320	1 320
Aug 4	Cash payment	EFT 320	1 320	Nil
Aug 14	Garden supplies/GST	Inv. 32289	715	715
Aug 28	Garden supplies/GST	Inv. 32365	330	1 045
Aug 31	Cash payment	EFT 325	715	330

The record shown in Figure 9.5 is an ideal way to provide essential information about a firm’s accounts payable. Because a running balance is recorded after every transaction, the amount owing to individual accounts payable can be seen at a glance. All document numbers are recorded for future reference, providing a history of the transactions with a particular account in one compact record. These details also comply with the demands of both *verifiability* and *faithful representation*. If a supplier has a query about how much is owed, the documents provide evidence of all the financial events between a business and its supplier. This also ensures that all economic events between the two parties have been recorded accurately.





9.3 Recording credit sales

sales journal a daily record used to keep track of all credit sales

Where a business provides services on credit to its customers, a **sales journal** records the details of all invoices issued to customers. In this case, the original invoice is issued to the customer and a copy is used to record the details in the journal. Figure 9.6 shows a typical sales journal.

Figure 9.6 Sales journal

LISA THE LANDSCAPER: SALES JOURNAL

Date	Accounts receivable	Inv. no.	Sale \$	GST \$	Accounts receivable \$
Sep 1	Balwyn College	1201	2 100	210	2 310
Sep 4	BBQs Galore	1202	500	50	550
Sep 7	D Haynes	1203	450	45	495
Sep 14	Balwyn College	1204	600	60	660
Sep 19	M Taylor	1205	80	8	88
Sep 24	BBQs Galore	1206	250	25	275
Sep 30	Balwyn College	1207	200	20	220
Sep 30	Totals		4 180	418	4 598

It is vitally important to record the names of all accounts receivable when a credit sale is made, so the business can 'chase them up' if they are slow payers.

As with the purchases journal, the sales journal records the key transaction details:

- date
- names of accounts receivable
- invoice numbers
- value of the sales transaction
- GST charged
- total of each invoice.

One notable difference with the sales journal is that the invoice numbers should always run in sequence. This is because the document numbers used are all from the same source. (In the purchases journal, the invoices may be received from several different businesses.) This ensures that all invoices are recorded accurately, as it's easy to identify missing numbers.

Individual records for accounts receivable

Just as with the purchases journal, businesses may post transactions from the sales journal to individual accounts receivable records. These records could also include cash receipts from these credit customers.

As well as the credit sales listed in Figure 9.6, Lisa the Landscaper has the following cash receipts.

Sep 6	Received from BBQs Galore \$550 (Rec. no. 101)
16	Received from Balwyn College \$2310 (Rec. no. 102)
20	Received from Balwyn College \$660 (Rec. no. 103)
24	Received from D Haynes \$495 (Rec. no. 104)

From these credit and sales transactions, Lisa the Landscaper would have individual accounts receivable records as shown in Figure 9.7.

Figure 9.7 Individual records for accounts receivable

ACCOUNTS RECEIVABLE RECORD: BALWYN COLLEGE

Date	Details	Doc. no.	Amount \$	Balance \$
Sep 1	Credit sale/GST	Inv. 1201	2 310	2 310
Sep 14	Credit sale/GST	Inv. 1204	660	2 970
Sep 16	Cash received	Rec. 102	2 310	660
Sep 20	Cash received	Rec. 104	660	Nil
Sep 30	Credit sale/GST	Inv. 1207	220	220

Note that the balance owing increases with every invoice issued and decreases when cash is actually received.

ACCOUNTS RECEIVABLE RECORD: BBQS GALORE

Date	Details	Doc. no.	Amount \$	Balance \$
Sep 4	Credit sale/GST	Inv. 1202	550	550
Sep 6	Cash received	Rec. 101	550	Nil
Sep 24	Credit sale/GST	Inv. 1206	275	275

ACCOUNTS RECEIVABLE RECORD: D HAYNES

Date	Details	Doc. no.	Amount \$	Balance \$
Sep 7	Credit sale/GST	Inv. 1203	495	495
Sep 24	Cash received	Rec. 104	495	Nil

ACCOUNTS RECEIVABLE RECORD: M TAYLOR

Date	Details	Doc. no.	Amount \$	Balance \$
Sep 19	Credit sale/GST	Inv. 1205	88	88



Many service businesses provide their services on credit, particularly those with companies as clients.

Managing accounts receivable

An owner and/or manager requires up-to-date information regarding their business's accounts receivable. The records shown here provide a clear, concise summary of transactions relating to each individual credit customer. This makes it easy to see which accounts are fully paid and which haven't made a payment in the last month. The business owner can then follow up on overdue accounts.

In order to control accounts receivable, an owner or manager might:

- make a reminder phone call
- post a monthly statement with a reminder notice
- email a reminder
- employ a debt collector
- threaten legal action (in extreme cases)
- refuse to provide further credit until the account is settled
- charge interest (if stipulated as a term of the contract).



9.4 Other credit concerns

Any business that offers credit terms, or that purchases goods and services on credit, needs to keep track of more information than is the case for a cash-only operation. As well as the accounts payable and receivable records already covered, there are other reports and records that need to be created.

Account schedules

When preparing a balance sheet, there is little point in listing every individual accounts receivable and accounts payable, especially if the business has hundreds of accounts receivable.

However, the total amount owing to the business by accounts receivable must be listed under the heading of 'Current assets'. Similarly, the total amount the business owes to accounts payable must be listed under the heading of 'Current liabilities'. If a business is using a system of individual accounts for its accounts receivable or accounts payable, it also needs a summary of these records.

An **accounts receivable schedule** is a listing of all accounts receivable, with their amounts owing at a particular date. Using the accounts receivable records in Figure 9.7, an accounts receivable schedule can be prepared as follows.

ACCOUNTS RECEIVABLE SCHEDULE AS AT 30 SEPTEMBER 2028

Balwyn College	\$220
BBQs Galore	275
M Taylor	88
Total amount owing	\$583

Therefore, the balance sheet of Lisa the Landscaper would show accounts receivable of \$583 as a current asset as at 30 September 2028.

An **accounts payable schedule** can be prepared in a similar way from the accounts payable records, listing all the accounts payable and the amounts owing to them at a particular date.

accounts receivable schedule
a listing of accounts receivable
and the amount owing
from each

accounts payable schedule
a listing of accounts payable
and the amount owing to each

Calculating GST

There are four types of transactions that may affect the GST debt of a business:

- GST collected by a business on its cash sales
- GST paid by a business on its cash payments
- GST charged to accounts receivable when credit sales are made
- GST charged by suppliers when credit purchases are made.

A business with accounts payable or receivable *must* take these transactions into account when calculating its GST situation. When a business owner completes their business activity statement (BAS), typically monthly or quarterly, they can determine their overall GST situation.

Consider the following example.

GST collected on cash sales (from cash receipts journal)	\$700
GST charged to accounts receivable on credit sales (from credit sales journal)	400
Total charged to customers	1 100
GST paid on cash payments (from cash payments journal)	300
GST charged by accounts payable (from credit purchases journal)	200
GST charged by all suppliers	\$500

The difference between these two figures will determine whether there is a GST debt or a GST refund at the end of the period, and its amount.

The GST paid to and charged by suppliers is deducted from the GST collected from and charged to customers. This determines the overall GST debt the business owes to the government.

The net result from this example is as follows.

GST charged to customers	\$1 100
Less: GST charged by suppliers	500
GST debt owing to the ATO	600

Of course, if the GST paid to suppliers exceeds the amounts charged to customers, the business is entitled to a GST refund.

It's up to each business owner to keep appropriate records so that they can prove to the Australian Taxation Office their GST entitlement or obligation at the end of a period.



Business owners must prove their GST entitlement or obligation to the ATO either monthly or quarterly. This is done by completing a Business Activity Statement.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [9.1]** In a credit transaction, goods or services are supplied immediately, but payment follows at a later date. An invoice is the source document used to inform a customer of the cost of a credit transaction. Accounts receivable are the credit customers who owe a business money; accounts payable are suppliers to which a business owes money for their goods or services.
- [9.2]** In single entry accounting, subsidiary records track credit accounts. The purchases journal keeps all of a business's credit purchases together in one record. These transactions can then be posted to individual accounts payable records.
- [9.3]** The sales journal keeps all of a business's credit customers together in one record. These transactions can be posted to individual accounts receivable records. Managers should review these regularly to monitor overdue accounts.
- [9.4]** Businesses that offer or take advantage of credit terms need to show this in their records. Schedules of accounts receivable and accounts payable summarise all credit accounts for entering into the balance sheet.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Credit purchases: Accounts payable

Doncaster Electricians made the following credit purchases during July 2028.

Jul 2	Bought electrical materials on credit from Wholesale Electrics: Invoice no. 32001: \$1500 plus \$150 GST
5	Credit purchase of light fittings from Lights 'R' Us Pty Ltd \$1340, plus \$134 GST: Invoice no. 4530
9	Received Invoice no. TJ324 from Red Hot Electrics for materials purchased, a total of \$1320, including GST of \$120
13	Bought materials on credit from Wholesale Electrics for \$190, plus \$19 GST: Invoice no. 32093
19	Received Invoice no. TJ371 for \$1120 worth of materials, plus \$112 GST, purchased from Red Hot Electrics
24	Purchased light fittings from Wholesale Electrics and received Invoice no. 33102 for a total of \$1130, plus GST of \$113

- In a spreadsheet, enter the above transactions in a credit purchases journal, using a special column for purchases of materials.
- Transfer the information from the purchases journal into individual records for accounts payable.
- Prepare an accounts payable schedule as at 31 July 2028.

2 Credit purchases: Accounts payable

The owner of Hot Air Ballooning has provided the following information regarding accounts payable transactions during August 2028.

Date	Credit purchases:	GST \$
Aug 1	Invoice no. 654, from Bulk Silk Supplies for \$2700	270
5	Ballina Baskets, Invoice no. 280, for \$2900	290
10	Bulk Silk Supplies \$3000 (Invoice no. 698)	300
13	Invoice no. 712, from Bulk Silk Supplies for \$1600	160
17	\$1800 from Ballina Baskets: Invoice no. 290	180

Date	Payments to accounts payable:
Aug 11	Paid Bulk Silk Supplies \$2970 (EFT no. 5401)
16	EFT no. 5402 sent to Ballina Baskets \$2000
23	Paid Bulk Silk Supplies \$3300 (EFT no. 5403)

- Using a spreadsheet, prepare a credit purchases journal for August 2028 with columns for 'Silk', 'Baskets' and 'Sundries'.
- Record both the credit purchases and cash payments to accounts payable in the individual accounts payable records. (All entries must be in chronological sequence.)
- Prepare an accounts payable schedule as at 31 August 2028.



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3 Credit sales: Accounts receivable

Melbourne Computer Repairs provides services to its regular customers on credit. The business repairs both tablets and laptops. The following credit transactions occurred during September 2028.

- Sep 1 Issued Invoice no. 4501 to Carlton College for repairs to its laptops. The total amount charged was \$880, including \$80 GST
- 4 Charged Fitzroy University \$1500 for tablet repairs. GST of \$150 added (Invoice no. 4502)
- 8 Sent Invoice no. 4503 to P Scaturchio for \$330, plus \$33 GST, for repairs to their laptop
- 11 Carlton College was issued Invoice no. 4504 for laptop repairs completed, \$1440, plus GST
- 18 Classy Couriers billed for \$250, plus \$25 GST, for tablet repairs (Invoice no. 4505)
- 22 Charged Carlton College \$850, plus \$85 GST, for repairing four laptops (Invoice no. 4506)
- 29 Invoice no. 4507 was sent to Fitzroy University for a total of \$473, including \$43 GST in relation to laptop repairs

- Enter the above transactions into Melbourne Computer Repairs' credit sales journal.
- Post the information from the sales journal to individual records for accounts receivable.
- Prepare an accounts receivable schedule as at 30 September 2028.



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4 Credit sales: Accounts receivable

Kay's Cleaning Services supplies the following information regarding its dealings with accounts receivable in October 2028.

Date	Credit sales charged to accounts receivable	GST \$
Oct 1	Invoice no. 1496, to Footscray Library, for \$380	38
3	To Preston TAFE, Invoice no. 1497 for \$140	14
7	Invoice no. 1498, to H Mai for \$150	15
12	Footscray Library, Invoice no. 1499, for \$280	28
17	Footscray Library, Invoice no. 1500, for \$280	28
21	Preston TAFE, Invoice no. 1501, for \$130	13
24	Invoice no. 1502, to T Lam, for \$110	11
28	Footscray Library, Invoice no. 1503, for \$300	30
31	Invoice no. 1504, to Preston TAFE, for \$140	14

Date	Cash receipts from accounts receivable
Oct 10	Received from Preston TAFE \$154, Receipt no. 900
13	Footscray Library paid \$418 (Rec. no. 901)
16	Received from H Mai \$165 (Rec. no. 902)
21	Receipt no. 903 issued to Footscray Library for \$308

- Using a spreadsheet, record the credit sales for October in a suitably designed credit sales journal.
- Enter both the credit sales charged to accounts receivable and the cash received from accounts receivable in individual records for accounts receivable. (All entries must be in chronological sequence.)
- Prepare an accounts receivable schedule as at 31 October 2028.
- Explain why the document numbers in the sales journal run in sequence.

5 Credit purchases and credit sales

The following transactions relate to a small business trading as Strathmore Signwriting.

Nov	1	Invoice no. 564 issued to Jacana Transport for \$460, plus \$46 GST
	4	Received Invoice no. 340 from Deluxe Paints \$440, plus GST of \$44
	6	Invoiced Jacana Transport \$605 (including \$55 GST): Invoice no. 565
	9	Charged B Young \$190, plus \$19 GST: Invoice no. 566
	11	Received Invoice no. A134 from Taz Industries for paints \$594, including \$54 GST
	12	Received \$506 from Jacana Transport: Rec. no. 860
	16	Invoiced Yellow Cabs \$780, plus \$78 GST: Inv. no. 567
	18	Paid Deluxe Paints \$484: paid by EFT no. 412
	21	Charged B Young \$190, plus \$19 GST: Invoice no. 568
	23	Purchased paints on credit from Deluxe Paints: Invoice no. 401, \$560, plus \$56 GST
	25	Received \$605 from Jacana Transport: Rec. no. 861
	26	Paid Taz Industries \$540: paid by EFT no. 413
	28	Invoice no. 569 to Yellow Cabs \$680, plus \$68 GST
	29	Received \$209 from B Young: Rec. no. 862
	30	Received Invoice no. 434 from Deluxe Paints \$480, plus \$48 GST. Charged Jacana Transport \$380 plus GST of \$38: Invoice no. 570

- From the list, enter the relevant transactions in a credit sales journal and a credit purchases journal.
- Prepare individual records for both the accounts receivable and accounts payable of Strathmore Signwriting.
- Draw up an accounts receivable schedule and an accounts payable schedule as at 30 November 2028.

6 Accounts payable

The following transactions all relate to dealings with United Trading Co. over the month of June 2028. At the start of June, this accounts payable was already owed \$200.

CREDIT PURCHASES

Jun	2	Invoice no. 765	\$320, plus \$32 GST
	9	Invoice no. 791	\$260, plus \$26 GST
	15	Invoice no. 823	\$440, plus \$44 GST
	24	Invoice no. 845	\$200, plus \$20 GST
	30	Invoice no. 891	\$480, plus \$48 GST

CASH PAYMENTS

Jun	4	EFT payment	\$200
	14	EFT payment	\$352
	29	EFT payment	\$286

- Prepare the accounts payable record for United Trading Co., showing all transactions during the month of June 2028.
- Explain how *verifiability* has been satisfied in your accounts payable record.
- State and explain two benefits of purchasing materials on credit.



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7 GST: Debt or refund?

Anthony Kirley notes the following events in his hairdressing salon during July 2028.

GST collected on cash transactions	\$1 200
GST paid on cash payments	\$500
GST charged by suppliers on credit purchases	\$250

Taking into account the above information, does Kirley owe GST to the ATO, or is he owed a tax refund? Determine the GST situation and explain your answer.



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8 GST: Debt or refund?

On 1 October 2028, Nat Ryan owed the ATO \$450 because of GST transactions recorded for her business, Ryan's Reproductions. During October, Ryan experienced the following events in her business.

GST charged by suppliers on credit purchases	\$650
GST charged to accounts receivable on credit sales	\$980
GST paid on cash payments	\$350
Cash payments not attracting GST	\$5 400
GST received on cash sales	\$780
Cash receipts not attracting GST	\$1 200

- Calculate the GST debt or GST refund due as at 31 October 2028.
- How would you classify your answer to part **a** in the balance sheet of Ryan's business? Explain your answer.



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9 Accounts receivable and accounts payable

Perfect Fit Tailors is a bespoke clothing store that buys its fabrics on credit and allows credit to its trusted customers for their custom-made suits. On 1 July 2028, the following amounts were already owed by accounts receivable: L Murphy \$100, D Anderson \$90.

The following events took place during July 2028.

Jul 2	Invoice no. 789 issued to Ron Ponting for \$480, plus \$48 GST
4	Purchased material from Cool Cotton Co. at a cost of \$300, plus \$30 GST. Invoice no. T651 was received
9	Liam Murphy paid \$100: Receipt no. 24
11	Issued Invoice no. 790 to Michael Waugh for \$320, plus \$32 GST
13	Ron Ponting paid \$528 (Rec. no. 25)
15	Bought fabric from Top Designs for \$600, plus \$60 GST (Inv. no. 354)
17	Issued Invoice no. 791 to Max Hughes for \$320, plus \$32 GST
19	Paid Cool Cotton Co. \$330: paid by EFT no. 603
21	Darren Anderson paid \$40 (Rec. no. 26)
24	Charged Michael Waugh \$290, plus \$29 GST, for a credit sale (Inv. no. 792)
28	Paid Top Designs \$360 by EFT no. 604
31	Purchased \$600 of material from Cool Cotton Co. and received Inv. no. TR790 (GST charged \$60) Invoiced Darren Anderson \$360, plus \$36 GST (Inv. no. 793)

- Enter the relevant transactions from the list into a credit purchases journal.
- Prepare individual records for accounts payable, showing all entries in correct sequence.
- Select the appropriate transactions from the list and prepare a credit sales journal.
- Prepare individual records for accounts receivable with all relevant entries.





- e Prepare accounts receivable and accounts payable schedules as at 31 July 2028.
- f Using your credit journals, determine the GST situation of this business at the end of July 2028.

10 Accounts receivable and accounts payable

Ferrante Furniture Repairs is a small business that provides quality repairs to a range of customers. Management looks after its valued clients by providing 30 days' credit.

On 1 August 2028, the business had the following accounts receivable: J Espandiar \$1450, R Benigno \$600 and D Tran & Co. \$2200. Balances owing to accounts payable were Australian Timber \$5100 and Fancy Fabrics \$3200. The business also had a GST debt of \$450 as at that date.

Aug 1	Paid one month's rent \$2000, plus \$200 GST. Paid Australian Timber \$3100 (EFT no. 42)
2	Invoice no. 213 issued to R Benigno for \$180, plus \$18 GST
3	Purchased material from Fancy Fabrics for \$2800, plus \$280 GST (Inv. no. 432)
6	Repairs completed for J Espandiar for \$550, including \$50 GST (Inv. no. 214). D Tran & Co. paid \$1680 (Rec. no. 332)
8	Cash client paid \$200, plus \$20 GST
9	Issued Invoice no. 215 to R Benigno for \$240, plus \$24 GST
11	J Espandiar paid \$1450 (Rec. no. 333)
12	Issued Invoice no. 216 to Shepparton Secondary College for \$2800, plus \$280 GST
14	The owner withdrew \$500 (EFT)
15	Bought timber from Australian Timber for \$2100 (Inv. no. T445): GST charged \$210
19	Paid advertising \$1100, including GST via EFT
21	Paid Fancy Fabrics \$3200 (EFT no. 43)
22	Issued Invoice no. 217 to Shepparton Secondary College for \$520, plus \$52 GST
23	Received a payment from R Benigno via EFT for \$600
24	Repairs made on credit for J Espandiar \$540, plus \$54 GST (Inv. no. 218)
26	Purchased timber on credit from Australian Timber for \$2600, plus \$260 GST (Inv. no. T476)
27	Cash client paid \$180, plus GST (EFT)
29	Invoiced D Tran & Co. for repairs of \$4200, plus GST of \$420 (Inv. no. 219)
30	Purchased material from Fancy Fabrics for \$2300, plus GST of \$230 (Inv. no. 454)
31	Sold goods on credit to Cusack and Sons for \$2360 (Inv. no. 220): GST charged \$236

- a Design appropriate journals and enter the above transactions for August in your journals to account for:

- credit sales
- cash receipts
- credit purchases
- cash payments.

Note

This business makes all cash payments via EFT.

- b Prepare individual records for accounts receivable, with all relevant entries in correct sequence.
- c Prepare individual records for accounts payable showing all entries for August.
- d Prepare accounts receivable and accounts payable schedules as at 31 August 2028.
- e Determine whether this business has a GST debt or is owed a GST refund at the end of August 2028 (show workings).



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ETHICAL CONSIDERATIONS

Jan Morrison has operated a business for several years under the name Ace Automotive. She sells spare parts for cars, as well as providing maintenance work on a range of motor vehicles.

Morrison is concerned about the cost of spare parts, which are all locally made. Price increases have eaten away at her profits to such an extent that the future of her business is in doubt. After doing extensive research, Morrison has discovered that if she imports her spare parts from overseas, she can save 30% on the cost of most items.

She wants your advice on whether to continue to support local suppliers or to import her spare parts. She wants to support local industry, but the price increases are making this very difficult.

Discuss the pros and cons (both financial and non-financial) of this issue and make a recommendation to Morrison.



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EXAM-STYLE QUESTIONS

Question 1 (3 marks)

A small business owner is experiencing a problem with accounts receivable that are not paying on time.

State three strategies the owner could implement to try to get credit customers to pay earlier. The current credit terms are 30 days.

Question 2 (3 marks)

Explain why a small business that purchases materials on credit should keep individual financial records for each supplier.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 10

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Financing for a small business

KEY TERMS

Internal sources of finance
External sources of finance
Retained profits
Trade credit
Overdraft
Term loan
Leasing
Flat rate interest
Reducing balance interest
Effective rate of interest
Credit rating
Gearing
Debt ratio
Return on owner's investment (ROI)

In this chapter, you will examine several options for financing a small business. You will also investigate how to evaluate the effectiveness of those options for different businesses.

Learning objectives

By the end of this chapter, you will be able to:

- **describe** various sources of finance for a small business [10.1]
- **distinguish** between flat rate interest and reducing balance interest [10.2]
- **distinguish** between a flat rate and an effective rate of interest [10.2]
- **outline** the factors used to assess a loan application [10.3]
- **explain** the concept of gearing [10.4]
- **calculate** a debt ratio for a business [10.4]
- **calculate** a return on owner's investment ratio [10.5]
- **explain** the effect of gearing on the owner's return on investment [10.5]

PRIOR KNOWLEDGE

CHAPTER 3 Balance sheets for a small business

CHAPTER 8 Income statements for a service firm



Estimated time required: 1 week





10.1 Sources of finance for a small business

internal sources of finance

funds provided to a business by the owner, which may include the owner's capital plus any retained profits

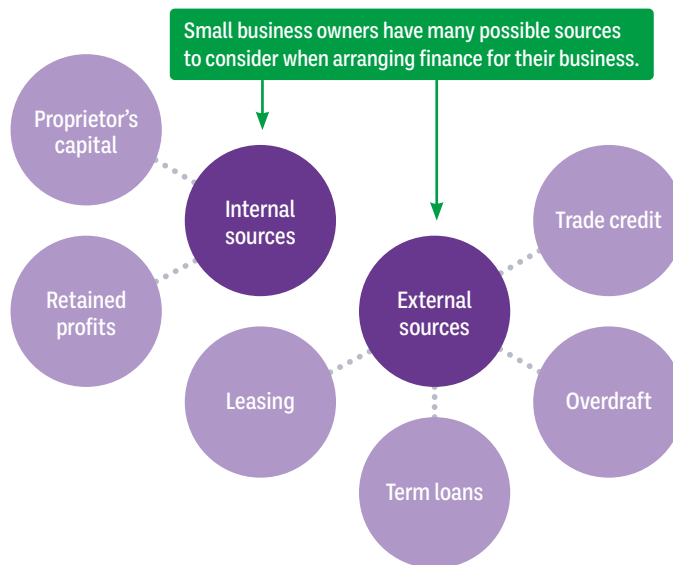
external sources of finance

funds borrowed from an individual or business that is external to the business seeking finance

Business finance is often a problem for small business owners. They may need finance to expand into larger premises, or to purchase a major asset such as a service vehicle. Even the day-to-day buying of goods or materials may involve decisions about whether to use some form of finance.

There are two types of finance available to small business owners: internal and external finance. **Internal sources of finance** are the owner of the business and the business itself. **External sources of finance** are individuals or other entities who lend funds or finance the operations of a small business.

Figure 10.1 Sources of finance



Internal sources

There are two main internal sources of finance.

- **Proprietor's capital:** When a sole trader sets up a business, they usually commit a lot of their time and money to it. This contribution of cash and assets is called proprietor's or owner's capital. The owner's capital often makes up most of the finance for a small business.
- **Retained profits:** A business that has been established for some time should (hopefully) earn a profit. The owner may choose to withdraw some of these profits (known as drawings), while the remainder (known as **retained profits**) stays in the business to finance future plans.

retained profits profits kept within a business rather than being withdrawn by the owner

External sources

There are four main external sources of finance.

- **Trade credit:** **Trade credit** is a common form of short-term (30–60 days') credit used by small businesses. Trading businesses use trade credit to purchase the inventory (goods) they sell in their day-to-day operations. Service firms use it to purchase the materials they require to provide their services to customers. For example, a plumber may use trade credit to purchase spouting, or a garage may use it to purchase spare parts for vehicle repairs.

trade credit short-term credit usually made available by suppliers of materials or goods

Accounts payable (the suppliers of the goods) stipulate the credit terms to the buyer. Trade credit is usually free of interest if the account is paid on time.

- **Overdraft:** A bank or financial institution may extend an **overdraft** to a small business owner. The arrangement allows the firm to withdraw more money than it has in its bank account. An overdraft is an ideal source of finance to cover short-term fluctuations in cash. If a business runs short of cash during a slow trading period, it can use an overdraft to get through that period without committing to a costly long-term loan.

The amount borrowed via an overdraft will depend on the firm's needs. Interest is payable on overdrafts and is calculated daily. The bank will always place a limit on borrowing through the overdraft facility.

- **Term loans:** A **term loan** provides longer-term finance, from two or three years up to 10 or 20 years, and is repayable on a specified date. It is usually taken out for a specific purpose; for example, a business may take out a five-year term loan to buy a new delivery van. This period gives it enough time to generate the cash it needs to repay the loan (plus the interest) on the specified repayment date.

Depending on the financial record of the business and its owner, a short-term loan may be *unsecured*; that is, the borrower isn't required to put up any collateral (security) in case it can't repay the loan. To finance a more substantial purchase, such as a property, a business may take a loan over a long period, such as 20 years. Such a loan would usually be *secured*; for example, the bank may ask for a mortgage on the business owner's personal house as security.

- **Leasing:** Some businesses lease assets instead of buying them, so they don't have to make a large outlay of cash. Examples of **leasing** include business premises, computers, photocopiers and vehicles. Leasing also avoids the long-term commitment associated with some loans.

Leasing is like renting in that the business never actually owns the leased asset. The main benefit of leasing is that the business can use the asset immediately, without having to save up for it first or commit itself to a long-term loan. Also, as many leases run for only one or two years, the assets leased can always be the latest models.

overdraft a bank account with a negative balance, used as a short-term source of finance

term loan a loan taken out for a fixed period of time, and due for repayment at a predetermined date

leasing payment of a fee to use an asset that isn't actually owned by the business



Many business owners cannot afford to buy their own property and may choose to rent, and take out a lease contract, for a set period of time.

Choosing a source of finance

Business owners must consider their specific needs before deciding on a source of finance. Table 10.1 sets out the advantages and disadvantages of the various types of finance.

Table 10.1 Advantages and disadvantages of various types of finance

	Advantages	Disadvantages
Capital	• Interest free • No fixed payments	• Limited to the personal resources of the owner
Retained profits	• Interest free • No repayments	• May not exist (if losses occur) • May be eliminated by drawings
Trade credit	• Readily available • Interest free	• Only for short-term items (30 days' credit is common) • Must be repaid on time, or supply may be threatened
Bank overdraft	• Flexible amount • Available when needed	• High interest • May be called up at short notice
Term loans	• Ideal for long-term projects • Can be designed to suit the needs of the business	• Fixed repayments must be budgeted for • Involves a commitment for an extended period of time • Security may be required
Leasing	• Avoids large outlay of cash • Assets can be updated every couple of years	• Item isn't actually purchased • Rent money is 'dead' money • Not available for all assets

Sources of finance must always meet the needs of the individual business.

It's important to use the appropriate form of finance when borrowing money. As a general rule, short-term finance should be used for short-term assets, and long-term finance for long-term assets. So, trade credit is appropriate when buying materials or inventory for a business but not when buying a fleet of vehicles. Such assets could be leased, or they could be financed with a long-term loan.

The other thing to consider is the cost of finance. It costs money to borrow money! Before making a commitment to any form of finance, the owner should investigate its full cost.



10.2 The cost of interest

Term loans are a very common source of finance. Most banks offer loan packages aimed at small businesses. However, business owners who want to borrow money need to be aware of the cost of interest when comparing loans.

Flat rate versus reducing balance interest

Borrowers need to be aware of the differences between *flat rate* and *reducing balance interest*.

- **Flat rate interest** is calculated on the amount *borrowed*.
- **Reducing balance interest** is calculated on the amount *owing*.

flat rate interest interest applied to the principal amount borrowed over a fixed term

reducing balance interest interest on a loan that is based on the amount currently owed

With a flat rate loan, the interest doesn't reduce during the time the loan is being repaid. It's the same amount in the last year as in the first year. By contrast, the interest on a reducing balance loan will be smaller as each year passes, because the amount owing is reduced.

Consider a loan of \$12 000 taken over three years. Assuming the loan will be paid off at an equal rate over the three years (i.e. \$4000 p.a.), the following calculations can be made.

Flat rate		
Year 1	10% of \$12 000 = \$1200	Amount owing at start of year \$12 000
Year 2	10% of \$12 000 = \$1200	Amount owing at start of year \$8 000
Year 3	10% of \$12 000 = \$1200	Amount owing at start of year \$4 000
Total interest payable	\$3600	

Flat rate interest is 'locked in' for the life of the loan, no matter how much has been repaid.

Reducing balance		
Year 1	10% of \$12 000 = \$1200	Amount owing at start of year \$12 000
Year 2	10% of \$8000 = \$800	Amount owing at start of year \$8 000
Year 3	10% of \$4000 = \$400	Amount owing at start of year \$4 000
Total interest payable	\$2400	

This example simplifies the calculations made under reducing balance loans. Such loans normally calculate interest on a more regular basis (e.g. monthly, or even daily). Also, the amount of interest payable depends on how many repayments are made in each yearly period. However, the example still shows the basic difference between the two types of loans.

Reducing balance interest is obviously the most beneficial for the borrower. However, it may not always be available for the purpose the borrower requires. If a person wants a four-year loan to buy a car for their business, they will probably only be offered a loan at a flat rate of interest. If the same person requests finance to purchase a business property, a mortgage loan over 20 years with reducing balance interest may be offered.



For a business that wants to purchase a vehicle, a loan with a flat rate of interest may be the only type of finance available.

effective rate of interest
the 'real' cost of borrowing money, as compared to the flat rate of interest quoted

Effective rate of interest

With a flat rate, the interest being charged is based on the amount borrowed, not on what remains to be repaid. This means that the borrower is effectively paying a higher rate of interest – the **effective rate** – than that quoted in flat rate terms.

Using the data from the previous example, the rates being paid each year could be shown as follows.

$$\text{Year 1: } \frac{\text{Interest}}{\text{Amount owing}} = \frac{\$1200}{\$12\,000} = 10\%$$

$$\text{Year 2: } \frac{\text{Interest}}{\text{Amount owing}} = \frac{\$1200}{\$8000} = 15\%$$

$$\text{Year 3: } \frac{\text{Interest}}{\text{Amount owing}} = \frac{\$1200}{\$4000} = 30\%$$

To calculate the effective rate over the total period of the loan, the following formula is used.

This is a complicated formula, so you are permitted to use the 'approximate' method.

$$EI = \frac{2RI}{P(N+1) + \frac{I(N-3R+2)}{3}} \times 100$$

Where:

EI = effective interest rate,

R = the number of repayments per year,

I = the total interest over the life of the loan,

P = the principal borrowed,

N = the total number of repayments in the loan.

Note

This formula has been provided for students with an interest in maths. It won't normally be examined as part of your VCE Accounting course.

Using this formula, the actual effective rate for the three-year loan of \$12 000 at 10% flat interest would be:

$$\begin{aligned} EI &= \frac{2RI}{P(N+1) + \frac{I(N-3R+2)}{3}} \times 100 \\ &= \frac{2 \times 12 \times 3600}{12\,000(36+1) + \frac{3600(36-(3 \times 12)+2)}{3}} \times 100 \\ &= \frac{24 \times 3600}{12\,000(36+1) + \frac{(3600 \times 2)}{3}} \times 100 \\ &= \frac{86\,400}{444\,000 + 2400} \times 100 \\ &= \frac{86\,400}{446\,400} \times 100 \\ &= 19.35\% \end{aligned}$$

This means that the quoted rate of 10% equates to an effective rate of 19.35% over three years.

To gain an approximate idea of the effective rate of interest for a flat rate loan, simply double the flat rate. For our example, the 10% flat rate would approximate to 20% – very close to its true effective rate of 19.35%. However, the accuracy of the doubling method will depend on the variables involved, such as the number of repayments per year and the total time period of the loan.

10.3 Applying for finance



When a small business owner wants to borrow money, financial institutions require some details to support the loan application. They use these details to assess the owner's ability to manage the finances of their business and to repay any loans.

An individual's personal **credit rating** may also be considered. It is influenced by their history of borrowing money and their ability to repay loans. A credit rating helps a bank to assess the risk of lending to a specific customer.

The credit rating of a small business owner is affected by many factors, including:

- monthly income
- monthly expenses
- current credit commitments
- previous credit history
- whether they have ever defaulted on a loan
- a statement of assets and liabilities
- a cash budget.

It's important for a business owner to show they can manage their finances over several periods. They can then use this record of financial management to prove to a bank that they can manage loans and meet future commitments.

Once any sort of finance has been approved, the business owner must try to meet all repayments on time. This confirms a good credit rating, which helps when seeking further finance in the future.

credit rating an estimate of a person's or organisation's ability and likelihood to repay loans



A small business owner will usually be required to provide a range of financial information to support a loan application.

Relevant accounting reports

A loan application usually requires the applicant to provide relevant accounting information. The two most common accounting reports required are the budgeted cash flow statement (which you will examine in detail in Chapter 23) and the balance sheet (which you learnt about in Chapter 3).

A budgeted cash flow statement enables a business to compare its monthly receipts with its monthly payments. To meet the repayments on a loan (i.e. to service the loan), the business's estimated receipts must exceed its estimated payments. Otherwise, the bank may refuse the application.

The second report, the balance sheet, sets out the business's assets and liabilities. If it is already *highly geared* (see below), a lender may refuse to approve further finance. Sometimes a lender will only provide financing if a mortgage on a property can be arranged, to protect them if the business owner doesn't meet the loan repayments.

While banks and financial institutions are in the business of lending money, they won't lend to an unacceptable risk. It's up to the business owner to show that they can manage the loan. Therefore, the customer must have a satisfactory level of equity in the business and not be overburdened with debt. Also, the receipts and payments over a monthly period must allow for a loan to be repaid. This further emphasises the importance of accurate financial accounting for a business owner.



10.4 Gearing

gearing the dependence of a business on borrowed funds (liabilities)

The term **gearing** refers to the dependence of a business on borrowed funds (liabilities) compared to the funds contributed by its owner. A highly geared business has significant debt, compared with the amount of the owner's investment, or equity. A lowly geared firm is one that borrows very little, compared to the funds contributed by the owner.

Consider the following businesses.

	Business A	Business B
Assets	\$200 000	\$200 000
Liabilities	20 000	160 000
Owner's equity	180 000	40 000

Note the different level of dependence on liabilities in these two businesses.

Both businesses have assets costing \$200 000, but they are financed in different ways. Business A has borrowed very little, while Business B has financed most of its assets with borrowed funds.

It's often necessary to borrow money to support a small business, but it is always advisable to seek the guidance of a financial expert before making a commitment.



The ratio of liabilities to assets is called the **debt ratio**; it's a percentage determined by dividing total liabilities by total assets. It can be used to measure the extent of a firm's external borrowings, as follows.

debt ratio a financial indicator comparing total liabilities to total assets

	Business A	Business B
Total liabilities	\$20 000	\$160 000
Total assets	\$200 000	\$200 000
	= 0.1	= 0.8
	or 10%	or 80%

Lowly geared business

Highly geared business

The debt ratio for Business A indicates that it finances 10% of its assets by external sources. Business B is more highly geared because it finances 80% of its assets with liabilities.

As a general rule, the higher the debt ratio, the higher the risk that the business will collapse. This is because, as borrowings increase, there is more pressure on a business to find the cash necessary to repay debts.

When a business owner wants to borrow money for a particular purpose, they should first review the firm's present gearing position. Financial institutions may see businesses that are too highly geared as an unacceptable risk and refuse to lend to them.

10.5 Return on owner's investment



A financial indicator of particular interest to the business owner is the **return on owner's investment (ROI)**. The ROI measures the percentage return the owner is earning on their investment in the business. It is calculated by dividing net profit for a period by owner's equity.

return on owner's investment (ROI) the return earned on the funds invested by a business owner

If an owner invests capital of \$50 000 and earns a profit of \$5000 in the first year of trading, the ROI would be calculated as follows.

$$\begin{aligned}
 \text{ROI} &= \frac{\text{Net profit}}{\text{Owner's equity}} \\
 &= \frac{\$5000}{\$50\,000} \\
 &= 10\% \text{ p.a.}
 \end{aligned}$$

ROI is a profitability indicator, as it compares profit to the personal funds invested. It indicates the success or failure of the owner's investment in the business. ROI will be discussed in more detail in Chapter 13.

There is no single measure of whether a specific percentage return is satisfactory to the owner. However, it should be measured against criteria such as the following.

- *The returns available on alternative investments.* What interest could the owner earn by investing the same amount in the financial market?
- *The returns earned by similar businesses.* An accountant may be able to evaluate whether the returns earned are above or below average.
- *The trend in the return on investment.* By comparing the ROI over several years, the owner can determine whether it is improving or declining.
- *The expected return for this year.* However high the ROI, it won't be satisfactory if it didn't achieve the owner's expectations.

Gearing and the ROI

As mentioned earlier, gearing compares the amount a firm borrows with the owner's personal investment. As a general rule, the higher the gearing, the higher the financial risk. Why, then, would a business owner risk being involved in a highly geared firm?

One possible reason may be necessity; if an owner has insufficient personal resources, they may have no choice but to borrow. However, some business owners use gearing to their advantage, in terms of the return on their own funds.

Consider again Business A and Business B (from pages 144–145). These two businesses have the same amount of total assets but are totally different in their gearing. If they each earn the same profit in a given year, we get the following results.

	Business A (\$)	Business B (\$)
Assets	200 000	200 000
Liabilities	20 000	160 000
Owner's equity	180 000	40 000
Profit for the year	20 000	20 000

Business A	Business B
ROI = \$20 000	ROI = \$20 000
$\frac{\$20\,000}{\$180\,000}$	$\frac{\$20\,000}{\$40\,000}$
= 11% p.a.	= 50% p.a.

You can see that for Business B, which is more highly geared, the owner's ROI is also much higher. This is because the owner has used other people's money to purchase the firm's assets to generate profits. In a lowly geared business, the owner contributes most of the required funds and will usually have a lower ROI.

Therefore, while highly geared firms have more financial risk because of heavier loan repayments, they can earn the owner higher returns on the personal funds they invested.

Business owners must weigh the opportunity of possibly earning higher returns through higher gearing against the greater risk that the business will collapse as a result of excessive borrowing. The balance between risk and returns will depend on the personal assets of the business owner and their willingness to risk borrowing money for possible future gains.





Practise and apply

10



REVISION: SUMMARY OF KEY CONTENT

- [10.1]** There are two types of finance available to small business owners. Internal sources of finance, such as proprietor's capital and retained profits, come from within the business. External sources of finance, such as loans and credit, come from outside the business. Business owners need to consider their specific needs before deciding on the appropriate form of financing.
- [10.2]** Loans require the borrower to repay both the principal and any interest. Flat rate interest is calculated on the amount borrowed, while reducing balance interest is calculated on the amount owing. Borrowers prefer reducing balance loans, but they aren't always made available. Borrowers should also work out the effective rate of interest (i.e. the real cost of borrowing).
- [10.3]** When a small business owner wants to borrow money, financial institutions require some details to support their loan application. These details are usually drawn from the business's cash budget and balance sheet.
- [10.4]** Gearing is how dependent a business is on borrowed funds. A highly geared business has significant debt, while a lowly geared firm has little debt. Banks may refuse to lend to businesses that are too highly geared, because they are seen as an unacceptable risk.
- [10.5]** The return on owner's investment is an indicator of how profitable a business is to the owner. While highly geared firms have more financial risk, they generate a higher ROI.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Sources of finance

Make a list of a variety of assets (current and non-current) owned by two small businesses operating in different service industries (e.g. a plumber and a doctor). Include six to eight assets in your list.

- a Recommend an appropriate source of finance for each of the assets you listed.
- b Give reasons to support your recommendations.



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2 Lease or buy?

Janette Garro, an architect, is thinking about getting a new car for her business. However, she is unsure whether to buy it or lease it.

The model she is thinking of buying has an advertised price of \$30 000. If she buys the car, she will probably keep it for three years before selling it for about \$20 000.

Garro has \$5000 cash to put towards the purchase, and a bank loan is available for the balance. The loan is at 10% p.a. at a flat rate of interest over three years. Garro has also enquired about leasing a similar vehicle at a cost of \$100 per week for three years.

- a State one advantage and one disadvantage of each of the sources of finance Garro is considering.
- b Calculate the cost of leasing the vehicle over the three-year period.
- c What is the interest payable on the three-year bank loan? (Show your workings.)
- d Determine the total cost of purchasing the car if Garro uses the bank loan.
- e Write a report comparing the two alternatives and making a clear recommendation to Garro. Give reasons to support your conclusion.



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3 Flat rate interest

Debbie Doherty is considering taking out a loan of \$6000 to purchase a new computer server for her business. Her bank has told her that a loan is available over four years, with monthly repayments, at a flat rate of interest of 10%.

- a Explain how financial institutions apply flat rate interest to loans.
- b Calculate the total amount of interest that Doherty would pay.
- c What is the total amount she would pay if she takes out the loan?
- d Calculate her monthly repayments.
- e What accounting report should Doherty prepare to show that she can meet the loan repayments?
- f Is the real cost of the loan 10% p.a., or is it higher? Explain your answer.
- g What is the effective rate of interest on this loan? Make an estimate, or use the formula presented in this chapter to determine the effective rate.

4 Flat rate interest

Jack Knight applies for a loan of \$10 000 to buy a motorcycle for his courier business. His bank informs him that a four-year loan at 12% p.a. flat interest is available. He would have to make 48 equal monthly instalments if he accepts the loan.

- a** Calculate the total cost of interest on the loan.
- b** Calculate the total amount to be repaid under the conditions of the loan.
- c** Calculate the monthly repayments.
- d** What rate of interest is Knight paying in effective terms?
- e** One of Knight's friends suggests that interest on the reducing balance is a better alternative. Explain to Knight the advantage of such a loan.



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5 Reducing balance interest

Vincent Ngo has saved \$55 000 for a deposit on a business property. He approaches his bank for a 6% mortgage loan of \$545 000, to be repaid over 25 years. The bank tells him that interest will be calculated daily and charged monthly to his account. Repayments of \$3512 are to be made monthly.

- a** What is a mortgage loan?
- b** Does the 6% refer to flat rate or reducing balance interest? Explain how this interest will be applied to the loan.
- c** Calculate the total cost of the loan to Ngo.
- d** Would there be an advantage to Ngo if he made fortnightly repayments instead of monthly ones? Explain your answer.



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6 Debt ratio

United Earth Moving has total assets of \$250 000 and an owner's equity of \$200 000.

- a** What is the total value of the business's liabilities?
- b** Calculate the debt ratio for this business and comment briefly on the extent of its borrowings.



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7 Gearing: A comparison

St Kilda Boat Hire has liabilities of \$20 000, while Williamstown Boat Hire has liabilities of \$40 000. Which business is more highly geared? Explain your answer, using examples.



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8 Comparing two businesses

The following statements relate to two small businesses, both operating as panel beaters.

SAMMY'S PANELS: BALANCE SHEET AS AT 30 JUNE 2028

Assets	\$	\$	Liabilities	\$	\$
<i>Current assets</i>			<i>Current liabilities</i>		
Accounts receivable	5 000		Bank overdraft	6 000	
Spare parts	12 000	17 000	Accounts payable	8 000	
			GST liability	1 000	
			Loan	3 000	18 000
<i>Non-current assets</i>			<i>Non-current liabilities</i>		
Equipment	10 000		Mortgage loan		100 000
Premises	150 000	160 000	Owner's equity		
			Capital		59 000
		\$177 000			\$177 000

SUE'S BODY SHOP: BALANCE SHEET AS AT 30 JUNE 2028

Assets	\$	\$	Liabilities	\$	\$
<i>Current assets</i>			<i>Current liabilities</i>		
Bank	2 500		Accounts payable	5 000	
Accounts receivable	3 500		Loan	3 000	8 000
Spare parts	16 000	22 000	<i>Non-current liabilities</i>		
<i>Non-current assets</i>			Mortgage loan		60 000
Equipment	12 000		Owner's equity		
Premises	160 000	172 000	Capital		126 000
		\$194 000			\$194 000

- Calculate the total liabilities for each business.
- Calculate the debt ratio for each business.
- Determine the working capital ratio (current assets divided by current liabilities) for both businesses.
- Compare the two businesses and comment on their financial structures. Refer to their liquidity, gearing and general financial risk.



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9 Return on owner's investment

Joel Lombardo invested \$40 000 into Paintball Arena on 1 July 2027. For the year ended 30 June 2028, the business earned a profit of \$5000.

- Calculate the return on Lombardo's investment in the business.
- Taking into account the rates of interest generally available in the finance market, comment on his ROI.



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10 Profitability

Harry Koecher earns a profit of \$30 000 as the proprietor of Western Pool Tables, while Dave Romic earns \$40 000 operating as Deluxe Pool & Billiards.

Which business owner has the higher profitability? Use examples to explain your answer.

11 Gearing and return on owner's investment

Consider the details of the following two businesses that both specialise in the hiring of electrical appliances.

	Ace Electricals	Acme Electricals
Assets	\$125 000	\$125 000
Liabilities	25 000	50 000
Net profit	20 000	20 000

- Calculate the owner's equity for the two proprietors.
- Calculate the debt ratio for each firm and state which business has the higher gearing.
- Calculate the return on the owner's investment for each business.
- Given that the two businesses have the same value for total assets, explain why one owner is receiving a greater return on the funds invested.

ACCOUNTING IN THE REAL WORLD

One of the most common financing activities in Australia, for businesses and individuals, is borrowing money to purchase a property. The costs of buying a house, apartment or business premises may include stamp duty, government taxes and (of course) the interest on the amount borrowed.

For individuals, the decision to buy a property, rather than renting a home, will be strongly influenced by personal and family concerns. For businesses, the decision is usually more pragmatic; it's all about the costs of finance versus the benefits of ownership.

Sharon Matheson is considering purchasing a business property for \$900 000. She has accumulated \$80 000 cash for a deposit on the property. She has been offered finance at 7% p.a. for a loan of \$820 000 over 25 years, based on monthly repayments.

Matheson is interested in knowing what the property will *really* cost her over that period. She has come to you for your expert analysis.

Visit the website of one of the following major financial institutions:

- Commonwealth Bank
- ANZ Bank
- NAB
- Westpac.

Find the home loan calculator on the website, enter Matheson's details and answer the following questions.

- What is the interest payable on the loan over 25 years?
- How much will Matheson have to repay if she borrows \$820 000?
- She is thinking about reducing the loan period to 20 years. How much would she save if she could achieve this?
- Instead of reducing the loan period to 20 years, would she be better off taking the loan over 25 years but waiting until she has a deposit of \$100 000? Determine the difference in the total amount to be repaid under the two proposals.
- Matheson is concerned about the likely increase in interest rates in the future. She has asked you to determine both the interest and the total amount to be repaid on two different loans. The two options that she is considering are: (a) a deposit of \$80 000 with a loan of \$820 000; and (b) a deposit of \$100 000 with a loan of \$800 000. Create a table to show how these two loans would be affected by interest rates of 7.5%, 8.0% and 8.5% for loans over 20, 25 and 30 years.
- The loans over 20 years obviously charge less interest compared to those over 25 or 30 years. What other important factor should Matheson consider when deciding which loan to take out? Explain your answer.



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EXAM-STYLE QUESTIONS

Question 1 (4 marks)

Jane Pinkman is the proprietor of the Mobile Hairdressing Salon. As her business vehicle is becoming unreliable, Pinkman wants to replace it with a newer model. She is planning to spend about \$25 000, but her business account currently has a balance of only \$6000. The bank has offered her an overdraft facility up to \$20 000. As the old car is breaking down quite often and is costing her work, Pinkman is thinking of taking up the bank's offer of using the overdraft facility and paying the rest in cash.

Discuss why Pinkman's approach to financing the new vehicle isn't appropriate. Explain your answer and recommend alternative sources of finance she should consider.

Question 2 (4 marks)

Jordan Fernandes is thinking about taking out a loan of \$20 000 over five years to help replace the non-current assets in his steam cleaning business. However, he is unsure how such a transaction will impact his accounting reports during the repayment period.

Describe how the five-year loan would affect this business's:

- a statement of receipts and payments
- b income statement.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 11

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Cash flow statements

KEY TERMS

Cash flow statement
Operating activities
Investing activities
Financing activities
Net cash provided
Net cash used
Cash held

In this chapter, you will examine the purpose of the cash flow statement, analyse the information it provides and consider how businesses use that information.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** the purpose of a cash flow statement [11.1]
- **describe** the additional information revealed by a cash flow statement [11.1]
- **classify** cash flows under the headings of operating, investing and financing activities [11.2]
- **outline** the basic format of a cash flow statement [11.3]
- **prepare** a cash flow statement from cash journals [11.3]
- **analyse** the results revealed by a cash flow statement [11.4]
- **explain** the link between a cash flow statement and management decision-making [11.4]

PRIOR KNOWLEDGE

CHAPTER 4 Single entry accounting for a small business

CHAPTER 7 Recording and reporting cash flows



Estimated time required: 1 week





11.1 Purpose of the cash flow statement

cash flow statement

an accounting report that states all cash inflows and outflows over a period

The **cash flow statement** reports on the movements of cash into and out of a business during the reporting period. Its focus is purely on the business's cash reserves; it reports on the sources of cash and how the business has used it during the period.

Cash flow statements are relatively new in the world of accounting. The relevant accounting standard only came into being in 1991. Since then, businesses have put greater emphasis on cash management, and the net profit figure is no longer the only important figure at the end of a period.

The purpose of the cash flow statement is simple: it completes the financial picture of a business. Together, the income statement, balance sheet and cash flow statement report on profit performance, financial position and cash movements.

The cash flow statement helps management to:

- determine the net amount of cash the business generates by its day-to-day activities
- evaluate the business's ability to meet future obligations to lenders and bankers
- assess the business's long-term debt arrangements
- review the investments made by the business into non-current assets.

As you've learnt already, profit isn't cash. Even if a business is profitable, it won't survive if it doesn't have cash available when needed. Expenses have to be paid, and some cannot be delayed. For example, employees will want to be paid on time and won't be happy if payday is put off because of a cash shortage. Accounts payable and loan repayments also need to be paid. The owner may also have demands for cash in terms of their personal drawings.

Under accrual accounting, the net profit figure is determined by deducting expenses incurred from revenue earned. The net profit figure is crucial in evaluating trading performance, but it has nothing to do with cash management. The cash flow statement concentrates solely on cash flows, so it's an ideal tool to use as part of an overall cash management plan.

A cash flow statement tracks the flow of cash, providing insights into a business's financial health and operational efficiency.



11.2 Classification of cash flows



One report related to cash is the statement of receipts and payments. This report can be prepared directly from a business's cash journals. However, the statement of receipts and payments is simply a summary of the cash transactions over a period. It doesn't classify the cash flows in any way.

Figure 11.1 shows a typical statement of receipts and payments.

Figure 11.1 Statement of receipts and payments

THE ESCAPE ROOM EXPERIENCE: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 30 JUNE 2028		
Receipts	\$	\$
Cash sales	90 000	
Collections from accounts receivable	30 000	
Capital contribution	40 000	
Loan from bank	20 000	
GST collections	9 000	189 000
Less: Payments		
Payments to accounts payable	60 000	
Advertising	5 000	
Wages	35 000	
Materials	3 000	
Purchase of vehicle	25 000	
Purchase of computer	2 000	
Loan repayments	3 000	
Drawings	20 000	
GST payments	3 700	156 700
Excess of receipts over payments		32 300
Bank balance as at 1 July 2027		2 000
Bank balance as at 30 June 2028		34 300

A statement of receipts and payments breaks down cash flows into two main groups. A cash flow statement does much more than this.

The statement is a simple summary of the cash transactions of this business over the period. It shows that a surplus of cash of \$32 300 was generated, taking the cash balance from \$2000 at the start of the period to \$34 300 at the end. However, it doesn't provide any additional information.

Cash flow activities

To get more information about the business, cash flows can be classified into three main areas: *operating activities*, *investing activities* and *financing activities* (as shown in Figure 11.2). These classifications provide the basic format of the cash flow statement.

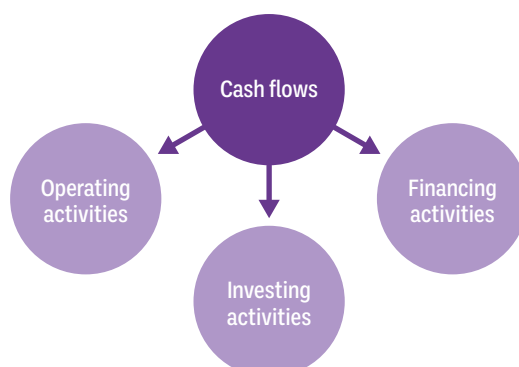


Figure 11.2
Classifications
of cash flows

Cash flows can be classified into three distinct groups.

operating activities

cash flows that relate to the day-to-day operations of a business

Operating activities relate to the everyday operations of the business – that is, the core activities that keep it going. Every business will have operating activities of some sort. They include two types of cash movements:

- cash inflows from the provision of goods and services to customers
- cash outflows to employees, and suppliers of both goods and services.

Operating activities include cash flows relating to many of the items that appear in an income statement. Cash sales and collections from accounts receivable are two of the most important operating cash flows. The cash outflows under operating activities include items such as payments to accounts payable, wages paid, insurance paid and advertising paid.

Credit sales are irrelevant to the cash flow statement because they aren't a cash flow. However, a cash flow does occur when accounts receivable settle their accounts, so this should be included.

Operating activities would include the cash generated from the provision of services, such as the day's takings in a restaurant.



investing activities

cash flows that result from the purchase or sale of non-current assets for cash

Investing activities relate to the buying and selling of non-current assets (i.e. assets that the business expects to own for longer than 12 months). This section of the cash flow statement is used to report the cash paid out when assets are purchased, and the cash received when unwanted assets are disposed of.

When a business purchases non-current assets, it is making an investment for the long term. Because these assets have future economic benefits for a business, they are viewed as investments that the business uses to help generate revenue.

The last classification in a cash flow statement is **financing activities**. This refers to cash flows that are a result of changes in a business's financial structure. Financing activities include the owner's capital contributions (cash only) and cash withdrawals, as well as the taking out and repayments of loans.

financing activities

cash flows that relate to changes in the financial structure of a business

As you learnt in Chapter 10, it’s important to consider how a business is financed when looking at its long-term future. It may be financed by internal funds, which come from the owner, or by external funds, which could involve borrowing cash from liabilities. The cash flows required to repay debts and support an owner’s drawings are an important feature of the cash flow statement. This information is relevant to lenders and prospective owners.

Applying the classifications

In the cash flow statement, all cash inflows and outflows are classified under these three headings, with a net figure produced under each heading. It’s common practice to label this net figure as either **net cash provided** or **net cash used** for each particular activity.

The links between the cash flow statement and the other two main financial reports become clearer when the three classifications are considered.

- Operating activities relate mainly to revenues and expenses, which are brought together in the income statement.
- Investing activities relate to the balance sheet, as they note cash flows from non-current assets.
- Financing activities also focus on the balance sheet, as they show changes in long-term liabilities and owner’s equity.

Table 11.1 provides examples of the different classifications of cash flows.

Table 11.1 Examples of cash flows by classification

Operating activities	Investing activities	Financing activities
<i>Cash inflows from:</i> • providing services for cash • selling goods for cash • collecting cash from accounts receivable • commission received • interest received • GST received	<i>Cash inflows from:</i> • selling non-current assets for cash	<i>Cash inflows from:</i> • capital injections by the owner • borrowing cash via loans
<i>Cash outflows from:</i> • purchasing inventory for cash • paying cash to accounts payable • paying cash for services • paying cash for expenses • GST paid	<i>Cash outflows from:</i> • buying non-current assets for cash	<i>Cash outflows from:</i> • cash drawings • loan repayments

11.3 Format of the cash flow statement

The accounting standards determine the basic format of a cash flow statement. Although they allow for some variation, cash flow statements always follow a set layout, based on the three classifications.

Let’s return to The Escape Room Experience (page). The business’s statement of receipts and payments is a source of the required cash flow information. Figure 11.3 (see page 158) shows how that information is now presented under the three headings ‘Cash flows from operating activities’, ‘Cash flows from investing activities’ and ‘Cash flows from financing activities’.

net cash provided a net cash inflow reported for one of the areas of operating, investing or financing activities

net cash used a net cash outflow reported for one of the areas of operating, investing or financing activities



Figure 11.3 Cash flow statement: Basic format

THE ESCAPE ROOM EXPERIENCE: CASH FLOW STATEMENT FOR YEAR ENDED 30 JUNE 2028		
	\$	\$
Cash flows from operating activities		
Receipts from customers	129 000	
Payments to suppliers and employees	(106 700)	
Net cash provided by operating activities		22 300
Cash flows from investing activities		
Purchase of vehicle	(25 000)	
Purchase of computer	(2 000)	
Net cash used in investing activities		(27 000)
Cash flows from financing activities		
Capital contribution	40 000	
Loan from bank	20 000	
Loan repayments	(3 000)	
Proprietor's drawings	(20 000)	
Net cash provided by financing activities		37 000
Net increase (decrease) in cash held		32 300
Cash held at the beginning of the year		2 000
Cash held at the end of the year		34 300

Brackets are used to denote cash outflows, as they have a negative effect on the firm's cash supplies.

Interpreting the cash flow statement

Each of the three classifications is clearly labelled, and a subtotal is provided for each category. (This helps to comply with the demand for *understandability*.) These subtotals can then be used to highlight the net cash inflow or outflow for each classification.

Business owners usually expect that their operating activities will generate cash. However, a negative result can occur, which means that cash has been used up rather than gained. If the cash from operating activities is a negative result, this may be a sign that a business has problems. However, sales may have slowed, the business may have purchased a lot of materials in anticipation of a busier period, or it may have paid some expenses in advance.

There are no set expectations for the rest of the report. The areas of investing and financing may have a net cash inflow or outflow. If a business is expanding, it may use a lot of cash in the investing area. In other periods, it may not buy any new assets; if it disposes of old assets for cash, the investing area may reveal a 'net cash provided' figure.

Similarly, financing activities may result in net cash provided or net cash used. In some periods, cash may be raised from either the owner or liabilities, and this may result in a net cash inflow. On the other hand, an established business may simply have cash outflows in this area. Loan repayments and the owner's drawings may result in a 'net cash used' result.

Alternative formats

Figure 11.3 shows very little detail in relation to the operating cash flows. Although this format satisfies the accounting standards, some users of the report may prefer detailed information about the operating activities.

If the business has many expenses, a supporting schedule may also need to be prepared. This schedule would list all of the items that make up the two items under 'operating activities'. Figure 11.4 shows this type of schedule.

Figure 11.4 Schedule of cash flows from operating activities

Receipts from customers	\$	\$
Cash sales	90 000	
Collections from accounts receivable	30 000	
GST receipts	9 000	129 000
Payments to suppliers and employees		
Payments to accounts payable	(60 000)	
Advertising	(5 000)	
Wages	(35 000)	
Cleaning materials	(3 000)	
GST payments	(3 700)	(106 700)
Net cash from operating activities		22 300

If needed, the details of this schedule could be included in the cash flow statement, as shown in Figure 11.5. However, these details may clutter up the report. For example, if there are too many expenses paid in a given period, the 'operating activities' section of the report becomes large and difficult to interpret.

Figure 11.5 Cash flow statement: Alternative format

THE ESCAPE ROOM EXPERIENCE: CASH FLOW STATEMENT FOR YEAR ENDED 30 JUNE 2028		
	\$	\$
Cash flows from operating activities		
Cash sales	90 000	
Collections from accounts receivable	30 000	
GST receipts	9 000	
Accounts payable	(60 000)	
Advertising	(5 000)	
Wages	(35 000)	
Materials	(3 000)	
GST payments	(3 700)	
Net cash provided by operating activities		22 300
Cash flows from investing activities		
Purchase of vehicle	(25 000)	
Purchase of computer	(2 000)	
Net cash used in investing activities		(27 000)
Cash flows from financing activities		
Capital contribution	40 000	
Loan from bank	20 000	
Loan repayments	(3 000)	
Proprietor's drawings	(20 000)	
Net cash provided by financing activities		37 000
Net increase (decrease) in cash held		32 300
Cash held at the beginning of the year		2 000
Cash held at the end of the year		34 300

Note

For VCE Accounting exams, the format demonstrated above is totally acceptable. However, you must have a subtotal for each of the three sections of the report. This subtotal must also have a description, such as *Net cash provided by operating activities* or *Net cash used in operating activities* or *Net cash from operating activities*. If the result is negative, just state the result and use brackets to indicate a negative result.



11.4 Cash flows and decision-making

As with all financial statements, there is little point in preparing a cash flow statement if management doesn't analyse the results and use it to make decisions to solve problems or improve the business.

A good starting point is to compare the results of the current period with those of the previous period. This allows management to identify changes in the three areas reported in the cash flow statement. For example, if the net cash provided by operating activities is decreasing over consecutive periods, this should set off alarm bells. The reason for such a trend should be identified (if possible) and decisions made to try to improve the situation.

Take a look at the comparative reports in Figure 11.6, which again relate to The Escape Room Experience.

Figure 11.6 Comparative cash flow statements

THE ESCAPE ROOM EXPERIENCE: CASH FLOW STATEMENTS FOR YEARS ENDED 30 JUNE				
	2027		2028	
	\$	\$	\$	\$
Cash flows from operating activities				
Cash sales	80 000		90 000	
Collections from accounts receivable	26 000		30 000	
GST receipts	8 000		9 000	
Payments to accounts payable	(58 000)		(60 000)	
Advertising	(4 000)		(5 000)	
Wages	(33 500)		(35 000)	
Cleaning materials	(2 000)		(3 000)	
GST payments	(1 500)		(3 700)	
Net cash provided by operating activities		15 000		22 300
Cash flows from investing activities				
Purchase of shop fittings	(9 000)		-	
Purchase of vehicle	-		(25 000)	
Purchase of computer	-		(2 000)	
Net cash used in investing activities		(9 000)		(27 000)
Cash flows from financing activities				
Capital contribution	-		40 000	
Loan from bank	-		20 000	
Loan repayments	-		(3 000)	
Proprietor's drawings	(10 000)		(20 000)	
Net cash used in financing activities		(10 000)		37 000
Net increase (decrease) in cash held		(4 000)		32 300
Cash held at the beginning of the year		6 000		2 000
Cash held at the end of the year		2 000		34 300

Changes in cash flows are easily identified when two consecutive reports are prepared together.

As you can see, there is good news in relation to *operating activities*: an increase of \$7300 in the net cash provided by operating activities in 2028 over the previous year.

The *investing activities* reflect a considerable investment in assets over the past two years. In 2027, \$9000 was invested in shop fittings, and a vehicle and a computer were purchased in 2028. These items required significant finance, but at the end of 2027 the business didn't have enough cash to fund these purchases. However, in 2028 the owner made a cash contribution of \$40 000 and borrowed an additional \$20 000. These activities helped the business to purchase the new non-current assets without using up all its cash. At the end of 2028, the business is in a sound overall cash position.

This example shows how the various cash flow items describe what has happened in a business over a period. The changes in the items can be easily identified, as well as any problems that are developing. Successful strategies can also be reviewed.

The comparative statements make it easy to evaluate decisions taken during the period, such as when management wants to increase net cash provided by operating activities by 10%, to fund the purchase of new assets.

The complete package of an income statement, balance sheet and cash flow statement provides a range of information that should allow management to make sound decisions.



The meaning of 'cash'

When preparing a cash flow statement, keep an open mind about the meaning of the term 'cash'. The accounting standards refer to 'cash and cash equivalents'. This means that cash includes assets such as cash on hand and cash at bank, but it can also include very short-term investments. For example, if a business has cash in a 60-day term deposit, this item would be viewed as being part of 'cash'. Also, if it has a bank overdraft, this should be viewed as a negative cash item that is part of the cash resources of the business.

A business might therefore calculate **cash held** as follows.

	\$
Cash on hand	500
Bank overdraft	(400)
Term deposit (60 days)	5 000
Cash held	5 100

cash held the total of all cash and short-term investments, less any bank overdrafts

The definition of cash held is important, as this is the final dollar amount reported in the cash flow statement. The report starts with 'cash on hand' at the start of the reporting period and concludes with the value of 'cash held' at the end of that period.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [11.1]** The cash flow statement reports on the movements of cash into and out of the business during the reporting period. Together, the income statement, balance sheet and cash flow statement report on profit performance, financial position and cash movements.
- [11.2]** To get more information about the business, cash flows can be classified into three main areas. Operating activities are cash flows relating to the day-to-day actions of the business. Investing activities are cash flows that result from the purchase or sale of non-current assets for cash. Financing activities are cash flows that relate to changes in the financial structure of a business.
- [11.3]** The basic format of a cash flow statement is like a statement of receipts and payments, but with information classified under the headings 'Cash flows from operating activities', 'Cash flows from investing activities' and 'Cash flows from financing activities'.
- [11.4]** The cash flow items describe what has happened in a business over a period, allowing changes and problems to be identified and decisions to be evaluated. The complete package of an income statement, balance sheet and cash flow statement provides management with a solid range of financial information.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Cash flows from operating activities

Vivien Forbes is the owner of Forbes Dry Cleaning. She has extracted the following information from the financial records of her business.

	\$
Cash sales	92 000
Credit sales	23 000
Collections from accounts receivable	12 000
GST receipts	9 200
Purchase of machinery	55 000
Cash purchases of cleaning materials	53 000
Wages	22 500
Cartage inwards	1 200
GST payments	5 420

- Select the relevant items from the table and calculate the net cash provided by (or used in) operating activities.
- Explain your treatment of the item 'credit sales'.
- Would you expect net cash flows from operating activities to be a positive or a negative figure? Explain your answer.

2 Cash flows from operating activities

The proprietor of Sumner's Shoe Repairs provides the following information about his business.

Receipts	\$	Payments	\$
Cash sales	40 000	Cash purchases of materials	25 000
Collections – accounts receivable	10 000	Wages	12 000
GST collections	4 000	Office expenses	3 000
		Loan repayments	8 000
		GST payments	2 800

- Using relevant information from the table, calculate the net cash provided by operating activities for the year ended 31 July 2028.
- Did you leave out any items in your calculation in part a? If so, explain why.



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3 Cash flows from investing activities

Michael Nguyen provides this summary of events in relation to his cash flows over the past year for his legal practice.

Receipts	\$	Payments	\$
Cash clients	186 000	Cash purchases of stationery	3 700
Collections from accounts receivable	22 000	Purchase of office equipment	4 000
Sale of office equipment	2 000	Drawings	25 000
GST receipts	18 800	Salaries	55 000
		Purchase of office furniture	2 500
		GST payments	1 020

Using the relevant information from this list, calculate the net cash provided by (or used in) investing activities.



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4 Cash flows from investing activities

Helen Ferry, the proprietor of Melbourne Glider Repairs, provides the following information about her business.

	\$
Cash purchase of laser printer	1 450
Cash purchase of repair materials	32 560
Sales to cash clients	67 340
GST receipts	6 947
Cash received from sale of office equipment	2 130
Purchase of repair tools for cash	9 820
Sales to credit clients	12 320
Cash receipts from accounts receivable	4 600
GST payments	4 383

Determine the net cash provided by (or used in) investing activities. Show all workings.



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5 Cash flows from financing activities

The manager of Wilson's Pavilion Hire provides the following details about her business.

Receipts	\$	Payments	\$
Cash sales	223 000	Accounts payable	10 200
Capital	45 000	Salary	28 000
Loan	12 500	Drawings	22 800
Accounts receivable	14 300	Purchase of office equipment	4 500
GST receipts	22 300	GST payments	450

Make a list of all the items relevant to financing activities and calculate the net cash flow for the year in relation to financing.



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6 Cash flows from financing activities

During the year ended 30 June 2028, the owner of Shepparton Indoor Sports, Anthony Taranto, contributed assets worth \$32 000 to his business. This consisted of \$15 000 cash and a vehicle valued at \$17 000. His other receipts for the year were as follows.





	\$
Cash sales	90 800
GST receipts	9 080
Accounts receivable	23 000
Loan	15 000

Taranto's cash payments for the year included the following.

	\$
Accounts payable	45 600
Loan repayments	4 850
Drawings	5 000
Insurance	1 200
New computer	2 500
GST payments	370

Calculate the net cash provided by (or used in) financing activities over the year ended 30 June 2028.

7 Cash flow statement

Brayden Stepien is the owner of Stepien Steam Cleaning. He has prepared a simple statement of receipts and payments but is unsure how to prepare a formal cash flow statement. He has asked for your help in relation to the following prepared report.

STIEPIEN STEAM CLEANING: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 31 MAY 2028

Receipts	\$	\$
Receipts from cash clients	132 000	
Collections from accounts receivable	28 700	
GST collections	13 200	
Loan from bank	15 000	188 900
Less: Payments		
Payments to accounts payable	52 000	
Wages	27 600	
Cleaning materials	13 000	
Purchase of service vehicle	29 200	
Advertising expenses	1 200	
Purchase of office equipment	6 500	
GST payments	4 990	
Loan repayments	4 300	
Drawings	46 000	184 790
Excess of receipts over payments		4 110
Bank balance as at 1 June 2027		(4 500)
Bank balance as at 31 May 2028		(390)

- Prepare a cash flow statement, showing clearly the net cash provided by (or used in) operating, investing and financing activities.
- Comment on the results achieved by this business over the last year, with reference to the three areas of cash flows.



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8

Cash flow statement

The following report has been submitted by Teresa Green, the proprietor of Thomastown Trailer Hire.

THOMASTOWN TRAILER HIRE: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 31 DECEMBER 2028

Receipts	\$	\$
Cash fees – PLZ Finance – hire of trailers	128 900	
Collections from accounts receivable	32 760	
Capital	15 000	
Sale of vehicle	9 800	
Commission revenue	2 000	
GST receipts	14 070	
Loan from PLZ Finance	12 500	215 030
Less: Payments		
Accounts payable	55 000	
Interest	1 200	
Stationery expenses	2 200	
Repairs to trailers	10 400	
Office cleaning	2 200	
Wages	44 300	
GST payments	1 480	
Loan repayments	4 300	
Drawings	46 000	167 080
Excess of receipts over payments		47 950
Bank balance as at 1 January 2028		(12 970)
Bank balance as at 31 December 2028		34 980

- a** Prepare a fully classified cash flow statement for the year ended 31 December 2028.
- b** Comment on the business's cash position at the end of 2028.

9 Cash flow statement

John Parker, the owner of Parker Pinball, has prepared the following summary of his cash transactions.

PARKER PINBALL: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 30 SEPTEMBER 2028

Receipts	\$	\$
Cash fees	230 000	
Collections from accounts receivable	45 300	
Loan from CBA	12 000	
Sale of office equipment	1 400	
Interest revenue	1 200	
Sale of service van	9 800	
GST receipts	24 120	
Capital	10 000	333 820
Less: Payments		
Salaries	43 000	
Cash purchases – machines	29 000	
Accounts payable	148 000	
Accounting fees	4 500	
Legal expenses	3 100	
Purchase of service van	40 300	
Promotional expenses	6 350	
Loan repayments	3 700	
GST payments	10 115	
Purchase of tools and equipment	17 900	
Drawings	35 000	340 965
Excess of receipts over payments		(7 145)
Bank balance as at 1 October 2027		3 165
Bank balance as at 30 September 2028		(3 980)

- Prepare a fully classified cash flow statement for the year ended 30 September 2028.
- Comment on the business's cash position at the end of September 2028.



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10 From journals to cash flow statement

Grace Samson, who owns Corporate Catering Services, has produced these cash journals.

CASH RECEIPTS JOURNAL

Date	Details	Receipt no.	Amount banked \$	Accounts receivable \$	Cash fees \$	Sundry receipts \$	GST received \$
Aug 1	Westbank	654	1 980	1 980			
2	Loan – NAB	–	5 000			5 000	
5	Gilbert & Sons	655	3 200	3 200			
8	Cash fees	EFT	242		220		22
11	Culvenor Cottage	656	1 800	1 800			
14	Cash fees	EFT	198		180		18
16	Hanton Hotel	657	2 700	2 700			
17	Cash fees	EFT	319		290		29
20	Commission	EFT	220			200	20
23	Sale of equipment	658	550			500	50
26	Cash fees	EFT	1 760		1 600		160
27	Cash fees	EFT	1 760		1 600		160
29	Sheahan Co.	659	2 600	2 600			
31	Cash fees	EFT	1 925		1 750		175
31	Totals		24 254	12 280	5 640	5 700	634

CASH PAYMENTS JOURNAL

Date	Details	EFT no.	Total paid \$	Accounts payable \$	Wages \$	Drawings \$	Assets \$	Sundry pay. \$	GST paid \$
Aug 1	Drawings	343	600			600			
2	JJ Catering Supplies	344	4 600	4 600					
3	Catering equipment	345	13 200				12 000		1 200
6	Wages	346	600		600				
9	Stationery	347	253					230	23
11	Pendulum Fruit Co.	348	2 300	2 300					
13	Wages	349	650		650				
16	Drawings	350	1 000			1 000			
19	Cooking equipment	351	4 950				4 500		450
19	Wages	352	600		600				
25	Loan r/p	353	400					400	
26	Wages	354	640		640				
29	Drawings	355	2 000			2 000			
31	Mitchell Meats	356	2 600	2 600					
31	Totals		34 393	9 500	2 490	3 600	16 500	630	1 673

On 1 August 2028, the business had the following cash reserves:

- cash on hand: \$500
- cash at bank: \$5400.

- Prepare a fully classified cash flow statement for the month ended 31 August 2028.
- Comment on the changes in the cash position of the business during August 2028.

11 From journals to cash flow statement

The owner of Brunswick Sound Systems, Neil Young, provides the following cash journals.

CASH RECEIPTS JOURNAL

Date	Details	Receipt no.	Amount banked \$	Accounts receivable \$	Cash fees \$	Sundry rec. \$	GST received \$
Sep 2	Cash fees	911	770		700		70
2	Cash fees	912	1 210		1 100		110
5	Deluxe Night Club	EFT	2 100	2 100			
6	Cash fees	913	440		400		40
9	Cash fees	914	1 650		1 500		150
12	Hernandez Hotel	EFT	2 100	2 100			
14	Cash fees	915	3 300		3 000		300
16	Cash fees	916	770		700		70
18	Interest revenue	EFT	500			500	
21	Sale of computer	EFT	1 045			950	95
22	Capital	EFT	8 000			8 000	
24	Cash fees	917	1 540		1 400		140
26	Celtic Club	EFT	3 200	3 200			
27	Central Hotel	EFT	1 270	1 300			
29	Cash fees	918	1 870		1 700		170
30	Totals		29 765	8 700	10 500	9 450	1 145

CASH PAYMENTS JOURNAL

Date	Details	EFT no.	Total paid \$	Accounts payable \$	Equipment repairs \$	Drawings \$	Assets \$	Sundry pay. \$	GST paid \$
Sep 1	J Walsh & Co.	641	1 200	1 200					
3	Computer	642	2 200				2 000		200
5	Repairs	643	4 400		4 000				400
7	Drawings	644	1 400			1 400			
10	Elsternwick Electricals	645	3 400	3 400					
12	Sound equipment	646	3 520				3 200		320
14	Loan r/p	647	1 650					1 650	
17	Drawings	648	800			800			
20	Advertising	649	550					500	50
24	Equipment repairs	650	880		800				80
27	Insurance	651	990					900	90
28	Billy Hyde	652	1 230	1 230					
28	Loan r/p	653	1 650					1 650	
30	Totals		23 870	5 830	4 800	2 200	5 200	4 700	1 140

The business maintains two bank accounts. On 1 September 2028, the accounts had the following balances:

- account #1: \$1500
- account #2: bank overdraft (\$1960).

- Prepare a fully classified cash flow statement for the month ended 30 September 2028.
- Comment on the changes in the cash position of the business during September 2028.



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12 From journals to cash flow statement

Millie Demidenko, owner of Cherry Lake Canoe Hire, has prepared the following cash journals. Her cash balance on 1 November 2028 was \$5460.

CASH RECEIPTS JOURNAL

Date	Details	Receipt no.	Amount banked \$	Accounts receivable \$	Cash fees \$	Sundry receipts \$	GST received \$
Nov 2	Cash fees	09-20	638		580		58
7	Cash fees	21-36	825		750		75
8	Cash fees	37-48	605		550		55
11	Cash fees	48-60	726		660		66
14	National Bank	EFT	1 320	1 320			
16	Cash fees	61-78	979		890		89
22	Mallesons	EFT	1 540	1 540			
23	Sale of trailer	EFT	1 320			1 200	120
26	Cash fees	79-94	825		750		75
30	Capital	-	5 000			5 000	
30	Totals		13 778	2 860	4 180	6 200	538

CASH PAYMENTS JOURNAL

Date	Details	EFT no.	Total paid \$	Wages \$	Drawings \$	Petrol expenses \$	Sundry payments \$	GST paid \$
Nov 4	Petrol	243	242			220		22
9	Wages	244	550	550				
10	Drawings	245	870		870			
12	Advertising	246	1 760				1 600	160
15	Canoes	247	4 400				4 000	400
16	Wages	248	580	580				
18	Drawings	249	2 000		2 000			
22	Wages	250	600	600				
25	Petrol	251	418			380		38
28	Wages	252	620	620				
28	Trailer	253	4 950				4 500	450
30	Totals		16 990	2 350	2 870	600	10 100	1 070

- Prepare a fully classified cash flow statement for the month ended 30 November 2028.
- Demidenko is concerned about the cash flows of the business. Comment on its cash position and the results your report has revealed in relation to the three areas of cash flows.

13 Analysis of cash flow statements

The following cash flow statements relate to the business of Caulfield Cosplay.

**CAULFIELD COSPLAY:
CASH FLOW STATEMENTS FOR YEARS ENDED 31 DECEMBER**

	2027	2028
	\$	\$
Cash flows from operating activities		
Receipts from customers	88 000	96 000
Payments to suppliers and employees	(47 000)	(52 000)
Net cash provided by operating activities	41 000	44 000
Cash flows from investing activities		
Proceeds from sale of non-current assets	3 400	2 300
Purchase of non-current assets	(12 000)	(3 200)
Net cash used in investing activities	(8 600)	(900)
Cash flows from financing activities		
Loan repayments	(10 000)	(10 000)
Capital injection	20 000	–
Proprietor's drawings	(35 000)	(33 000)
Net cash used in financing activities	(25 000)	(43 000)
Net increase in cash held	7 400	100
Cash held at beginning of year	2 340	9 740
Cash held at end of year	9 740	9 840

Comment on the changes that have taken place in operating, investing and financing activities over the period covered by the two reports.

14 Analysis of cash flow statements

The following cash flow statements relate to City Catering, owned by Eddy Marmay.

CITY CATERING: CASH FLOW STATEMENTS FOR YEARS ENDED 30 JUNE

	2027	2028
	\$	\$
Cash flows from operating activities		
Receipts from customers	119 000	116 000
Payments to suppliers and employees	(53 000)	(56 000)
Net cash provided by operating activities	66 000	60 000
Cash flows from investing activities		
Proceeds from sale of non-current assets	1 500	1 200
Purchase of non-current assets	(12 000)	(29 500)
Net cash used in investing activities	(10 500)	(28 300)
Cash flows from financing activities		
Bank loans	15 000	20 000
Loan repayments	(5 000)	(15 000)
Proprietor's drawings	(25 000)	(40 000)
Net cash used in financing activities	(15 000)	(35 000)
Net increase in cash held	40 500	(3 300)
Cash held at beginning of year	(15 000)	25 500
Cash held at end of year	25 500	22 200

Marmay's business generated \$60 000 in operating activities but cash held decreased. Prepare a report for Marmay, explaining the changes in his cash flows over the last two years.



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EXAM-STYLE QUESTIONS

Question 1 (2 marks)

A small business owner has asked for clarification about his latest accounting reports. His income statement shows a profit of \$50 000 for the year, yet his total of cash flows from operating activities is only \$15 000.

Using an example, **explain** how this is possible.

Question 2 (3 marks)

Complete the following table by indicating each item's classification in a cash flow statement and noting whether it is a cash inflow or cash outflow.

Item	Classification	Inflow or outflow
Bank loan		
Interest on loan		
GST refund received		



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 12

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Price-setting strategies

KEY TERMS

Recommended retail price
Percentage mark-up
Break-even point
Fixed costs
Variable costs
Semi-variable costs
Contribution margin
Total costs

In this chapter, you will consider multiple methods for setting prices for goods or services, with an emphasis on break-even analysis. You will then learn how to conduct that analysis, calculate break-even points and produce your analysis in graph form for interpretation.

Learning objectives

By the end of this chapter, you will be able to:

- **describe** various methods of setting selling prices [12.1]
- **define** terms such as 'break-even point', 'fixed costs', 'variable costs' and 'contribution margin' [12.2]
- **calculate** a break-even point for a business proposal [12.2]
- **prepare** a break-even graph [12.3]

PRIOR KNOWLEDGE

CHAPTER 2 Accounting for small business



Estimated time required: 1 week





12.1 Determining selling prices

When a business owner decides to sell goods, they need to determine the selling price of those goods.

Many service businesses (e.g. doctors) have a system of recommended fees, and their charges to customers don't vary much. However, the prices of some types of service businesses can vary greatly. For example, car repairers, building contractors, plumbers and carpenters may quote higher or lower prices than their competitors.

For any of these businesses, a number of factors may influence prices. As Figure 12.1 shows, these factors can include:

- the recommended retail price
- percentage mark-ups
- competitors' prices
- market reactions
- break-even analysis.

Figure 12.1 Factors affecting prices



recommended retail price
a suggested retail price set by a supplier

percentage mark-up
a percentage added to a product's cost price to determine the selling price

Recommended retail price: Wholesalers often recommend a selling price as a guide to retailers. These prices don't have to be followed, but they provide a good starting point if a retailer isn't sure what to charge.

Some suppliers include their recommended retail prices on their invoices. Managers should refer to these prices from time to time and adjust their selling prices to cover increases in cost prices.

Percentage mark-up: A mark-up is the amount added to a cost price to determine a selling price. A percentage mark-up determines the profit margin for an individual item. For example, a business may add 100% to everything it sells; if an item was purchased for \$3, the profit margin would be \$3 (100% of \$3), and it would sell for \$6.

Table 12.1 shows how some other percentage mark-ups are applied.

Table 12.1 Percentage mark-ups

MARK-UP OF 50%		
Cost	Profit margin	Selling price
\$5.00	50% of \$5.00 = \$2.50	\$5.00 + \$2.50 = \$7.50
\$10.00	50% of \$10.00 = \$5.00	\$10.00 + \$5.00 = \$15.00
\$20.00	50% of \$20.00 = \$10.00	\$20.00 + \$10.00 = \$30.00

MARK-UP OF 125%		
Cost	Profit margin	Selling price
\$5.00	125% of \$5.00 = \$6.25	\$5.00 + \$6.25 = \$11.25
\$10.00	125% of \$10.00 = \$12.50	\$10.00 + \$12.50 = \$22.50
\$20.00	125% of \$20.00 = \$25.00	\$20.00 + \$25.00 = \$45.00

Mark-ups aren't always the same across a range of inventory. Some businesses use different mark-ups for different products.

Competitors' prices: Whether a business bases its initial prices on recommended retail or fixed mark-ups, it may adjust those prices from time to time because of competition from other similar businesses. If a competitor charges much lower prices, this will have a significant impact on the business that's charging higher prices. Some industries are highly competitive and prices can change daily. Petrol stations are a good example; management must set the most appropriate price for the day, or sales may suffer. In more stable industries, prices may be adjusted every few months. A business may also introduce special promotions, such as weekly specials, as a reaction to what competitors are doing.

Market reactions: Even if there is little competition in a particular town or suburb, management must always be alert to changes in buyers' tastes. The success of a small business often depends on management's ability to 'read' the market accurately. In an economy such as Australia's, all business operators are competing for a share of the dollars available for spending. Different markets change over time; some businesses die out, while others become successful. Managers must react to changes in the market and/or the needs of their customers, or their business won't last in the long run. Flexibility is the key to success in small business, including in the way prices are set.

Break-even analysis: This technique for setting prices is based on the relationship between costs, volume (number of units sold) and profit. It can be used to calculate a particular selling price in order to produce a certain level of profit. This analysis is a key tool, so we'll cover it in depth in this chapter.



Mark-ups applied to goods have a direct impact on profit for a period.



12.2 Break-even analysis

Break-even analysis is a tool that prospective business owners can use to evaluate a business proposal. Established businesses can also use it to set selling prices to generate a certain level of profit.

Terminology

You should know the following terms to understand how break-even analysis works.

break-even point the point at which a business's revenue is exactly equal to its total expenses

fixed costs expenses that don't change, regardless of the volume of goods sold

variable costs expenses that change directly in line with a change in sales volume

semi-variable costs expenses that have both a variable and a fixed component

contribution margin the value that each unit sold contributes towards profit

- The **break-even point** is when revenue (income) equals expenses (costs), so no profit or loss is made.
- **Fixed costs** are expenses that remain constant, regardless of the number of units sold in a period. For example, the rent of a shop may be \$800 per week. It doesn't matter if the shop sells 1 or 1000 units in a given week; the cost of rent doesn't change.
- **Variable costs** are expenses that vary directly with a change in the volume of sales. For example, if the packaging of a product costs \$5 per unit, this cost increases with every unit sold. If one unit is sold, the cost is \$5; for two units the cost is \$10; three units cost \$15, and so on.
- **Semi-variable costs** are expenses that have both a variable and a fixed component. For example, sales staff salaries may be fixed at \$60 000 per annum plus a commission of \$2 for every unit sold.
- **Contribution margin** is the difference between the selling price and the variable cost of a product; that is, the amount one unit contributes towards a firm's profit. This is also known as the *variable profit* per unit.

Calculating the break-even point

When evaluating a business proposition, break-even analysis can be used to calculate the number of units a business needs to sell to break even. To calculate this, we use the break-even formula.

$$\text{Break-even (in units)} = \frac{\text{Fixed costs}}{\text{Selling price} - \text{Variable costs}}$$

EXAMPLE 12.1

Josie Papaleo is thinking about opening a pizza shop, which she will call Josie's Pizza Parlour. She has an initial breakdown of expenses.

Cost of making a pizza	\$7 per unit	
Selling price per pizza	\$12 per unit	
Weekly costs	– rent of shop	\$600
	– wages	\$400

The break-even formula provides the following calculation.

$$\text{Break-even (in units)} = \frac{\$1000}{\$12 - \$7} = \frac{\$1000}{\$5} = 200 \text{ pizzas}$$

This calculation tells Papaleo that, to break even, she must sell 200 pizzas in a week. So, to earn a *profit*, she would have to sell *more than* this number. >>

» You can check this calculation by preparing a simple income statement.

		\$
Sales revenue	200 pizzas × \$12	2 400
Less: Variable costs	200 pizzas × \$7	1 400
Gross profit		1 000
Less: Fixed costs		
Rent	600	
Wages	400	1 000
Net profit		0

The income statement is proof that the break-even point in units is 200 pizzas. In terms of sales dollars, the break-even point is \$2400 (200 pizzas at \$12 each).

Another way to prove the break-even point is to use the following mathematical equation.

$$\text{Profit} = (SP \times \text{units sold}) - (VC \times \text{units sold}) - FC$$

Where:

SP = selling price; VC = variable cost; FC = fixed costs.

Using the data from Josie's Pizza Parlour, the calculation would be as follows.

$$\begin{aligned}\text{Profit} &= (\$12 \times 200) - (\$7 \times 200) - \$1000 \\ &= (\$2400) - (\$1400) - \$1000 \\ &= \$0\end{aligned}$$

Modifying the formula

Of course, no business owner is willing to work long hours and risk losing their own money simply to break even. They are more likely to have a profit target in mind for every trading period.

The break-even formula can be modified to include a desired profit figure.

$$\text{Break-even + profits (in units)} = \frac{\text{Fixed costs} + \text{Profit}}{\text{Selling price} - \text{Variable costs}}$$

EXAMPLE 12.2

Josie Papaleo wants her shop to earn a profit of \$2000 per week.

$$\text{Break-even + profits (in units)} = \frac{\$1000 + \$2000}{\$12 - \$7} = \frac{\$3000}{\$5} = 600 \text{ pizzas}$$

A simple income statement can again be used to prove the answer.

		\$
Sales revenue	600 pizzas × \$12	7 200
Less: Variable costs	600 pizzas × \$7	4 200
Gross profit		3 000
Less: Fixed costs		1 000
Net profit		2 000

Working from units to price

These calculations can be very useful to a business owner, but one important question still needs to be answered: If expected sales are lower than a target, what price does the shop need to charge to make the desired profit?

By working backwards through the income statement, from net profit up, the owner can start with the expected number of sales, then use that to determine how much they need to charge per unit or item in order to reach the desired profit.

EXAMPLE 12.3

Josie Papaleo estimates that in her local market she can expect to sell only 500 pizzas a week. This means her target of 600 pizzas for a profit of \$2000 may never happen. The question becomes: At what price must she sell 500 pizzas to earn a profit of \$2000?

By working backwards through the statement (from net profit up), she can determine the required selling price.

		\$
Sales revenue	500 pizzas × \$?	6 500
Less: Variable costs	500 pizzas × \$7	3 500
Variable profit		3 000
Less: Fixed costs		1 000
Net profit		2 000

In order to determine a desired selling price, start at the bottom of the income statement and work backwards (up to the top of the report). Then you simply have to find the missing figure (\$6500 of sales with 500 pizzas sold).

This statement shows that if Papaleo can sell only 500 pizzas a week, she must sell them for \$13 each ($\$6500 \div 500$ pizzas) to earn the required revenue of \$6500.

Break-even assumptions

Break-even analysis is based on several assumptions. The results of break-even calculations are valid *only* if these assumptions hold true. The assumptions are as follows:

- All goods made are sold.
- Expenses can be divided into fixed and variable.
- The selling price of goods will remain constant.
- All costs are known and will remain constant.

If any one of these assumptions fails to hold true, break-even calculations become invalid. Similarly, if any factor in the break-even formula changes, all figures need to be updated and a new break-even point will have to be determined.



12.3 Graphing the analysis

Break-even calculations are often repetitive. Rather than requiring multiple calculations, break-even data can be shown on a graph. A graph enables the relationship between units sold, costs and profit to be seen at a glance. Several different graphs can be prepared. These should all show the number of units on the horizontal (x) axis and dollars on the vertical (y) axis.

We can use the original data from Josie's Pizza Parlour to illustrate the relevant graphs. Papaleo had variable costs of \$7, a selling price of \$12 and fixed costs of \$1000 per week.

Fixed costs graph

The first graph that can be prepared is for fixed costs. Figure 12.2 shows the relationship between units sold and fixed costs.

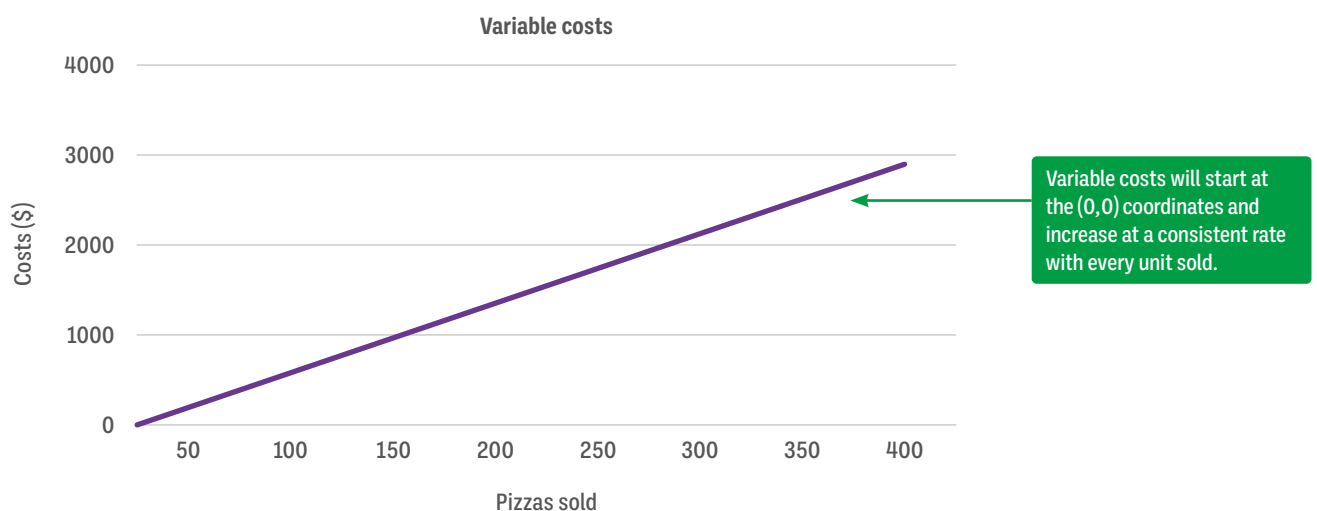
Figure 12.2 Fixed costs graph



Variable costs graph

Figure 12.3 illustrates the relationship between units sold and variable costs. The variable cost line always starts at the coordinates (0,0) and increases at the rate of cost per unit (i.e. \$7 per pizza).

Figure 12.3 Variable costs graph



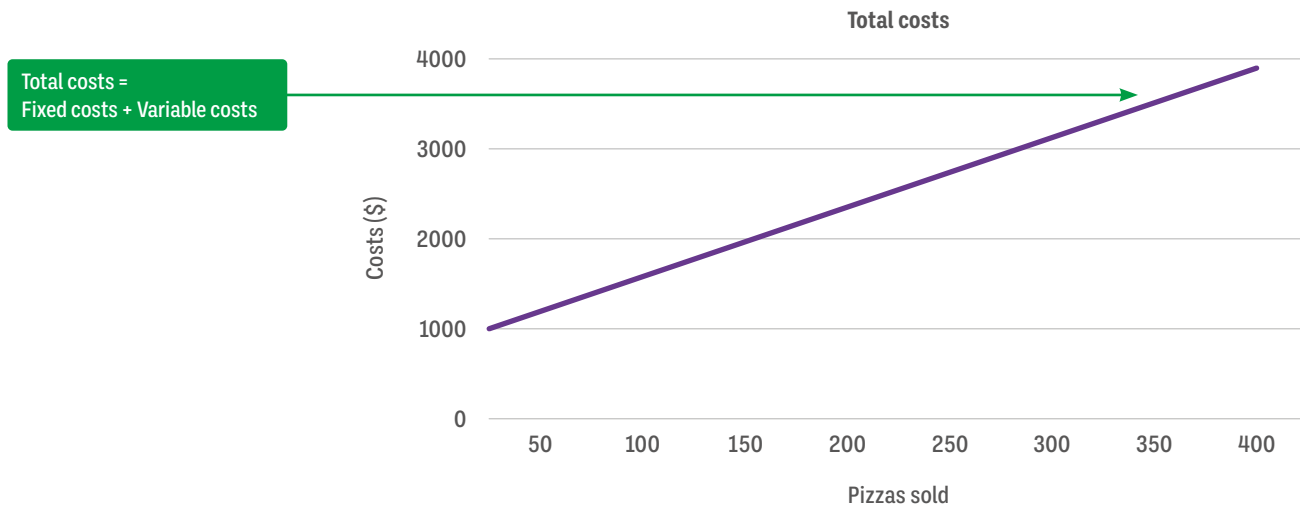
Variable costs increase in *direct proportion* to the number of units being sold (i.e. in a straight line): the higher the sales, the higher the costs.

Total costs graph

total costs the total of fixed and variable costs at a specific level of sales

The fixed and variable costs can be joined to prepare a graph showing the relationship between units sold and **total costs**. Figure 12.4 shows the total costs line for Josie's Pizza Parlour.

Figure 12.4 Total costs graph

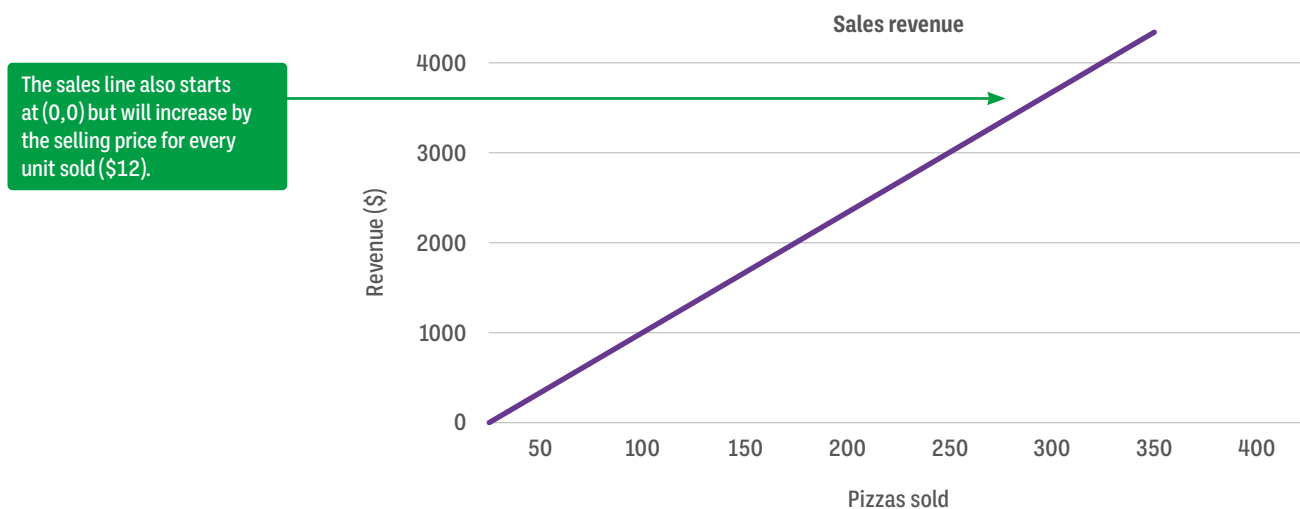


Do you notice the point at which the total cost line starts? If zero units are sold, fixed costs are still paid, so the total cost line *always* starts at the value of fixed costs (in this case, \$1000).

Sales revenue graph

Sales revenue can also be plotted on the same type of graph. Figure 12.5 shows the relationship between the number of units sold and sales revenue earned.

Figure 12.5 Sales revenue graph

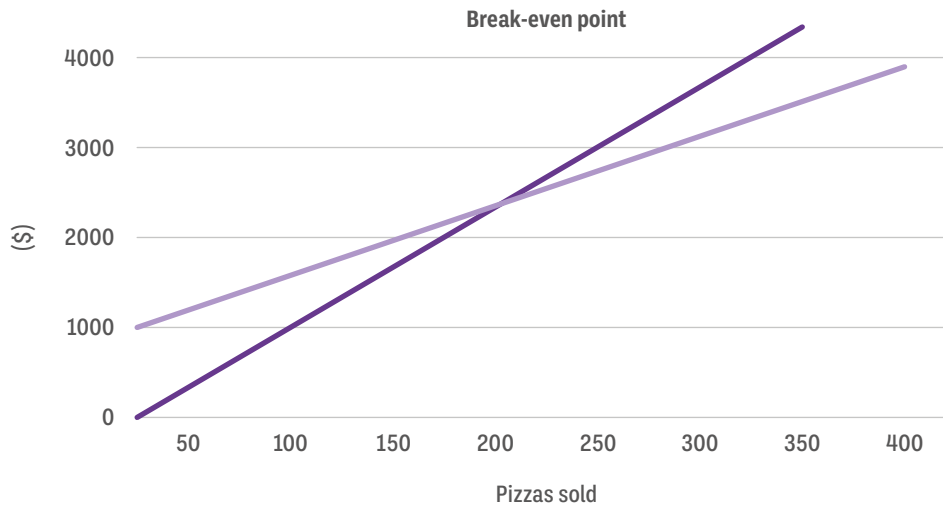


Break-even graph

While it's important to understand all of these graphs, a break-even graph relies *only* on the use of the total costs line and the sales revenue line. By comparing these two lines on the same set of axes, you can easily see the effect of a change in sales volume. This graph can be used to give a profit or a loss figure for all levels of turnover.

Figure 12.6 shows the break-even graph for Josie's Pizza Parlour.

Figure 12.6 Break-even graph



The point where the two lines intersect is (200, 2400): 200 units and \$2400 sales. This is the break-even point; once Josie's Pizza Parlour sells 200 pizzas and makes \$2400 in sales, it has broken even.

Once the break-even point is passed, the margin between sales and costs increases with every additional unit sold. Similarly, the lower the sales figure is below the break-even point, the greater the loss made.

Remember: This break-even graph is relevant only if the data remains unchanged. If even one item changes (e.g. if variable costs rise to \$9), a new graph will need to be prepared.





Practise and apply



REVISION: SUMMARY OF KEY CONTENT

[12.1] The selling price of goods, or the fees for a service, may vary depending on a range of factors. Business owners may use recommended retail prices or apply a percentage mark-up to cost prices; they may also adjust their prices in reaction to competitors or market factors. A key consideration in setting prices is the break-even point, which should be calculated and analysed.

[12.2] The break-even point is the point at which revenue (income) equals expenses (costs) – that is, no profit or loss is made.

For a business to make a profit, it must exceed this point. By calculating the break-even point, the business can determine how many units it needs to sell at a specific price, or the price that needs to be set to sell a specific number of units.

[12.3] Break-even calculations can be created as graphs. By graphing the total costs and the sales revenue on the same set of axes, the break-even point is the point where the lines intersect. Once the break-even point is passed, the margin between sales and costs increases with every additional unit sold.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Percentage mark-ups

A clothing store is considering using a fixed percentage mark-up on the goods it sells. It currently sells three lines of inventory with the following cost prices.

Jeans	\$40
T-shirts	\$10
Baseball caps	\$5

Calculate the selling prices for each of the items if the following mark-ups were used.

- a 50%
- b 90%
- c 150%

2 Percentage mark-ups

Jack Slavich owns a bookstore. He sometimes follows the recommended retail prices when setting his prices. However, he believes that these prices are too high on some products, so he reduces them to what he feels comfortable with.

A friend suggests that he maintain a fixed mark-up on all goods sold. Slavich says he already does this on the more expensive lines, as he makes \$11 clear profit on all items over \$20.

He has supplied the following information.

Inventory item	Cost price	Selling price
Novels	\$4.50	\$9.95
Dictionaries	\$12.90	\$19.95
Cookbooks	\$18.00	\$29.00
Biographies	\$22.00	\$33.00
Travel guides	\$38.00	\$49.00

- a Do you agree that Slavich has applied a fixed mark-up on all items selling for \$20 or more? Explain your answer.
- b Calculate the actual mark-up he has applied on the five types of stock he sells.
- c State one advantage to Slavich of maintaining a fixed mark-up on all goods sold.
- d State one disadvantage of his method of estimating selling prices.
- e What other factors should he take into account when setting his selling prices?



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3 Determining break-even point

A students' representative council (SRC) is considering selling a range of commemorative goods to Year 12 students. The principal believes that students should learn about the costs of running a business, so she has agreed to rent the SRC a room for \$60 per week from which to run their new business.

The first item will be a rugby top. The estimated cost price per top is \$45, and the students have decided to sell them for \$50. If they can make a profit, they will use the extra funds to buy other items.

- a If the SRC went ahead with its plan, how many rugby tops would it have to sell in a week to break even?
- b Prepare a simple income statement to prove your answer to part a.
- c How many tops would the SRC have to sell to earn a weekly profit of \$100?
- d If the SRC increased its selling price to \$55, what effect would it have on the break-even point?
- e If the principal increased the rent to \$70, what is the new break-even point? (Assume that the selling price is \$50.)



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4 Break-even point

Matthew Hewitt is the owner of Exclusive Gaming Tables. He rents a workshop for \$450 per week. The timber for each table costs \$45 and stain costs him \$15 per table. Hewitt is thinking of selling the gaming tables for \$150 each.

- a What are Hewitt's total fixed costs per week?
- b What are the total variable costs per gaming table?
- c Calculate the contribution margin per table.
- d How many gaming tables does Hewitt have to sell in a week to break even?
- e How many gaming tables would he have to sell in a week to earn a profit of \$900?
- f Prepare income statements to prove your answers to parts d and e.



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5 Break-even point

Michelle Templar owns Carlton Tablet City, which sells computer tablets for \$450 each. She pays a part-time assistant \$430 a week, and the weekly rent for her shop is \$950. Each tablet costs \$220.

- a Calculate the break-even point in units and in sales dollars for Templar's business.
- b How many tablets does the shop have to sell in a week to earn a profit of \$2300?
- c If Templar drops the selling price to \$400 per tablet, what would be the new break-even point?
- d Using the original data, if the shop sells 12 tablets a week, what selling price must Templar charge to earn a profit of \$2300?
- e Prepare a graph showing fixed costs and variable costs for Carlton Tablet City. Use the x -axis to show units ranging from zero to 30 tablets.

6 Income statements and break-even

The following information relates to Reliable Golf Buggies, a small business owned by Chris Biffin.

**RELIABLE GOLF BUGGIES:
INCOME STATEMENT FOR MONTH ENDED 31 MARCH 2028**

	\$	\$
Sales of buggies		9 600
Less: Cost of buggies		6 400
Gross profit		3 200
Less: Other expenses		
Salaries	1 600	
Cleaning	400	
Rent	2 400	4 400
Net profit (loss)		(1 200)

Biffin sells his golf buggies for \$120 each.

- How many golf buggies did he sell during March?
- What is the variable cost per buggy?
- Calculate the business's break-even point.
- Explain why the business suffered a loss in March 2028.
- Given the number of units sold during March, what selling price was necessary to break even during this month?
- If 200 buggies were sold in a month, what selling price would Biffin need to charge to earn a profit of \$4000?
- Using the original data, complete the following table.

Units sold	Sales revenue \$	Fixed costs \$	Variable costs \$	Total costs \$	Profit (loss) \$
50					
70					
90					
110					
130					
150					
170					

- Using the information in the table completed in part g, prepare a graph showing sales revenue, total costs and the break-even point for Reliable Golf Buggies.



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7

Income statements and break-even

Ebony Rea, a small business owner, supplies the following information about her business, Classic Barstools.

CLASSIC BARSTOOLS: INCOME STATEMENT FOR MONTH ENDED 31 MAY 2028

	\$	\$
Sales of barstools		7 200
Less: Cost of barstools		3 840
Gross profit		3 360
Less: Other expenses		
Wages	2 000	
Electricity	130	
Telephone	120	
Advertising	200	2 450
Net profit		910

According to her records, Rea sold 48 barstools during May.

- What price was Rea charging per barstool?
- How much did she pay per barstool?
- Calculate the contribution margin per barstool.
- Calculate the break-even point in units and in sales dollars for the business.
- List any assumptions you made in calculating your answer to part **d**.
- If Rea wants to earn a profit of \$3500 per month, how many barstools must she sell?
- If she could produce and sell only 70 barstools per month, what selling price must she charge to earn a profit of \$3500?
- If the cost of barstools went up by 10%, what would be the new break-even point? (Assume that the current selling price is maintained.)
- Prepare a break-even graph for Classic Barstools using the data from May's income statement. Draw a revenue line and a total cost line and indicate the break-even point in units and in sales dollars.
- Redraw the break-even graph in part **i**, taking into account the 10% increase in the cost of the barstools as specified in part **h**.



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8

Break-even analysis

Darren Berry makes and sells cricket bats from his rented shop, trading under the business name Berry's Bats. His monthly rent is \$2400. He has one assistant who receives a weekly wage of \$650. Berry's insurance expenses for the year total \$1440. Each cricket bat costs \$280 to make. Berry is currently selling the bats for \$440 each.

- How many bats does Berry have to sell per month to break even?
- Prove your answer to part **a** by preparing an income statement.
- Berry aims to make a profit of \$4000 per month. How many bats would he need to sell to earn this profit?
- Prove your answer to part **c** by preparing an income statement.
- If Berry could produce and sell only 20 cricket bats per month, what selling price must he charge to earn his profit of \$4000?



- »
- f** If Berry could increase production and make 40 bats per month, he would require a second assistant and therefore his wages expense would increase to about \$1000 per week. What price would he now need to charge per bat in order to earn his desired profit of \$4000 per month?
 - g** Prepare a break-even graph for Berry's Bats using the original data.

CASE STUDY

PART 1: January 2027

Nicole Stevens runs a small business in addition to working full-time as a receptionist at the local veterinary clinic. She makes dog kennels to a standard design and sells them at the local craft market for \$59 each.

Stevens hires a workshop each Saturday at a cost of \$52. This fee covers the use of the premises, as well as all the tools she requires. She plans to use the workshop weekly to keep up with demand for her product. She feels confident about this because her grandfather has retired recently and has offered to help her out. He doesn't expect payment for his assistance.

On Saturdays, Stevens and her grandfather make the kennels and complete all the painting work. On Sundays, she has to pay \$14 to gain a site at the market.

The local council has advised Stevens that the market will be closed for four weeks during the winter. She isn't too worried about this, as it will provide an opportunity to catch up with production if she falls behind.

To make one dog kennel, Stevens incurs the following costs.

Timber for frame and sides	\$24
Fibreglass sheeting for roof	\$13
Paint	\$8
Nails, screws and glue	\$2

- a** Make a list of the factors that Stevens should consider when determining the selling price of her kennels.
 - b** Calculate the total fixed costs that she will incur in a full year of trading.
 - c** How many kennels will she have to sell in a year to break even? (Assume that she only sells her standard model.)
 - d** Once her business is established, Stevens would like to make a profit of about \$6000 over a full year. How many kennels would she need to make and sell to achieve this objective?
 - e** Stevens is confident that she can produce eight kennels a week. This will allow her time for both construction and painting. Does this create a problem for her business? Explain your answer.
 - f** If Stevens can produce a maximum of eight kennels a week, how much would she have to sell each kennel for to achieve her profit objective?
- »



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» PART 2: January 2028

Nicole Stevens's business is now operating fairly successfully, although she hasn't achieved all of her objectives. During 2027, she sold 320 kennels, after she decided that she should keep her selling price at \$59 per kennel. However, she's receiving many enquiries for custom-made kennels. Prospective customers are bringing along their own designs and asking Stevens for quotes.

One customer has requested that she make a double kennel, designed to house two dogs together. She is considering their design and is trying to work out if it is feasible to make, but she is unsure about what price to charge. She has been working on the following specifications.

	Timber	Fibreglass	Other
Items	- Cost of timber for frame: \$2 per metre - Timber required: 14 metres - Extra timber panelling: \$14 per kennel	- Cost of fibreglass sheeting: \$12 per sheet - Fibreglass required: 1.5 sheets	- Cost of paint: \$12 per kennel - Nails, screws and glue: \$4 per kennel

- Before considering new designs, Stevens would like a precise report on how her business performed in 2027. Prepare an income statement to determine her profit or loss for the year.
- Stevens has asked you to help her prepare a quote for the double kennel. What price would you recommend she quote for this kennel as a one-off sale? Show all your workings and justify why you chose your recommended price.
- Stevens is prepared to make a few double kennels to see if they sell. Make a list of the factors she should consider before starting on the production of a new design.



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ETHICAL CONSIDERATIONS

Andy Lonsdale owns a small menswear shop in his local area. He usually applies a 100% mark-up to all his products, but his sales have slumped lately.

Rick, a friend of Lonsdale's, asks him why a business shirt hanging on the rack has a price tag of \$49.99. Lonsdale says the shirt cost him \$25, so it has a selling price of \$50, but he uses '\$49.99' because it sounds cheaper. He mentions that he is now thinking of selling the shirts at cost price, just to get his money back. Rick tells him about a 'little trick' he has seen used by another small business operating as a retail outlet.

The next day, Rick arrives at the shop with a new sign for Lonsdale. He suggests that he use it as part of a 'special' display.

Lonsdale explains to Rick that the sign isn't accurate, because he's been selling the shirts for \$49.99, not \$80. Rick replies: 'Well, mate, you said you need to make some sales. Try it and see what happens.' Lonsdale is unsure if he should agree to the plan.

Write a report to discuss both sides of this issue. Is it a case of 'sales at any cost'? Is it the right thing to do? What are the potential financial benefits and potential financial costs of this decision? Conclude your report by advising Lonsdale on what he should do.



EXAM-STYLE QUESTION

Question (8 marks)

The owner of Kira's Kebabs is thinking of changing the price of her products. At the moment, she charges \$10 per item. She estimates that each kebab costs her about \$4 to make. Her weekly expenses include casual wages of \$500 and rent of \$300. Over the last few months, Kira has averaged sales of about 500 kebabs a week. She is considering the following options.

Option 1

Drop the selling price to \$8 per kebab. The expected result would be a 20% increase in sales.

Option 2

Keep the selling price at \$10 but run a promotion of a free soft drink with every kebab. The drinks would cost her about 80 cents a can, but she expects sales to increase by 10%.

Option 3

Run an advertising campaign at a cost of \$400 per week. This should increase her sales by 10%.

- a Prepare** an income statement for each of the three options to determine the anticipated profit.
- b Compare** the results of your income statements and **comment** briefly on each option.
- c Select** your preferred option and **explain** to Kira why you made your recommendation.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 13

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Evaluating the performance of a service business

In this chapter, you will learn how to prepare, analyse and evaluate income statements for service businesses, and how to present that data for the report user. You will also consider key financial indicators that can be applied for a service business.

Learning objectives

By the end of this chapter, you will be able to:

- **analyse** an income statement for a service business [13.1]
- **use** alternative means of presenting performance data, including graphs [13.1]
- **evaluate** the results reported in an income statement [13.2]
- **calculate** net profit margin and return on investment indicators [13.2]
- **evaluate** liquidity using a working capital ratio [13.3]
- **evaluate** financial stability using the debt ratio [13.3]
- **identify** a range of non-financial evaluation tools [13.3]

KEY TERMS

Benchmark
Industry average
Net profit margin
Return on owner's investment (ROI)
Rate of return on assets
Liquidity
Working capital ratio
Debt ratio

PRIOR KNOWLEDGE

CHAPTER 1 Let's go accounting!

CHAPTER 3 Balance sheets for a small business

CHAPTER 8 Income statements for a service firm



Estimated time required: 1 week



13.1 Income statements for service businesses



Most small service businesses have the same accounting needs as small traders and use the same single entry accounting systems. The two cash journals are their main tools for recording transactions. They summarise information from these cash records to prepare an income statement at the end of the reporting period.

Figure 13.1 shows an example of an income statement for a service business.

Figure 13.1 Income statement for a service business

CLARKE'S CLEANING SERVICES: INCOME STATEMENT FOR YEAR ENDED 30 JUNE 2028		
Revenue	\$	\$
Cleaning fees		90 000
Less: Expenses		
Cleaning materials	30 000	
Office expenses	3 000	
Insurance	2 000	
Vehicle expenses	5 000	40 000
Net profit		50 000

This report is designed to satisfy the needs of the owner of a service business. It's simple, with revenue items listed at the top, followed by expense items. The end result – the profit or loss for the period – is shown at the bottom of the report.

We will use the information in this statement as an example to evaluate the performance of a service business.

Adding percentages

One of the important qualitative characteristics of accounting is *understandability*. Accounting information needs to be easily understood. Income statements such as the one in Figure 13.1 should be easy to read, set out with headings and subtotals, with the key figure of net profit labelled clearly.

Despite the simple layout, however, some users may still find it hard to understand exactly what all the numbers mean. So, accountants sometimes present financial information in different ways to improve understanding. For example, they may present dollar figures in percentage terms of overall expenses or revenues. An income statement in percentages can help an owner by showing how much of each dollar earned has been consumed by a particular expense item, such as cleaning materials.

Figure 13.2 (see page 192) represents the information for Clarke's Cleaning Services but also shows percentages, with all the expenses expressed as a percentage of the total revenue earned.



Figure 13.2 Income statement with percentage breakdown

**CLARKE'S CLEANING SERVICES:
INCOME STATEMENT FOR YEAR ENDED 30 JUNE 2028**

Revenue	\$	%
Cleaning fees	90 000	100.0
Less: Expenses		
Cleaning materials	30 000	33.3
Office expenses	3 000	3.3
Insurance	2 000	2.2
Vehicle expenses	5 000	5.5
Total expenses	40 000	44.4
Net profit	50 000	55.6

Total revenue is always stated as 100%. All other items are shown as a percentage of this total figure.

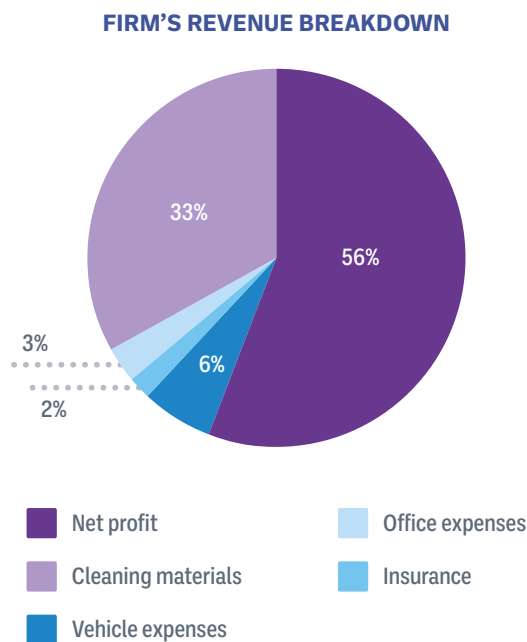
After all expenses are taken into account, this is the percentage of the revenue that remains as profit.

These percentages represent what happened to the average dollar of revenue earned by the business during the period. For example, for every dollar Clarke's Cleaning Services earned, 44.4% (i.e. 44.4 cents) was used up by the expenses of running the business. The biggest expense item was cleaning materials, which used up 33% of the firm's revenue. After taking all the expense items into account, the business still had 55.6% of each dollar of revenue remaining as net profit.

Pie charts

Graphs or charts may present information in a way that is easier to understand than a page of numbers. When the dollar values are converted to percentages, this data can be presented as a pie chart, as shown in Figure 13.3.

Figure 13.3 Pie chart showing the breakdown of the firm's revenue



Rather than showing every individual expense item, a simplified graph can be used to show only total expenses for a given period. Figure 13.4 shows total expenses and net profit in a pie chart.

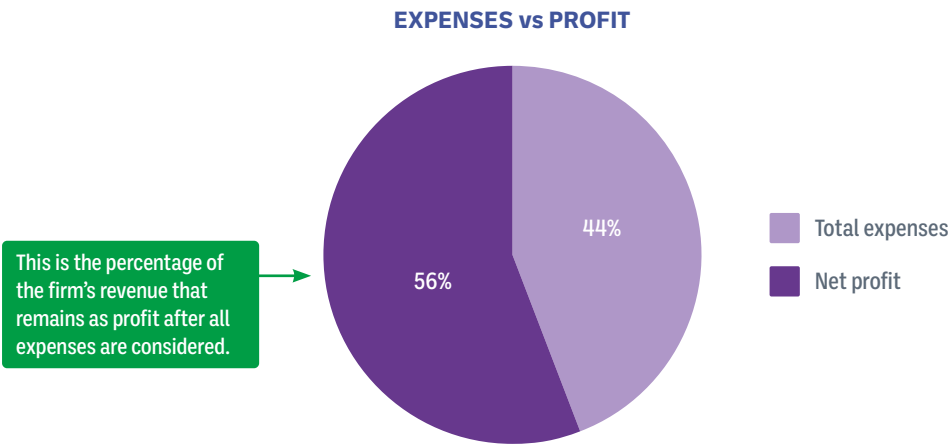


Figure 13.4 Percentage breakdown of the firm's revenue, showing total expenses

There are no set rules for graphs or charts in accounting. However, if they are used to try to satisfy *understandability*, they should show all the key information.

Figure 13.4 shows that 44% of sales was consumed by expenses. However, because this percentage is a total of all expenses, the chart doesn't show the importance of cleaning materials. As the amount for cleaning materials was significant (\$30 000), it probably needs its own segment in the pie chart, which will highlight its impact on the profit of the business.

Trend analysis is when comparisons are made over several consecutive reporting periods to identify a general trend in the performance of a business. A series of pie charts can be used to make trend analysis easier. As the charts show the breakdown of the firm's revenue, changes in the firm's operations can be easily identified.

The pie charts in Figure 13.5 show the breakdown of the firm's revenue into two segments – expenses and net profit. They are based on the following data for Clarke's Cleaning Services.

	2026		2027		2028	
	\$	%	\$	%	\$	%
Revenue	75 000	100.0	83 000	100.0	90 000	100.0
Expenses	30 000	40.0	35 000	42.2	40 000	44.4
Net profit	45 000	60.0	48 000	57.8	50 000	55.6

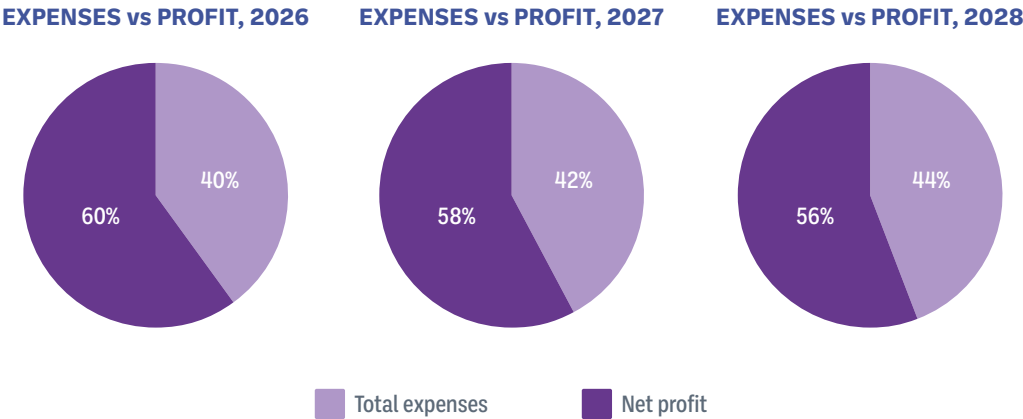


Figure 13.5 Percentage breakdown of firm's revenue over three consecutive periods

The three-year comparison in dollar terms may not present a clear picture of what has happened in this business. However, by presenting the data graphically, we can see that the percentage of revenue that remains as net profit has been shrinking over the three years.

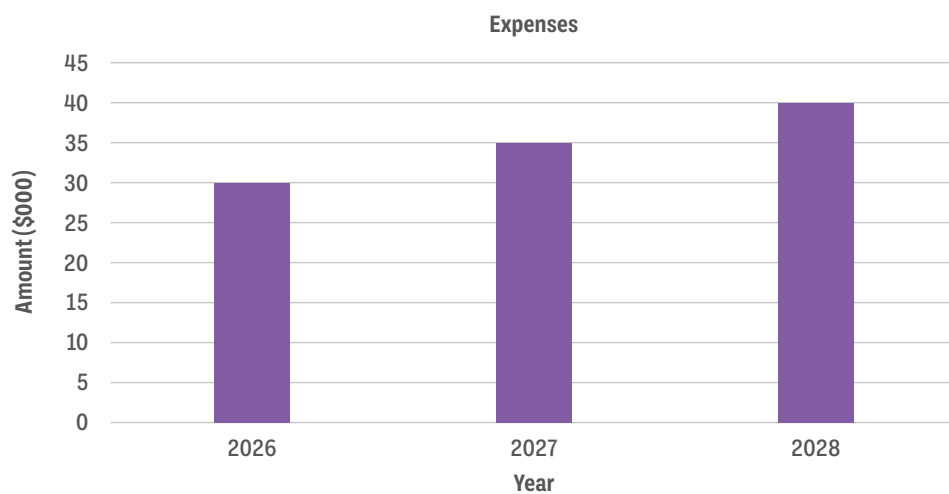
This is an important aspect of using graphs in accounting. Changes can be identified easily when graphs are prepared on a consistent basis, with good use of colour or shading. Most people can identify such changes when information is presented graphically, even if they don't fully understand accounting reports.

Other graphs

Other graphs and charts may also be used to present accounting information. For example, bar graphs allow a business to compare its various expense items easily.

Figure 13.6 uses the same three-year data for Clarke's Cleaning Services as in Figure 13.5 to show the expenses of the business.

Figure 13.6 Bar graph showing comparative spending on expense items



One role of accounting is to provide information to the users of financial reports. Charts or graphs that improve the quality and understandability of the information being presented are useful ways to get the message across.



13.2 Evaluating an income statement



Once an income statement has been prepared, the next step is to assess what it means in terms of the final profit result.

The first point to consider when evaluating a net profit figure is the length of the accounting period. (This should be stated in the heading of the report.) For example, a \$20 000 profit may be disappointing if the period covered by the report is a full year. However, if the period covered is one month, the owner may be very happy with the result.

Performance benchmarks

In addition to the period covered, there are several financial **benchmarks** or standards that accountants and management can use to evaluate performance. Figure 13.7 shows a variety of these benchmarks.

benchmark a standard used to assess the performance of a business

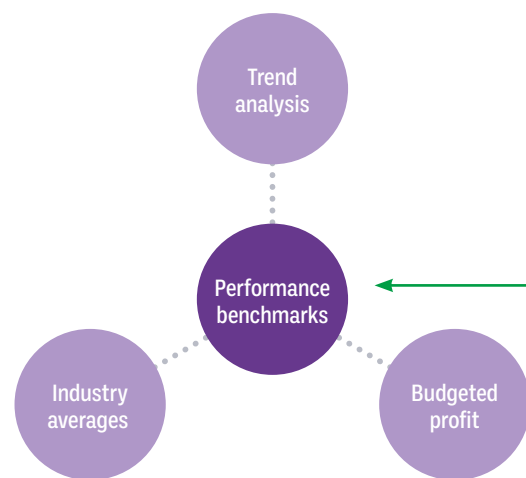


Figure 13.7 Performance benchmarks

It is quite common to use a variety of benchmarks when evaluating the performance of a business.

Trend analysis

Comparing one period's profit to previous results provides management with a *trend* in the profit results over time. The trend may indicate improving performance or declining profit. The results from several accounting periods may provide the owner with a better idea of performance than one period's results.

Consider the profit results of the two firms shown in the table below.

Net profit results:	2024 \$	2025 \$	2026 \$	2027 \$	2028 \$
Business A	2 000	8 000	16 000	28 000	48 000
Business B	90 000	78 000	65 000	56 000	48 000

Note the contrasting trends in profit for these two businesses.

If you look at 2028 only, your evaluation might simply be that the two businesses earned the same net profit. However, when you take the *trend* into account, you get a different picture of events. Business A has been improving its profit every year, while Business B's profit has been steadily declining. Trend analysis should *always* be considered because it may help to predict a business's likely future results.

Budgeted (or expected) profit

The past trend in a firm's profit results can help in evaluating its performance. However, even if profit has improved compared to previous results, it may still be considered unacceptable if it didn't meet management's expectations.

Look at Business A in the earlier example. Imagine if the budgeted profit for 2028 was \$52 000 (\$4000 more than the actual profit). Even though the business increased its profit from the previous year, if its target for the period was \$52 000, management would probably be disappointed.

Industry averages

industry average typical industry results, used to assess the performance of a business

An accountant may be able to advise a business owner about how their business compares to other similar businesses. If industry statistics are available, the owner can see how their firm's financial performance compared to the **industry average**. Did it perform better than most similar businesses? Has the business been falling behind in recent years?

Key financial indicators

While benchmarks are generally dollar amounts, some financial indicators are calculated as a ratio or a simple number. Accountants may use several different financial indicators when evaluating a net profit result.

Other financial indicators are covered in detail in Unit 2, but here we will look at the net profit margin, the return on owner's investment and the rate of return on assets.

Net profit margin

net profit margin the percentage of revenue left as profit after all expenses have been taken into account

$$\text{Net profit margin} = \frac{\text{Net profit}}{\text{Total sales}}$$

The **net profit margin**, also known as the return on sales ratio, compares the net profit for a period to the amount of sales revenue generated. It determines the percentage of the firm's revenue that remains after all expenses have been considered.

This indicator has already been introduced in the pie charts in Figures 13.3, 13.4 and 13.5, which show how much of the firm's revenue was consumed by expenses and how much remained as profit.

If a business has total sales of \$50 000 and net profit was \$5000, the net profit margin would be as follows.

$$\begin{aligned}\text{Net profit margin} &= \frac{\text{Net profit}}{\text{Total sales}} \\ &= \frac{\$5000}{\$50\,000} = 0.1 : 1, \text{ or } 10\%\end{aligned}$$

This shows the owner that 10% of the firm's revenue was ultimately earned as net profit. In other words, only 10 cents out of every sales dollar earned was profit.

If expenses increase and the prices charged to customers remain the same, the net profit margin will decrease. This will happen because expenses are eating away more of the revenue. The opposite is also possible: if a business increases its prices and its expenses remain constant, the net profit margin will increase.

Return on owner's investment

$$\text{Return on owner's investment} = \frac{\text{Net profit}}{\text{Average capital}}$$

The **return on owner's investment (ROI)** was introduced in Chapter 10 to demonstrate the potential benefits of borrowing money to purchase assets for a business. It compares the profit earned by a business to the funds contributed by its owner. The formula used in Chapter 10 was simpler, based on one input of capital from the owner. An owner may contribute additional funds or may withdraw assets during an accounting period. Rather than using owner's capital at the start or end of the period, an average figure is usually used. This provides a more accurate picture of the owner's return when their contribution has changed during a period.

Most small business owners invest their capital to maximise their return. They could put their money into term deposits in a bank and have a secure, low-interest return. When they go into business the risks are greater, but so are the potential rewards. A business owner can use the ROI ratio to decide whether it is still worthwhile to continue with their business investment.

return on owner's investment (ROI) the return earned on the funds invested by a business owner

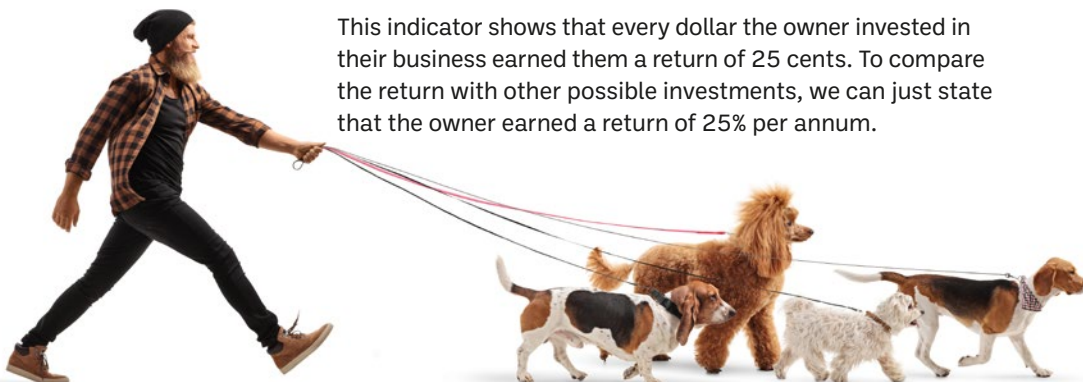
EXAMPLE 13.1

This information is extracted from the records of Paw & Path Dog Walking.

	\$
Capital as at 1 January 2028	70 000
Capital as at 31 December 2028	90 000
Net profit for 2028	20 000

$$\begin{aligned}\text{Return on owner's investment} &= \frac{\text{Net profit}}{\text{Average capital}} \\ &= \frac{\$20\,000}{\left(\frac{\$70\,000 + \$90\,000}{2}\right)} \\ &= \frac{\$20\,000}{\$80\,000} = 0.25:1, \text{ or } 25\%\end{aligned}$$

This indicator shows that every dollar the owner invested in their business earned them a return of 25 cents. To compare the return with other possible investments, we can just state that the owner earned a return of 25% per annum.



An owner's ROI isn't just about a simple percentage return. Small business owners take a considerable risk by investing their personal funds into a business venture. They also tend to work long hours. While it's difficult to put a value on the risk taken and the hours worked, the ROI should be substantially more than that available in the financial markets.

rate of return on assets
the return earned on
the investment made in
the assets of a business

Rate of return on assets

Another financial indicator used by some business owners is the **rate of return on assets**. Rather than comparing profit to the owner's capital, the net profit for a period can be compared to investment made in the assets of the business.

EXAMPLE 13.2

More information can be drawn from the records of Paw & Path Dog Walking.

	\$
Total assets as at 1 January 2028	190 000
Total assets as at 31 December 2028	210 000
Net profit for 2028	20 000



$$\begin{aligned}\text{Rate of return} &= \frac{\text{Net profit}}{\text{Average total assets}} \\ &= \frac{\$20\,000}{\left(\frac{\$190\,000 + \$210\,000}{2}\right)} \\ &= \frac{\$20\,000}{\$200\,000} = 0.10:1, \text{ or } 10\%\end{aligned}$$

This indicator shows that every dollar the owner invested in the assets of their business earned them a profit of 10 cents. That is, the assets of the business provided a return of 10% over the accounting period.

This rate of return provides additional information about the profitability of the business. It can be compared to:

- the rate of return earned in previous periods
- the rate of return achieved by similar businesses
- the budgeted, or expected, rate of return as set by the owner.



13.3 Additional indicators

Some indicators may be very personal, or unique to a particular industry. However, there are a number of other common indicators a business owner might use to determine how their business is performing.

Liquidity

liquidity the ability of a
business to meet its short-term
obligations as they fall due

In addition to learning how profitable a business has been, an owner may want information about its liquidity. **Liquidity** is the ability of a business to meet its short-term debts, or obligations, when they fall due. In other words, will the business be able to pay its debts on time?

A classified balance sheet provides information about liquidity, as it can be used to show a business's current assets and current liabilities. Current assets are assets that are expected to be used up or turned into cash within 12 months, while current liabilities are obligations that are due to be met within 12 months.

So, it makes sense to compare the current assets and current liabilities of a business at a point in time. This is called the **working capital ratio**.

$$\text{Working capital ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

working capital ratio

a financial indicator used to measure liquidity, determined by dividing current assets by current liabilities

Consider the following information.

	Current assets	Current liabilities
	\$	\$
Business A	100 000	80 000
Business B	210 000	220 000

The working capital ratios for the two businesses are as follows.

$$\text{Business A} = \frac{\$100\,000}{\$80\,000} = 1.25:1, \text{ or } 125\%$$

$$\text{Business B} = \frac{\$210\,000}{\$220\,000} = 0.95:1, \text{ or } 95\%$$

Business A has the better liquidity, as it has \$1.25 of current assets for every \$1 of current liabilities. While Business B has more current assets, it has less liquidity because it also has a much higher value for current liabilities. It only has \$0.95 of current assets for every \$1 of current liabilities. In the next 12 months, Business A will be able to meet its debts on time, while Business B may run into liquidity problems.

Although other factors may have an effect, the working capital ratio provides a basic measure that a business can use to evaluate its ability to meet its debts on time.

Stability

Chapter 10 introduced the concept of gearing. Stability is also a matter to consider because most businesses will borrow money at some time. Sometimes short-term finance (e.g. a bank overdraft) is available, while other forms of finance require a long-term commitment to making repayments (e.g. long-term loans).

Borrowing money can be a very positive experience for business owners, as loans enable them to acquire more assets for their business. These assets can then generate additional revenue, which will help the business increase its overall profit.

However, loans can also lead to a negative experience if too much money is borrowed. The more loans a business has, the higher its repayments will be. If it suffers from a downturn in revenue, it may have trouble making its repayments on time. The ultimate risk is that the business may collapse completely.

The **debt ratio** measures the risk a business faces by showing how dependent it is on borrowed funds compared to owner's equity.

$$\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}}$$

debt ratio a financial indicator comparing total liabilities to total assets

Consider the following examples.

	Total liabilities	Total assets
	\$	\$
Business A	20 000	400 000
Business B	280 000	500 000

The debt ratio for these two businesses would be as follows.

$$\text{Business A} = \frac{\$20\,000}{\$400\,000} = 5\%$$

$$\text{Business B} = \frac{\$280\,000}{\$500\,000} = 56\%$$

These two businesses are financed in completely different ways. Business A is lowly geared, as it has very low reliance on borrowed funds. Only 5% of its assets are funded by liabilities, so the owner has funded 95% of the total assets. This is a low-risk business, and its repayments to liabilities would be very low.

Business B is more highly geared, with more than half (56%) of its assets being funded by liabilities. It would have higher repayments of debt and the owner faces a much greater risk in taking on so many liabilities.

Non-financial indicators

In addition to financial indicators, business owners may use non-financial information to evaluate their business performance.

For a service business, non-financial indicators could include the following.

- *The number of jobs completed in a period.*
- *The number of complaints/follow-up calls required:* Once jobs are completed, the level of customer satisfaction can be measured by how many times a service provider is called back to finish a job or fix problems.
- *Customer satisfaction surveys:* Some businesses ask customers to complete a survey once the services have been provided and the bill has been paid.

Non-financial indicators such as customer surveys can help an owner identify problems within their business.



- *The number of quotes provided that are converted to jobs completed:* The percentage of quotes that are turned into actual customers is an excellent indicator for some business owners.
- *Visits to the business website:* If services are being gained through online bookings, a business owner may count the number of website visits as a guide to how well the business is performing.
- *Repeat customers:* How many customers come back as return clients?
- *Referrals:* How many customers refer their friends as future clients?
- *The number of hours worked:* Some business owners work much longer hours than a 'normal' working week. They would usually expect to be well rewarded for this.
- *Tracking of postcodes:* Businesses that seek customers across a range of suburbs may keep track of customers' postcodes. This can be reviewed regularly to see how well the range of customers is progressing. Owners can see if new suburbs are being picked up or if some have been lost to competitors.

Many successful business owners use a combination of financial and non-financial indicators as tools to measure business performance.



Customer satisfaction is a non-financial indicator that can be used to evaluate performance.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [13.1]** For a service business using a single entry accounting system, the income statement is one of the most important accounting reports for assessing overall financial performance. The data in the income statement can also be presented using graphs, which may be easier for some business owners to analyse.
- [13.2]** Service businesses may be evaluated against several performance benchmarks, such as an analysis of profit trends, budgeted revenues or industry averages. Key mathematical indicators can also be calculated, such as the net profit margin, the return on owner's investment and the rate of return on assets.
- [13.3]** Business owners may want to analyse their business's liquidity (the ability to pay debts on time) and financial stability as additional indicators. They may also want to consider non-financial indicators, which could provide further information about strengths, weaknesses and opportunities for improvement.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Preparing an income statement

Lydia Cromwell owns South Yarra Book Binders. She provides the following details of her trading results for the year ended 31 March 2028.

	\$		\$
Cash sales	85 000	Credit sales	15 000
Cost of materials	45 000	Wages – assistant	25 000
Advertising	2 000	Interest expense	1 200
Postage expenses	800	Insurance	1 300

- Prepare an income statement for the year ended 31 March 2028.
- Comment on the performance of the business for the year.

2 Preparing an income statement

David Foss is the owner of the Dynamic Gym in Essendon. He provides the following details from his records for the year ended 31 August 2028.

From the cash journals:		From the sales journal:	
	\$		\$
<i>Cash receipts:</i>		Credit sales	32 600
Cash sales	95 400		
Capital	20 000		
Loan	10 000		
GST collected	9 540		
<i>Cash payments:</i>			
Casual wages	18 800		
Interest on loans	1 200		
Laptop computer	2 600		
Office expenses	3 400		
Drawings	2 000		
Rent	35 000		
GST paid	4 100		

- Several items listed aren't relevant to an income statement. List these items and explain briefly why they aren't relevant to this report.
- Using the relevant information, prepare an income statement for the year ended 31 August 2028.
- Comment briefly on the profit performance of this business.



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3 Breakdown of an income statement using percentages

The manager of FX DJ Hire supplied the information below, which relates to the period ended 30 June 2028.

	\$		\$		\$
Sales	150 000	Courier fees	1 450	Insurance	3 370
Rent	28 000	Capital (1/7/27)	250 000	Advertising	4 220
Wages	27 000	Drawings	43 000	Equipment repairs	7 600

- Prepare an income statement for the year ended 30 June 2028. Show clearly the dollar value of all items and the percentage breakdown of the firm's revenue.
- Prepare a pie chart showing the breakdown of the firm's revenue.
- Prepare an extract from the firm's balance sheet to show the owner's equity section of the report.
- The owner works 60–80 hours a week. Comment on the performance of this business, taking into account this information and the amount of capital invested.



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4 Breakdown of the firm's revenue

The following information relates to Warrnambool Trailer Hire.

	\$
Sales revenue	125 000
Trailer repairs	24 250
Wages	61 250
Office expenses	12 000

- Calculate the business's net profit.
- Calculate the net profit margin.
- Comment on the results of your calculation in part **b**, explaining clearly what this financial indicator shows.
- Prepare a pie chart, showing the breakdown of the firm's revenue into the various expense items and the net profit that remains.
- Prepare a bar graph for all expense items to help the owner compare spending in the various areas.

Hint

Use the chart wizard in Microsoft Excel® to prepare your pie chart.

5 Trend analysis

Johnny Truong is the owner of JT's Car Repairs. He has asked you to analyse the performance results of his business over the past three years, based on the following information.

	2026	2027	2028
	\$	\$	\$
Cash sales	120 000	132 000	138 000
Credit sales	40 000	48 000	62 000
Cost of materials	80 000	93 600	110 000
Sales staff wages	18 000	23 760	27 600
Advertising	6 000	10 560	13 800

Use financial spreadsheets for this question.

- Calculate the net profit for each of the three reporting periods.
- Calculate the net profit margin for each of the three years.
- Comment on the trend in the net profit margin over the three-year period.
- From your spreadsheet, prepare pie charts for each of the three years, showing clearly the breakdown of total sales revenue.

6 Comparisons of performance

The following information relates to two similar businesses.

	Dandenong School of Tennis	Cranbourne Tennis Coaching
	\$	\$
Net profit	55 200	56 000
Capital (1/7/27)	220 000	210 000
Capital (30/6/28)	240 000	190 000

- Calculate the return on owner's investment for the two business owners.
- Comment on the results from part **a**, indicating clearly which owner has the better return.
- Which three benchmarks may be used to evaluate a return on the owner's investment?



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7 Trend analysis: Returns on investment

Laura Lee is the proprietor of Laura's Therapeutic Massage. She provides the following details from the most recent accounting periods.

	2026	2027	2028
	\$	\$	\$
Sales revenue	180 000	160 000	200 000
Net profit	27 000	28 800	30 000
Capital (start of period)	96 000	100 000	110 000
Capital (end of period)	100 000	110 000	120 000
Total assets (start of period)	270 000	300 000	280 000
Total assets (end of period)	300 000	280 000	320 000

- Calculate the net profit margin for each of the three reporting periods and comment on the trend in the ratio.
- Calculate the return on owner's investment for each of the accounting reporting periods and comment on your results.
- 'The return on owner's investment should be approximately the same as that available on term deposits.' Do you agree? Explain your answer.
- Calculate the rate of return on assets for each of the three periods. Comment on the trend revealed by this financial indicator.



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8 Rate of return on assets

Consider the following financial information, which relates to two electrical contractors.

	Eddie's Electricals	Bernie's Electricals
	\$	\$
Net profit	135 000	124 000
Average total assets	750 000	620 000

- Calculate the return on assets for the two businesses.
- Which business has used its assets most effectively to earn profit? Explain your answer.
- Explain another way the owners could evaluate the profit performance of their businesses.



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9 Rate of return: Trend analysis

The owner of Bendigo Tractor Repairs has provided the following information about her business. The owner is quite pleased, as net profit has increased every year.

	31 Dec 2025	31 Dec 2026	31 Dec 2027	31 Dec 2028
	\$	\$	\$	\$
Net profit	80 000	90 000	110 000	120 000
Capital	400 000	400 000	450 000	460 000
Total assets	600 000	620 000	700 000	800 000

- Calculate the return on owner's investment and the return on assets for the years ended 31 December 2026, 2027 and 2028.
- Comment on the trends in the financial indicators, considering the owner's comments about profit going up every year.
- Identify and discuss three non-financial indicators that the owner of Bendigo Tractor Repairs could use to evaluate the performance of her business.

10 Working capital ratio

The following information has been extracted from the balance sheets of two similar businesses.

	Bill's Mowing	Lucy's Lawn Services
	\$	\$
Current assets	24 000	38 000
Current liabilities	16 000	29 000

- Which business has the better liquidity? Calculate the working capital ratio to support your answer.
- Explain why it's important to have sufficient liquidity in a business.

11 Trends in liquidity

Jimmy Iles has provided the following data relating to his barbecue food truck business.

	2025	2026	2027	2028
	\$	\$	\$	\$
Current assets	12 000	14 000	18 000	20 000
Current liabilities	6 000	8 000	11 000	15 000

- Calculate the working capital ratio for each year.
- Comment on the trend in the ratio over the four years. Should Iles be concerned about the trend you have identified? Explain your answer.

12 Debt ratio

The following information has been provided for two businesses.

	City Car Hire	Suburban Car Hire
	\$	\$
Total liabilities	330 000	350 000
Total assets	550 000	800 000

- Calculate the debt ratio for each business.
- Which business has the greater financial risk? Explain your answer.

13 Trends in gearing

The owner of Carnegie Car Wash has calculated the following data for her business.

	2026	2027	2028
Debt ratio	45%	67%	75%

The owner is happy with the performance of the business, as profit has been steady over the past few years.

- Explain to the owner what the trend in the debt ratio indicates.
- Describe one advantage of increasing the debt ratio for a small business.
- Describe one disadvantage of increasing the debt ratio.



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CASE STUDY

Superior Graphic Design provides freelance design services to both private and corporate customers. It has been established for a number of years. The owner, Bree Semini, keeps cash journals and a credit sales journal.

At the end of the previous accounting period, the balance sheet for the business was as shown.

Assets	\$	Liabilities	\$	\$
Cash at bank	3 210	GST debt	2 000	
Accounts receivable	4 320	Mortgage loan	473 000	475 000
Business vehicle	45 300	Owner's equity		
Equipment	12 000	Capital	415 430	
Office furniture	8 600	Plus: Net profit	28 000	
Premises	820 000		443 430	
		Less: Drawings	25 000	418 430
	893 430			893 430

Semini prepared the following summary at the end of the current period, 30 September 2028.

From cash journals:	\$	From credit sales journal:	\$
Cash sales	86 400	Credit sales	21 400
Accounts receivable	12 340	GST charged to accounts receivable	2 140
Capital	10 000		
Loan from NAB	12 000		
GST received	8 640		
Cash purchases of materials	15 000		
Wages	52 400		
Advertising	1 470		
Loan repayments	20 800		
Electricity	1 620		
Drawings	37 000		
Interest on loans	9 800		
Purchase of equipment	4 300		
GST paid	2 239		

Additional information:

- The mortgage loan is repayable at the rate of \$400 per week.
- The loan from NAB is an interest-only loan. The total amount borrowed is due for repayment on 30 June 2029.
- The firm's bankers have approved an overdraft facility to cover short-term shortages of cash.

- Prepare a cash flow statement for the year ended 30 September 2028.
- Using the results from your statement in part **a**, comment on the firm's cash position at the end of the period.
- Prepare an income statement for the year ended 30 September 2028.
- Using a spreadsheet, prepare a pie chart to show the breakdown of the firm's revenue. Divide the chart into two sections: total expenses and net profit.
- Using your statement in part **c**, plus your chart in part **d**, comment on the profit performance of the business.



- » **f** Prepare a classified balance sheet as at 30 September 2028. (*Hint:* You will need to calculate how much is owed by accounts receivable as at 30 September 2028 and the GST liability of the business.)
- g** Using the data from the previous period's balance sheet, calculate the owner's return on investment.
- h** Using the balance sheet prepared as at 30 September 2028, calculate the owner's ROI.
- i** Write a brief comment on the trend in the owner's ROI over the two years.
- j** Calculate the debt ratio as at 30 September 2028 and comment on the financial stability of the business.
- k** Semini is confused. She is certain that her business made a profit again this year but is worried about the shortage of cash it's experiencing. Explain to her why she has run out of cash but has been able to report a profit again in the current period. In your explanation, state the items that affect cash on hand but don't affect profit.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Explain why benchmarks are important when evaluating the profit performance of a small business.

Question 2 (4 marks)

State and describe two non-financial indicators that the owner of a restaurant could use to evaluate business performance.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 14

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Internal control

KEY TERMS

Internal control
Bank reconciliation

In this final chapter of Unit 1, you will consider internal control procedures that a small business might put in place to protect its economic resources against misuse or theft and to control its record keeping.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** the meaning of the term ‘internal control’ [14.1]
- **outline** how internal control is achieved in a business situation [14.1]
- **describe** procedures that help to achieve control over cash [14.2]
- **outline** security measures that business owners might use [14.2]

PRIOR KNOWLEDGE

CHAPTER 3 Balance sheets for a small business

CHAPTER 8 Income statements for a service firm

CHAPTER 11 Cash flow statements



Estimated time required: 1 week



14.1 Internal control procedures



No business owner likes to think that their cash or assets might be stolen, even though this happens in many industries and business enterprises. But it isn't just deliberate theft that can put assets at risk. Poor record keeping, human error or even bad luck can mean that assets go missing and money is lost.

Accounting helps a business protect its assets by providing ways to check what it owns. A system of **internal control** involves setting up procedures within the structure of a business to protect its assets.

Figure 14.1 shows some typical internal control procedures.

internal control a system of procedures that protect the assets of a business and ensure the accuracy of its accounting system

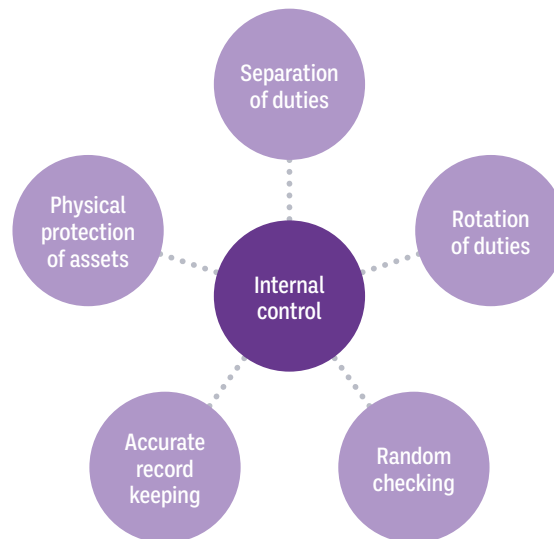


Figure 14.1 Internal control procedures

Internal control usually involves a range of measures that work together to protect the assets of the business.

Business owners and managers may use the following internal control procedures.

- *Separation of duties:* Staff are not left in charge of one area for an extended period, or in total control of all processes. For example, staff involved in receiving cash aren't also responsible for counting the cash or doing the banking. The system involves several staff members in any one process, to reduce opportunities for staff to commit a fraud against the business.
- *Rotation of duties:* Employees' duties are rotated occasionally so that one staff member cannot carry out a fraud undetected. Job rotation also ensures that correct procedures are followed. For example, if one staff member has done the banking for several months, they are moved to a different task and another person (or more than one person) then takes over the banking duties.
- *Random checking:* Checks are carried out occasionally, without warning, to ensure that no goods or money are missing. If staff can access cash on hand, it is monitored and checked regularly as part of a normal routine. Making sure that all registers have sufficient change is a good excuse for checking register tills.
- *Accurate record keeping:* Accurate and timely records of all cash receipts and payments, and references to their source documents, function as control mechanisms against fraud. Documents with pre-printed sequential numbers can be accounted for to satisfy the requirements of *verifiability*.
- *Physical protection of assets:* If a firm's assets can be physically removed, security cameras and alarm systems can protect those assets against theft. Relaxed security may create temptation in dishonest staff or customers.

Rotating banking duties, such as regular depositing of cash at ATMs, helps a business protect its cash.



Some of these internal control procedures won't be relevant to all firms. For example, in a small business with one or two employees, it may not be possible to rotate duties. However, as a business grows and takes on more employees, the demand for more internal control procedures also grows. The procedures put in place must respond to the needs of the business and its assets.

At the same time, managers need to consider the ethical nature of some of these procedures. Is it appropriate to treat your staff as potential thieves? In a large business, staff may not take these procedures personally – but in a small business, strict internal control procedures could alienate the very people who keep the business running.



14.2 Asset control

Cash

The asset most likely to be the target of fraudulent behaviour is cash. It's almost impossible to prove ownership of notes and coins. A firm must take steps to ensure that the cash coming into the business ends up in the business bank account. Similarly, money leaving the account should only be for legitimate business purposes.

Every business owner needs to consider how best to control the cash that moves through the business on a day-to-day basis. The following are some common procedures.

- Cash receipts are evidenced by a receipt (either handwritten or a cash register docket) or by bank documents when accepting EFTPOS or EFT payments. Documentation is essential for verifying the total cash receipts for a day's trading.
- Cash registers are cleared regularly. This helps to prevent theft, because large notes (\$100 and \$50 notes) won't accumulate in the cash registers.
- In larger firms, or where the business deals in large sums of cash, two staff members clear registers together. They count the money immediately and record the amount against the specific cash register.
- Large sums of money are not left on business premises overnight or on weekends. Most banks provide a night safe for businesses such as restaurants to deposit cash after hours. Some businesses have their own safe on their premises, but it's not unknown for these to be stolen!

- Daily takings are banked intact, to allow them to be checked against cash register tapes. It's not acceptable for employees to borrow from the till to buy their lunch or for a 24-hour loan. Money put in the till remains in the till until it is counted and verified with the appropriate documents.
- Cash payments are not made using cash from cash registers. All payments are made by EFT, as this mode of payment is always supported by documentation.
- When large amounts of cash need to be deposited at the bank, two staff go together or a security firm is used.
- Formal cash receipts and cash payments journals are used to record all document numbers and dollar values.
- A **bank reconciliation** statement is prepared regularly (usually monthly). It involves comparing the statement prepared by the bank with the cash journals maintained by the business. It helps to identify any recording errors and updates the business records with transactions such as bank fees and interest.

bank reconciliation checking the cash records kept by a business against the records kept by a bank

These procedures don't guarantee protection from all forms of fraud and theft, but they can reduce the likelihood of theft. Following such steps will result in a more accurate set of accounting records, which will hopefully protect the assets of the business.

Materials and inventory

Management may require further control measures when a business holds large amounts of materials (in the case of service firms) or inventory (for trading firms).

Materials are often purchased in advance so that work can start quickly when quotes are accepted. They may be stored in garages, in warehouses or at the business premises. Building materials and tools are often targets for thieves, and the loss of such items can have a significant effect on a small business. Owners of small businesses need to be aware of the potential for such losses and must act to protect their assets.

Depending on the nature of the materials or inventory being held, management may use some of the following security measures.

- *Security personnel:* Some businesses employ guards during trading hours, while others use security patrols at night. Depending on the needs of the business, security personnel can be a great deterrent to potential thieves.
- *Undercover security:* Some larger businesses (e.g. large retail outlets) employ staff who appear to be shoppers but are actually undercover guards who watch out for shoplifters.
- *Video surveillance:* Many business owners install closed circuit television cameras to cut down on theft from their business premises.



- *Security tags:* Used mainly in trading firms, security tags attached to products help cut down on losses through shoplifting.
- *Two-way mirrors:* Many service and trading businesses have two-way mirrors behind their counters where customers are served, so that managers can see what is happening on the shop floor.
- *Dye bombs:* This security device is used mainly in retail outlets to help reduce the level of shoplifting.
- *Electronic security gates:* Security gates can help prevent thefts of a variety of items.

Again, there can be ethical concerns to consider. Customers have a right to privacy, and devices such as cameras must not be used to monitor people inappropriately.

Single-owner businesses cannot always afford, or may not need, some of these security measures. Management should consider what security is required for their business and respond on that basis.





Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [14.1]** Accounting helps to protect the assets of a business by enabling it to check what it owns. A system of internal control involves setting up procedures within the structure of a business to protect its assets.
- [14.2]** A range of specific procedures can be used to monitor cash, inventory, materials and other assets. Some of these procedures target customers, staff or both.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Internal control: Cash

Nick Louder is the owner of the Happy Valley Amusement Park. The park operates six different rides at \$6 per ride, and one employee looks after each ride. Louder has told his staff to collect the cash when the customers first get on the rides, as this eliminates the cost of tickets. As he wants to know how much each ride earns, Louder has instructed the ride attendants to count the money received at the end of the day, write the total in an exercise book in the office, and then put the money in the top drawer of Louder's desk.

Louder is satisfied with his system, which has helped him to identify and replace the least popular rides. His employees also appear to be happy to do things this way.

- a Make a list of some internal control problems with the way Louder is running his business.
- b Write a step-by-step plan for how you think Louder should operate his business, from selling tickets to banking the money.



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XL template

2 Internal control: Goods

Charlie Ross is a tomato grower from Yarrawonga. When his fruit is ready to sell, he employs six people to work at several local markets. He provides each seller with 100 kg of tomatoes, some display equipment and a cash float for the day. As the markets have several tomato vendors, Ross allows his workers to set the price for the day so that they can stay competitive. At the end of a day's trading, they add up their takings and return everything to Ross. As the markets are held throughout summer, there is some spoilage and his workers are permitted to throw out any damaged produce. Ross has elected to be a 'cash only' business and as there is no power available at the market sites, a cash register cannot be used, so no receipts are issued.

Ross is a little concerned. In the past week, the takings from one market were very low. The worker explained that the market was quiet; however, she returned only 20 kg of tomatoes at the end of the day, saying that most of the fruit was affected by the sun.

- a In terms of internal control, are you satisfied with the way Ross operates his business? If not, what areas of concern have you identified?
- b How do you think the internal control procedures for this business could be improved? Prepare a report for Ross, outlining your recommended changes.



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XL template

3 Internal control: Service business

Kamala Khan operates a hair salon in a regional shopping centre. She employs four hairdressers. She has been worried about the control over cash moving through her business and has decided to no longer accept cash transactions. In future, all customers must use contactless card payments.

As the system will keep records of everything, Kamala no longer sees the need to keep any documentation. Now that there's no cash on the premises at all, she feels she can stop worrying and spend more time catching up with her friends at her local café.

- a Do you agree with Khan that the system she has put in place can now run itself? Discuss the advantages and disadvantages of the new system.
- b Does Khan need to refine the system to ensure that it achieves internal control? Explain your answer.

EXAM-STYLE QUESTIONS



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Question 1 (4 marks)

Karen Withers is the owner of Stacks of Wax, a small business that sells candle products and oil burners. She has three casual employees working in the shop. Withers likes to have good working relationships with her staff. She even lets them borrow up to \$20 from the till, to pay for lunch or takeaway coffees, if they leave an IOU note in the cash register.

State and explain two reasons why Withers should not be allowing her staff to complete their own IOUs and then take cash from the cash register.

Question 2 (6 marks)

The owner of the local supermarket has noticed that there have been several customers attempting to shoplift from the store recently. He is now considering installing multiple security cameras. If he detects shoplifters, he plans to print images of the thieves and display them at the entrance to the shop as a 'wall of shame'.

- a Are security cameras an acceptable form of internal control? **Explain** your answer.
- b A friend of the owner has stated that it's a breach of privacy and unethical to photograph customers. Do you agree? **Discuss**.

Watch selected exercises from this chapter being completed with step-by-step instructions and advice.





UNIT 2

Accounting and decision-making for a trading business

The content in Unit 2 of the VCE Accounting course will be covered in the following chapters:

Chapter 15	The twofold effect of transactions	220
Chapter 16	Cash records for a trading firm	232
Chapter 17	Accounting for inventory	249
Chapter 18	Managing a trading business	269
Chapter 19	Credit transactions for a trading business	290
Chapter 20	Income statements for a trading business	314
Chapter 21	Cash flow statements for a trading business	334
Chapter 22	Accounting for non-current assets	354
Chapter 23	Reducing balance method of depreciation	372
Chapter 24	Budgeting for a small business	383
Chapter 25	Headstart: An introduction to double entry accounting	414

CHAPTER 15



15 16 17 18 19 20 21 22 23 24 25

The twofold effect of transactions

KEY TERMS

Twofold effect (of transactions)
Inventory
COD (cash on delivery)
Cost of sales

In this chapter, you will revise the effect of transactions on the balance sheet of different small businesses. However, rather than prepare numerous reports one after another, you will use a worksheet to summarise the information.

Learning objectives

By the end of this chapter, you will be able to:

- **explain** the twofold effect of transactions [15.1]
- **state** the twofold effect of a variety of transactions for a trading business [15.2]
- **prepare** a worksheet for a trading firm, showing the twofold effect of transactions [15.2]
- **prepare** a balance sheet for a trading firm from a worksheet [15.2]
- **describe** the link between balance sheets and the qualitative characteristics of accounting [15.3]

PRIOR KNOWLEDGE

CHAPTER 1 Let's go accounting!

CHAPTER 3 Balance sheets for a small business

CHAPTER 8 Income statements for a service firm

CHAPTER 11 Cash flow statements



Estimated time required: 1 week



15.1 Transactions in service firms



In Chapter 3, you learnt about balance sheets. These accounting reports show the financial position of an entity, with information on its assets, liabilities and owner's equity.

In that chapter, balance sheets were prepared after every business transaction. Of course, it isn't realistic for a small business to do this. However, the chapter clarified how for every transaction, at least two of the three items in the balance sheet (i.e. assets, liabilities or owner's equity) are affected. This is known as the **twofold effect**. (If GST is involved, a third item will be affected by each transaction.)

Let's consider the example of Speed-E Couriers to demonstrate and revisit how transactions affect the balance sheet prepared for a service business. Table 15.1 shows the transactions that occur in the business's first week of operations, and their twofold effect on its balance sheet.

twofold effect (of transactions)
where, for every transaction in a business, at least two items in the balance sheet are affected

Table 15.1 The twofold effect of transactions on the balance sheet

Date	Transaction	First effect	Second effect
Jun 1	Owner deposited \$50 000 to commence business as Speed-E Couriers	Increase Cash at Bank (asset) by \$50 000	Increase Capital (owner's equity) by \$50 000
Jun 2	Took out an interest-only loan of \$20 000 from Total Finance	Increase Cash at Bank (asset) by \$20 000	Increase Loan (liability) by \$20 000
Jun 3	Bought motorcycle for cash \$10 000, plus GST of \$1000	Decrease Cash at Bank (asset) by \$11 000	Increase Motorcycle (asset) by \$10 000 AND Decrease GST Debt (liability) by \$1000
Jun 4	Banked courier fees \$15 000, plus GST of \$1500	Increase Cash at Bank (asset) by \$16 500	Increase Capital (owner's equity) by \$15 000, as courier fees are classified as revenue AND Increase GST Debt (liability) by \$1500
Jun 5	Paid wages for the week \$1000	Decrease Cash at Bank (asset) by \$1000	Decrease Capital (owner's equity) by \$1000, as wages are classified as an expense

As you can see, for any transaction, there are *always* at least two items affected in the balance sheet.

The transactions listed for 4 and 5 June show the effect of revenues and expenses on owner's equity. When a business receives revenue, the effect is to *increase* owner's equity, as revenues increase profits and profits are added to owner's equity at the end of the period. On the other side of the report, the Cash at Bank value also *increases*.

When an expense (e.g. wages) is paid, the opposite occurs. As expenses decrease profit, they lead to a *decrease* in the owner's equity. On the assets side of the report, Cash at Bank *decreases* when the wages are paid.

Remember

Revenue items will increase owner's equity, while expense items will decrease owner's equity, as reported in the balance sheet.

Note also the effect of GST on the balance sheet. If services are provided for cash, Cash at Bank increases. The corresponding effect is an increase in the firm's revenue, plus an increase in the GST debt of the business. If a business pays GST on the purchase of an item, the payment decreases its GST debt.

Using a worksheet

A second way to show the effect of transactions on the balance sheet is to use a worksheet. This alternative is much simpler than preparing numerous reports.

The worksheet is based on the accounting equation, with *assets* on the left side and *liabilities* and *owner's equity* on the right side. It takes its format from the design of the T-form balance sheet.

The worksheet in Figure 15.1 has been prepared using the transactions shown in Table 15.1. The difference this time is that you can see how each individual transaction affects the items in the balance sheet.

Figure 15.1 Worksheet approach: Transactions and the twofold effect on a service business

Transaction	Assets			Liabilities			Owner's equity
	Cash at bank	Motorcycle			Loan	GST debt	Capital
Jun 1 Owner deposited \$50 000 to commence business as Speed-E Couriers	+\$50 000						+\$50 000
Jun 2 Took out an interest-only loan of \$20 000 from Total Finance	+\$20 000				+\$20 000		
Jun 3 Bought motorcycle for cash \$10 000, plus GST of \$1000	-\$11 000	+\$10 000				-\$1 000	
Jun 4 Banked courier fees \$15 000, plus GST of \$1500	+\$16 500					+\$1 500	+\$15 000
Jun 5 Paid wages for the week \$1000	-\$1 000						-\$1 000
	\$74 500	\$10 000			\$20 000	\$500	\$64 000

Figure 15.1 clearly shows the twofold effect of each transaction. Some items have increased, while others have decreased, but two items have been affected every time. The totals at the bottom of the worksheet are ready to be listed in a formal balance sheet, as shown in Figure 15.2.

Figure 15.2 Balance sheet derived from worksheet totals

SPEED-E COURIERS: BALANCE SHEET AS AT 5 JUNE 2028

Assets	\$	Liabilities	\$	\$
Cash at bank	74 500	Loan – Total Finance	20 000	
Motorcycle	10 000	GST debt	500	20 500
		Owner's equity		
		Capital		64 000
	84 500			84 500

Note that the balance sheet is still based on the accounting equation (assets = liabilities + owner's equity), so it must still balance.

15.2 Transactions in trading firms



Trading businesses have many of the same transactions as service firms. The owners of both types of businesses contribute capital. They both may take out loans, and both pay regular expenses such as advertising and wages.

The main difference between the two types of businesses is the frequent transactions involving the buying and selling of **inventory**. The basic purpose of a trading firm is to buy and sell goods as quickly as possible to generate a profit. Inventory could be anything that is bought or sold (e.g. cars, house plants, vitamins, sneakers, etc.).

inventory goods purchased by a trading firm for resale

Purchasing inventory

There are two ways a trading firm can purchase its inventory: by using cash or on credit.

Cash purchases are those the business pays for at the time of purchase. Business owners do this in some industries because, as cash clients, they may receive substantial discounts. For example, retail outlets may have inventory delivered to their door on a **COD (cash on delivery)** basis. An electronic funds transfer may be done immediately. The inventory is then placed on the shelves, ready for sale.

COD (cash on delivery)
when cash is paid for goods at the point of delivery, rather than paying later when an invoice is received

The second method of buying inventory is via a credit facility. Trade credit is when a supplier offers a customer a period to pay for the goods purchased. A typical trade credit arrangement is for the buyer to have 30 days to pay the account. This gives the retail store time to try to sell the goods to its customers before it pays the supplier.

Table 15.2 shows the twofold effect of these two types of purchases for Geelong Glassware.

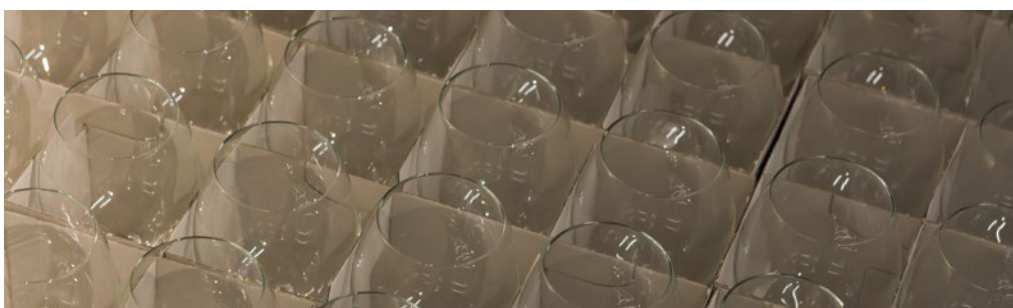
Table 15.2 Twofold effect of purchase transactions by a trading business

Date	Transaction	First effect	Second effect
Jul 1	Bought inventory for cash for \$1000, plus GST of \$100	Increase Inventory (asset) by \$1000 AND Decrease GST Debt (liability) by \$100	Decrease Cash at Bank (asset) by \$1100
Jul 2	Bought inventory on credit for \$2000, plus GST of \$200	Increase Inventory (asset) by \$2000 AND Decrease GST Debt (liability) by \$200	Increase Accounts Payable (liability) by \$2200

Both of these transactions increased the asset Inventory. Whether goods are purchased for cash or on credit, inventory will *always* increase because of these transactions.

Both transactions also reduced the GST debt, because the business must pay GST to its suppliers. These amounts may be deducted from the GST collected from customers, which reduces the firm's GST debt.

The difference between the two types of purchases is that the cash purchase decreased an asset (Cash at Bank), while the credit purchase increased a liability (Accounts Payable).



The increase in the Inventory account means either a decrease in Cash at Bank or an increase in Accounts Payable.

Selling inventory

The owner of a trading firm will try to sell its inventory as soon as possible. Once again, there are two possibilities: cash and credit sales.

However, there is a further complication. When inventory is sold, two transactions actually occur.

The first transaction is as follows:

- Inventory is sacrificed (used up) to make a sale. As inventory has future economic benefits and is controlled by the business, it is classified as an *asset*.
- When it is sold, it's no longer an asset. The inventory has been used up and should be written off as an *expense*.

This change in the nature of the inventory is one transaction. The asset Inventory turns into an expense called **Cost of Sales**.

The second transaction involves the revenue created by the sale. Once again, the two possibilities are a cash sale or a credit sale.

Table 15.3 shows both transactions that arise when Geelong Glassware sells its inventory.

cost of sales the cost price of inventory sold by a trading firm

Table 15.3 Twofold effect of selling goods in a trading business

Date	Transaction	First effect	Second effect
Jul 3	Sold goods for cash for \$800, plus GST of \$80 (cost price \$500)	Increase Cost of Sales (expense) by \$500, the cost price of the goods sacrificed AND Increase Cash at Bank (asset) by \$880, because this is the amount actually received	Decrease Inventory (asset) by \$500, the cost price of the goods sacrificed AND Increase Capital (owner's equity), as revenue of \$800 has been earned AND Increase GST Debt (liability) by \$80, as this has been collected from customers
Jul 4	Sold goods on credit for \$800, plus GST of \$80 (cost price \$500)	Increase Cost of Sales (expense) by \$500, the cost price of the goods sacrificed AND Increase Accounts Receivable (asset) by \$880, as credit customers now owe this amount	Decrease Inventory (asset) by \$500, the cost price of the goods sacrificed AND Increase Capital (owner's equity), as revenue of \$800 has been earned AND Increase GST Debt (liability) by \$80, as this has been charged to credit customers

Note

Accounts receivable are customers that have been provided credit, on the expectation that they will pay sometime in the near future. As accounts receivable have a legal obligation to pay the business, they are expected to have future economic value and are therefore classified as a current asset.

Whenever inventory is sold, the asset account Inventory must decrease, and the cost price of the goods sold is transferred to the expense account Cost of Sales.

Note that in these examples, the cost price entry is the same whether goods are sold for cash or on credit. The effect on the GST debt is also the same, regardless of whether the goods were sold for cash or on credit.

The difference between the two types of sales relates to the asset that is increased when a sale is made.

- If inventory is sold for cash, the Cash at Bank account increases.
- If customers are provided with inventory on a credit basis, then the Accounts Receivable account will be created in the balance sheet.

Note that the amount owed by accounts receivable includes the 10% GST charged on the sale. When a credit sale is made, the invoice price should be stated, plus the 10% GST, and then the total amount owing.



The sale of inventory has a twofold effect in a trading business.

Recording sales and purchases in a worksheet

As with a service business (pages 221–222), purchases and sales of inventory can be recorded in a worksheet, which will show the twofold effect of the transactions.

Figure 15.3 shows the combined purchases and sales already noted for Geelong Glassware. It has one additional transaction, which was made before these transactions to establish the business. There are also two further transactions involving the firm's accounts receivable and accounts payable; these help to provide a full picture of the events faced by the managers of a trading firm.

Figure 15.3 Worksheet approach: Transactions and the twofold effect on a trading business

Transaction	Assets			Liabilities		Owner's equity
	Cash at bank	Inventory	Accounts receivable	Accounts payable	GST debt	Capital
Jul 1 Owner deposited \$40 000 to commence business	+\$40 000					+\$40 000
Jul 1 Bought inventory for cash for \$1000, plus GST \$100	-\$1 100	+\$1 000			-\$100	
Jul 2 Bought inventory on credit for \$2000, plus GST \$200		+\$2 000		+\$2 200	-\$200	
Jul 3 Sold goods for cash \$800, plus \$80 GST (cost price of \$500)	+\$880	-\$500			+\$80	+\$300
Jul 4 Sold goods on credit for \$800, plus \$80 GST (cost price \$500)		-\$500	+\$880		+\$80	+\$300
Jul 5 Paid accounts payable \$600 of amount owing	-\$600			-\$600		
Jul 6 Received \$200 from accounts receivable	+\$200		-\$200			
	\$39 380	\$2 000	\$680	\$1 600	-\$140	\$40 600

Figure 15.3 demonstrates that all sales from a trading business:

- increase either Cash at Bank or Accounts Receivable (with selling price)
- decrease Inventory (with cost price)
- increase owner's equity by the difference between cost and selling price (i.e. the profit made on the deal)
- increase the liability shown as the GST Debt.

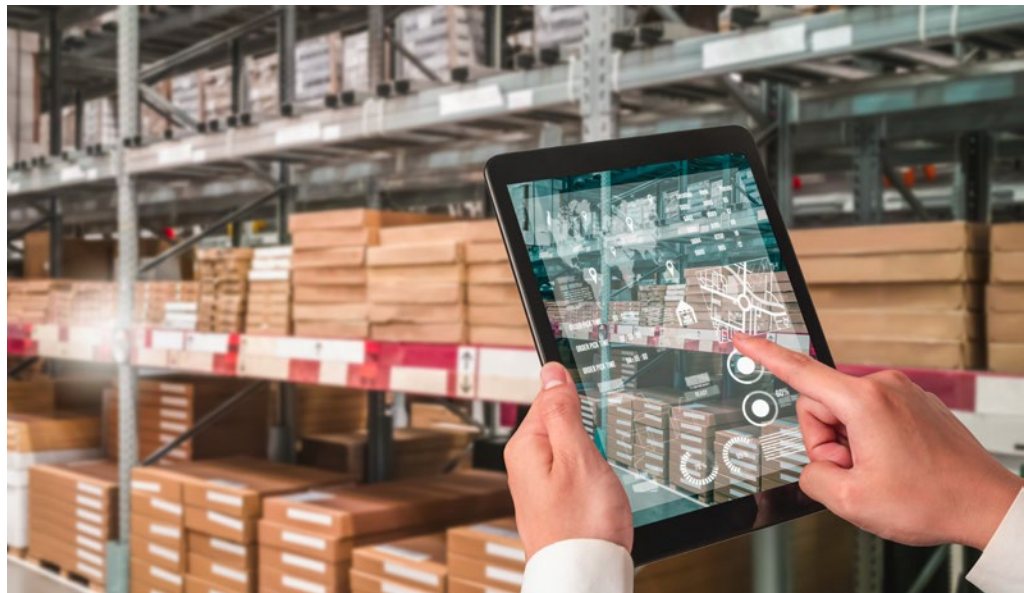
When inventory is sold, an expense item, Cost of Sales, is created. Because expenses decrease profit, the ultimate impact of this item is a reduction in the owner's equity in the balance sheet. The worksheet therefore deducts the cost of sales from the sales revenue and adds the profit made to the owner's equity.

The results from the worksheet can then be presented in a balance sheet in the usual way, as shown in Figure 15.4.

Figure 15.4 Trading business balance sheet derived from worksheet totals

GEELONG GLASSWARE: BALANCE SHEET AS AT 6 JULY 2028				
Assets	\$	Liabilities	\$	\$
Cash at bank	39 380	Accounts payable	1 600	
Inventory	2 000			1 600
Accounts receivable	680			
GST refund	140	Owner's equity		
		Capital		40 600
	42 200			42 200

Inventory is a significant investment for any trading business, but it becomes an expense when the goods are actually sold.



15.3 Balance sheets and the qualitative characteristics



You learnt about the six qualitative characteristics of accounting reports in Chapter 2. It's worth revisiting those here, at the start of Unit 2, and considering how they are reflected in the balance sheet (see Figure 15.5).



Figure 15.5
The qualitative characteristics of accounting reports

The main difference between service businesses and trading businesses is accounting for the asset known as Inventory.

As the examples in this chapter have shown, all assets, including inventory, are usually recorded at their original purchase price (also called original cost). This cost can be verified with a business document such as an invoice or an EFT record. This meets the demands of the characteristic of *verifiability*, as the value of the asset can always be checked with these documents.

The selling prices of inventory aren't relevant to the value shown for this asset in a balance sheet. The cost price of inventory satisfies the demands of *faithful representation* in terms of the value reported in a balance sheet. The real-world economic event is the buying of the inventory, and supporting documents should always be available to provide evidence of the cost price of this asset. The *relevant* amount to be reported is the cost of the inventory, and this satisfies both *faithful representation* and *verifiability*.

The inventory remains as an asset until it is sold. At that time, a second transaction takes place and the selling price of the inventory sold can be recorded as a revenue item. When this event takes place, the asset Inventory should decrease (at cost price), as the inventory sold is no longer under the control of the entity. (It has been used to help generate revenue for the business.)



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [15.1]** Balance sheets list the assets, liabilities and owner's equity for a business at the end of a period. Every transaction made by that business affects at least two items in the balance sheet. This is known as the twofold effect of transactions. Using a worksheet to summarise all transactions, then transferring that summary to the balance sheet, is an easy way to create balance sheets that accurately reflect this effect.
- [15.2]** Trading businesses buy and sell inventory to generate profit. Inventory is an asset, and buying and selling inventory (whether on a cash or credit basis) causes the value of that asset to rise and fall. Buying inventory is a single transaction, but selling it is two transactions: a drop in value for the asset (recorded as an expense called Cost of Sales) and an increase in owner's equity due to the revenue of the sale.
- [15.3]** The purchase price of inventory should be recorded by a business document, to meet the demands of *verifiability*. Balance sheets show the cost of that inventory, satisfying *relevance*, but not the selling price, which isn't relevant. Recording the cost price also satisfies the demands of *faithful representation* in terms of the value reported in a balance sheet.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Worksheet analysis: Service business

Jimmy Isles is the owner of South Isles Security Services. He provides you with the following list of transactions in his first week of business.

2028

Jul	1	Isles invested \$25 000 cash to commence the business
	2	Purchased a computer for \$2500 cash, plus GST of \$250
	3	Provided security services at a nightclub and received \$1900 cash, plus \$190 GST
	4	Isles contributed office furniture to the business valued at \$500. He previously used the furniture in his home, where it is no longer required
	5	Provided security at a high school formal and received \$1200, plus \$120 GST
	6	Paid advertising \$100, plus GST \$10
	7	Isles withdrew \$200 for personal use

- Prepare a worksheet to show the twofold effect of each of the above transactions. Use the following headings in your worksheet: Cash at bank, Office equipment, Office furniture, GST liability, Capital.
- Use the final results of your worksheet from part **a** to prepare a balance sheet as at 7 July 2028.

2 Worksheet analysis: Service business

Altona Meadows Landscaping Services, which is owned and managed by Michelle Faulkner, is a small business serving both commercial and domestic clients. Faulkner uses the accrual method of accounting and recognises GST at the time services are provided.

On 31 July 2028, the business's balance sheet showed the following values: Cash at bank \$1200, Vehicle \$35 000, Equipment \$18 000, Accounts receivable \$800, Accounts payable \$900, GST liability \$1200, Loan \$4400, Capital \$48 500.

During the first week of August, the following events occur.

Aug	1	Charged accounts receivable \$400, plus \$40 GST
	2	Received cash fees from clients amounting to \$1800, plus GST of \$180
	3	Paid petrol expenses of \$200, plus GST of \$20
	4	Paid \$900 off the business loan
	5	Charged a commercial client \$1000 for services provided, plus GST of \$100
	5	Paid wages of \$400
	6	Received cash fees of \$800, plus \$80 GST
	6	Paid advertising \$200, plus \$20 GST
	7	Paid accounts payable \$400 on account

- Prepare a worksheet to show the twofold effect of each of the above transactions. Use the headings in the list of opening balances. (*Hint: Include the opening balances at the top of the worksheet.*)
- Using the final results of your worksheet from part **a**, prepare a balance sheet as at 7 August 2028.



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3 Worksheet analysis: Trading business

Darryl Holland decides to open a new business trading under the name Dutchy's Paints & Wallpapers. He aims to make a profit through buying and selling a range of paints, wallpapers and assorted accessories. Holland uses the accrual method of recognising GST.

The following events take place in the first two weeks of his business.

Sep	1	Holland contributed cash of \$50 000 and a vehicle valued at \$20 000 to start the business
	2	Took out a loan from Mutual Finances for \$10 000
	3	Made an EFT payment for new display equipment costing \$15 000, plus GST of \$1500
	4	Bought inventory for \$18 000 COD, plus \$1800 GST
	5	Purchased inventory on credit for \$12 000 from Paints 'R' Us (plus GST of \$1200)
	6	Sold goods for \$2000 cash, plus \$200 GST (cost price of goods sold \$800)
	7	Sold goods for \$1000 on credit, plus \$100 GST (cost price of goods sold \$500)
	10	Repaid \$200 to Mutual Finances
	11	Sold goods for \$600 cash, plus \$60 GST (cost price \$300)
	12	Paid \$100 for office expenses, plus \$10 GST
	14	Collected \$300 from accounts receivable

- Prepare a worksheet to show the twofold effect of each transaction listed above. Use the results to prepare a balance sheet as at 14 September 2028.
- What source documents would Holland use in relation to the transactions on the following dates: 4, 5, 6 and 7 September?



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4 Worksheet analysis: Trading business

Chapel Street Clearance Fashion is a retail store owned by Laura Magill. The business has traded successfully for three years. Its most recent balance sheet (prepared 30 June 2028) included the following dollar values: Cash at bank \$13 200, Accounts receivable \$9200, Inventory \$48 000, Office furniture \$6000, Accounts payable \$12 000 and GST liability \$2500.

The transactions listed below occurred during the first half of July 2028.

Jul	1	Bought inventory on credit for \$5000, plus \$500 GST
	2	Received \$2200 cash from accounts receivable on account
	3	Sold clothing for \$3000 cash, plus \$300 GST (cost of sale \$1400)
	4	Magill withdrew inventory for personal use. The inventory cost \$2000
	5	Paid accounts payable \$4000
	6	Sold clothing on credit for \$6000, plus \$600 GST (cost of sale \$2900)
	7	Paid wages of \$500 to assistant
	8	Magill contributed an additional \$5000 cash to the business
	9	Borrowed \$6000 from NAB
	10	Cash sale of \$3000, plus \$300 GST (cost price \$1600)
	11	Paid for cleaning of shop \$100, plus \$10 GST
	12	Purchased inventory for cash \$2900, plus \$290 GST
	14	Credit sale of \$5000, plus \$500 GST (cost price \$2600)

- Complete a worksheet to show the twofold effect of all transactions listed above.
- Prepare a balance sheet as at 14 July 2028.

Hint

You will need to calculate the owner's capital as at 1 July.

5 Worksheet analysis: Trading business

Luke Mastromanno owns and operates Mastro's Massive Market. On 1 August 2028, the balance sheet of his business included the following items: Cash at bank \$3290, Inventory \$54 300, Accounts receivable \$7800, Shop fittings \$22 500, Accounts payable \$3780 and GST debt \$1800.

The following transactions occurred during August.

Aug	2	Sold goods for cash \$3000 (GST \$300) – cost price of sales \$1300
	4	Purchased additional shop fittings for \$2500 cash, plus GST of \$250
	7	Bought inventory on credit for \$3400, plus \$340 GST
	11	Mastromanno withdrew \$800 from the business via EFT
	13	Made a credit sale for \$2400 (plus \$240 GST) – cost price \$1100
	16	Made an EFT payment to accounts payable for \$1280
	19	Paid advertising of \$200 (plus \$20 GST) and insurance \$660 (plus \$66 GST)
	23	Purchased inventory for \$500, plus \$50 GST, paying by EFT
	25	Collected \$1600 from accounts receivable
	28	Made a cash sale via EFT for \$2300, plus GST of \$230 (cost of sale \$1100)

- Complete a worksheet to show the effect of all transactions listed above on the assets, liabilities and owner's equity of Mastro's Massive Market.
- Prepare a balance sheet as at 31 August 2028.
- State the source document that Mastromanno would use to evidence the transactions that occurred on the following dates: 2, 4, 7, 13 and 19 August.
- Explain how the documents you listed in part **c** help to satisfy the qualitative characteristics of accounting.
- Explain two benefits of using an EFTPOS terminal in a retail outlet.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

State one advantage and one disadvantage of paying COD.

Question 2 (3 marks)

A retail business sold goods on credit for \$700, plus GST. The cost price of the goods sold was \$400. Before this transaction, the business had a GST liability of \$300.

Complete the table below to show how this transaction will affect the balance sheet classifications listed in the table.

Classification	Increase / Decrease / No effect	\$
Assets		
Liabilities		
Owner's equity		



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 16

15 16 17 18 19 20 21 22 23 24 25

Cash records for a trading firm

KEY TERMS

Purchases
Sales
Purchase invoice
Sales invoice

The single entry accounting requirements of a trading business are very similar to those of a service business, with a few small but important differences.

Learning objectives

By the end of this chapter, you will be able to:

- **identify** documents used by a trading business [16.1]
- **modify** cash journals for use by a trading business [16.2]
- **design** multi-column cash journals for a trading business [16.2]
- **modify** cash journals to record cash flows for accounts receivable and accounts payable [16.2]
- **prepare** a statement of receipts and payments for a trading business [16.3]

PRIOR KNOWLEDGE

CHAPTER 4 Single entry accounting for a small business

CHAPTER 7 Recording and reporting cash flows



Estimated time required: 1 week



16.1 Business documents for a trading firm



While a service firm earns revenue by providing services to its customers, a trading firm earns revenue by dealing in physical goods. The business purchases inventory to sell to customers, hopefully at a higher price than it cost to buy.

The cost of inventory bought for this purpose is called **purchases**. The revenue earned from the transaction of selling inventory to customers is called **sales**. These two terms relate to the two basic transactions a trading firm experiences in conducting its business. Both purchases and sales may occur on a cash or credit basis.

Trading businesses use the same basic financial documents as service firms, with occasional differences.

purchases transactions involving a trading firm acquiring inventory for resale

sales the revenue a trading firm earns by providing goods to its customers

Invoices

A **purchase invoice** provides evidence of a credit purchase of inventory. The supplier of the goods provides the purchase invoice to the trading firm.

purchase invoice a business document received by a trading firm from accounts payable when it purchases inventory on credit

 **PGF Golf Co.**
365 Fairway Drive
Bogieville VIC 3916

TAX INVOICE No: 81250
DATE 27/8/28

SOLD TO Watson's Golf Shop
12 Eagle Road
Huntingdale VIC 3166

QUANTITY	DESCRIPTION	VALUE \$	TOTAL \$
5	Full sets – Never Slice clubs	400.00	2000.00
	Plus 10% GST		200.00
	TOTAL CHARGED		2200.00

TERMS Strictly 30 days

Figure 16.1
Purchase invoice



Purchase invoices provide evidence of inventory purchases made on credit. They should be checked against the goods actually delivered.

sales invoice a business document issued by a trading firm to accounts receivable when it sells inventory on credit

Figure 16.2 Sales invoice

A trading firm issues a **sales invoice** when it makes a credit sale (Figure 16.2). Its format is very similar to the purchase invoice, but in this case the trading firm issues the sales invoice to the customer. The firm should keep a copy for its own records.

**Watson's Golf Shop**
12 Eagle Road, Huntingdale VIC 3166

TAX INVOICE No: 60012
Date 3/9/28

To R Interdonato
3 Norman Avenue
Melbourne VIC 3000

Quantity	Description	Value \$	Total \$
1 set	Never Slice clubs	750.00	750.00
1 doz	Top-Flite balls	30.00	30.00
Subtotal			780.00
Plus 10% GST			78.00
Total charged			858.00

Credit terms Strictly 30 days

EFT payments

Cash can be moved from business to business very efficiently and quickly by electronic funds transfer (EFT). EFT transactions can be easily checked, as they will all be listed on the monthly bank statement issued to the business owner. The business owner can also print a copy of EFT transactions made via their online account (Figure 16.3).

Figure 16.3
A confirmation of payment from an EFT transaction

**ACME Bank**
CONFIRMATION OF PAYMENT

Transfer to	BSB 004-310
A/C number	2834-112-90
Date/time	04/09/28 11:01:45
Authorisation	39288
TOTAL AUD	\$2200.00
Reference	PGF Golf Co Inv. 81250

Cash receipts

Trading firms use cash receipts in the same way as service firms. Receipts are issued when cash flows into the business as a result of a cash sale, or when a debt from an earlier credit sale is collected from accounts receivable. For example, when R Interdonato paid the amount owing on Invoice 60012, Watson's Golf Shop issued the cash receipt shown in Figure 16.4.

 Watson's Golf Shop 12 Eagle Road, Huntingdale VIC 3166		Rec. 3985
Received from	R Interdonato	Date 5/9/28
The amount of	Eight hundred and fifty-eight dollars	\$ 858.00
For	On account Inv. 60012	
Signed	<i>T Watson</i>	

Figure 16.4
Cash receipt

EFTPOS transactions

Just as EFT transfers have replaced cheque books, EFTPOS has replaced cash sales in many businesses. Increasingly, customers are choosing to use a credit or debit card linked to their personal bank accounts.

Many business owners prefer EFTPOS, too. Although they have to pay bank fees on every transaction and a monthly fee to the bank to hire the terminal, EFTPOS avoids the security issues that come with handling large amounts of cash. Business owners also don't have to chase up accounts receivable that are late with their credit card payments. Instead, this becomes the bank's job.

Both the customer and the business owner get a copy of the EFTPOS receipt, which covers the documentation requirement. (Figure 16.5)

ACME BANK Watson's Golf Shop 12 Eagle Road Huntingdale VIC 3166	

CUSTOMER COPY	

Merchant number:	31255
Terminal number:	UZ927

PURCHASE	
DEBIT:	MasterCard XXXX1291
Date/time:	07/09/28 14:20
Authorisation:	82818

TOTAL:	AUD \$550.00

Figure 16.5
EFTPOS receipt



EFTPOS transactions now account for the majority of transactions in retail stores.



16.2 Recording in cash journals

In Chapter 4, you learnt about the two core elements of a single entry accounting system – the cash receipts and cash payments journals.

As with any accounting record, the cash receipts journal for a trading firm should be designed to suit the needs of the business. So, a few changes need to be made to the journals shown in Chapter 4 to make them suitable for a trading business.

Recording cash receipts

Service businesses charge fees for providing services, while trading businesses make money from sales of goods. This means that, in a trading business, the cash receipts journal records sales, rather than fees. A cash receipts journal may be simple in design, or it may be prepared as a multi-column record. Either design must be able to accommodate the GST collected on the sale of goods.

Figure 16.6 shows a simple cash receipts journal for a trading business.

Figure 16.6 Cash receipts journal: Simple version

Note that Document no. can be used as an alternative heading to accommodate various types of receipts.

WATSON'S GOLF SHOP: CASH RECEIPTS JOURNAL (SIMPLE VERSION)

Date	Details	Receipt no.	Amount banked \$	Amount received \$	GST received \$
Oct 1	Capital	EFT	6 000	6 000	
4	Cash sale – accessories	4001	88	80	8
6	Cash sale – clothing	4002	77	70	7
9	Cash sale – clubs	4003	715	650	65
13	Loan – EZ Finance	EFT	165	150	15
14	Cash sale – clubs	EFT	825	750	75
15	Cash sale – clothing	4004	330	300	30
17	Cash sale – accessories	4005	110	100	10
19	Cash sale – accessories	4006	88	80	8
21	Cash sales – clubs	EFT	572	520	52
24	Cash sale – clubs	4007	198	180	18
31	Cash sale – accessories	EFT	88	80	8
31	Totals		9 256	8 960	296

When a business receives cash as a loan, a receipt isn't usually issued. The bank simply transfers the amount of the loan to the business bank account via an EFT.



You can see that the cash receipts journal shown in Figure 16.6 is very similar to the one shown in Figure 4.1 in Chapter 4 for a service business (page 35). The obvious difference is in the 'Details' column. Rather than recording fees received, the journal records a variety of cash sales. The GST collected on these sales has been recorded (where appropriate) and the total cash actually received is shown. As with all accounting records, the source document should always be noted, if one is available.

When an owner contributes cash as capital, or when a loan is taken out (see 1 and 13 October in Figure 16.6), a receipt wouldn't normally be issued. However, such transactions may be completed via EFT.

In larger firms, a cash register summary may be prepared and the abbreviation 'CRS' may be entered in the receipts journal as a total for the day.

Although this simple cash receipts journal serves a basic purpose, small business owners usually prefer a multi-column journal. The journal in Figure 16.6 can be redesigned with special columns to provide a summary of key transactions (see Figure 16.7).

Figure 16.7 Cash receipts journal: Multi-column version

WATSON'S GOLF SHOP: CASH RECEIPTS JOURNAL (MULTI-COLUMN VERSION)								
Date	Details	Receipt no.	Amount banked \$	Sales			Sundry receipts \$	GST received \$
				Clubs \$	Clothing \$	Accessories \$		
Oct 1	Capital	EFT	6 000				6 000	
4	Cash sales	4001	88			80		8
6	Cash sales	4002	77		70			7
9	Cash sales	4003	715	650				65
13	Loan – EZ Finance	EFT	165		150			15
14	Cash sales	EFT	825	750				75
15	Cash sales	4004	330		300			30
17	Cash sales	4005	110			100		10
19	Cash sales	4006	88			80		8
21	Cash sales	EFT	572	520				52
24	Cash sales	4007	198	180				18
31	Cash sales	EFT	88			80		8
31	Totals		9 256	2 100	520	340	6 000	296

You already know that multi-column cash journals have many benefits. The obvious benefit is the summarised data available at the bottom of the record. The owner of Watson's Golf Shop can find totals for sales of clubs, clothing and accessories very quickly, particularly if this journal is prepared on a spreadsheet.

The second advantage of the multi-column journal is that the totals at the bottom can be added and checked against the total of the 'Amount banked' column. This ensures that basic recording errors haven't been made in preparing the journal. Such a check becomes part of the internal control systems used by the business owner.

Recording cash payments

As with the cash receipts journal, a cash payments journal for a trading firm may be designed as a simple record (as shown in Figure 16.8), or it may contain special columns for frequently occurring transactions (as in Figure 16.9).

There may appear to be only a very small difference between a payments journal for a trading firm and one for a service firm. The difference lies in the *purpose* of the purchases made. For a service business, purchases are usually materials or tools. For a trading business, the term ‘purchases’ is used for those products that are intended to be resold in the normal course of business.

Figure 16.8 Cash payments journal: Simple version

Date	Details	EFT no.	Total paid \$	Amount paid \$	GST paid \$
Oct 1	Advertising	34001	550	500	50
3	Stationery	34002	110	100	10
5	Drawings	34003	500	500	
7	Inventory	34004	880	800	80
9	Advertising	34005	550	500	50
10	Computer	34006	3 300	3 000	300
16	Wages	34007	500	500	
17	Advertising	34008	660	600	60
19	Inventory	34009	770	700	70
24	Drawings	34010	650	650	
25	Shop fittings	34011	1 540	1 400	140
26	Advertising	34012	660	600	60
28	Drawings	34013	400	400	
30	Wages	34014	500	500	
31	Totals		11 570	10 750	820

‘Purchases’ is only used when referring to purchases of inventory, where it’s expected that the goods purchased will be resold to earn revenue.



The cash payments journal in Figure 16.8 provides the absolute bare essentials in terms of an accounting record. EFT payments can be noted and the type of payment shown.

Figure 16.9 Cash payments journal: Multi-column version

WATSON'S GOLF SHOP: CASH PAYMENTS JOURNAL (MULTI-COLUMN VERSION)										
Date	Details	EFT no.	Total paid \$	Advertising \$	Wages \$	Inventory \$	Drawings \$	Assets \$	Sundry payments \$	GST paid \$
Oct 1	Advertising	34001	550	500						50
3	Stationery	34002	110						100	10
5	Drawings	34003	500				500			
7	Inventory	34004	880			800				80
9	Advertising	34005	550	500						50
10	Computer	34006	3 300					3 000		300
16	Wages	34007	500		500					
17	Advertising	34008	660	600						60
19	Inventory	34009	770			700				70
24	Drawings	34010	650				650			
25	Shop fittings	34011	1 540					1 400		140
26	Advertising	34012	660	600						60
28	Drawings	34013	400				400			
30	Wages	34014	500		500					
31	Totals		11 570	2 200	1 000	1 500	1 550	4 400	100	820

Note the use of the column headed 'Assets' in the payments journal. As non-current assets may be purchased for cash (e.g. the computer on 10 October), such payments must be accounted for in the payments journal. However, it's important not to mix purchases of assets with expenses, so a separate column should be used.

When preparing a statement of receipts and payments, simply state the total cash paid out for new assets. The details of the assets aren't usually required when looking at cash flows for a period. Therefore, the total of the 'Assets' column may be shown as one item in a statement of receipts and payments. If a spreadsheet is used to record cash payments, the 'Assets' column can be transferred to the statement of receipts and payments as one total, making the preparation of the report much easier.

Note also the column headed 'Sundries' (or 'Sundry payments'). Such a column should always be available to record the payments of unusual items or those that only occur occasionally.

Buying and selling on credit

It's common practice for many trading firms to buy and sell goods on credit. If a firm purchases goods on credit from a supplier, the business is promising to make a cash payment to the supplier at a later stage. When a firm sells goods on credit to a customer, it will (hopefully) receive cash at a later date from the credit customer (i.e. the accounts receivable).

However, in the cash journals you have seen so far, no provision has been made for recording the cash flows involving accounts receivable and accounts payable. Minor modifications need to be made to the cash journals if a trading firm either buys or sells on credit.

Cash purchases of inventory should be kept separate from any cash payments to accounts payable for credit purchases made at an earlier date. This requires an additional column headed 'Accounts payable'. Whenever cash is paid to accounts payable, this column is used to record the amount of cash paid out.

Figure 16.10 shows an extract from the payments journal of Watson's Golf Shop, modified with this additional column.

Figure 16.10 Cash payments journal with column for accounts payable (extract)

WATSON'S GOLF SHOP: CASH PAYMENTS JOURNAL									
Date	Details	EFT no.	Total paid \$	Accounts payable \$	Advertising \$	Wages \$	Inventory \$	Other expenses \$	GST paid \$
Nov 1	Insurance	34010	440					400	40
2	Inventory	34011	550				500		50
3	S Roberts	34012	2 500	2 500					
4	Inventory	34013	660				600		60
	Breen P/L	34014	1 000	1 000					

A similar modification is necessary if a trading firm decides to provide credit to its customers. This requires adding an 'Accounts receivable' column to record receipts from credit transactions.

Figure 16.11 shows an extract from the receipts journal of Watson's Golf Shop, modified with this additional column.

Figure 16.11 Cash receipts journal with column for accounts receivable (extract)

WATSON'S GOLF SHOP: CASH RECEIPTS JOURNAL									
Date	Details	Receipt no.	Amount banked \$	Accounts receivable \$	Sales			Sundry receipts \$	GST received \$
					Clubs \$	Clothing \$	Accessories \$		
Nov 1	Cash sales	4010	660		600				60
2	Cash sales	4011	110			100			10
3	E Cartman	EFT	1 200	1 200					
4	Cash sales	4012	132				120		12
5	S Marsh	EFT	800	800					
6	Loan	EFT	5 000					5 000	

As with the previous cash receipts journals, it's possible to subdivide the cash sales into special areas or departments. This provides management with additional information about the sales being made on a daily basis. The only difference is the extra column for accounts receivable.

When selling on credit, it's crucial to accurately record cash received from accounts receivable. Credit accounts must be watched closely, and unpaid debts must be followed up to ensure that accounts receivable pay within a reasonable time. This is the main reason many small business owners are willing to accept credit card sales via their EFTPOS terminal.

Note that the GST charged to accounts receivable will be created when an invoice is issued. It's important not to record GST twice, so when an accounts receivable pays an amount owing, the GST column isn't used. (Chapter 19 covers in detail the recording of transactions in relation to accounts receivable and accounts payable.)

16.3 Statement of receipts and payments for a trading business



A trading firm should prepare a statement of receipts and payments on a regular basis. As this report summarises cash inflows and outflows for a period, the manager can use it to compare the inflows resulting from the sale of goods against outflows for the purchase of goods and the payment of expenses.

The statement is prepared in exactly the same way as for service firms. The difference between the two types of businesses is simply the nature of the items included in the report. Cash sales and cash purchases are the two key items reported in the cash flows for a trading firm. If the business buys or sells on credit, the cash flows resulting from such credit transactions would also be seen as important items.

Using the cash journals for Watson's Golf Shop, the statement of receipts and payments for the month of October 2028 would be prepared as shown in Figure 16.12 (assuming that the business had \$5000 in the bank as at 1 October 2028).

Figure 16.12 Statement of receipts and payments

WATSON'S GOLF SHOP: STATEMENT OF RECEIPTS AND PAYMENTS FOR MONTH ENDED 31 OCTOBER 2028

Cash receipts	\$	\$
Sales – Golf clubs	2 700	
Sales – Golf clothing	610	
Sales – Accessories	340	
Capital contribution	6 000	
Loan – EZ Finance	5 000	
GST collected	365	15 015
Cash payments		
Advertising	2 200	
Wages	1 000	
Inventory	1 500	
Stationery	100	
Drawings	1 550	
Purchase of assets	4 400	
GST paid	820	11 570
Excess of receipts over payments		3 445
Bank balance (1 October 2028)		5 000
Bank balance (31 October 2028)		8 445



Remember that the heading of this accounting report should include the name of the business and the length of the reporting period. The manager of a trading firm may prepare such a statement each month, or even each week, to analyse the performance of the business in terms of receipts and payments. The report provides a summary of all cash transactions and includes important information about the sources of cash receipts and how cash was used.

Note that the items recorded in the column headed 'Assets' in the cash payments journal have been listed as *totals* in the statement of receipts and payments. If a spreadsheet is used to prepare the cash journals, the total of the column can simply be transferred from one cell in the journal to another cell in the statement of receipts and payments. In a manual system, the individual items in a column headed 'Assets' may be listed individually when preparing a statement of receipts and payments.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [16.1]** Trading firms earn revenue by dealing in inventory. The cost of inventory is called purchases, while the revenue earned from selling inventory is called sales. The basic financial documents used by trading businesses reflect the fact that their revenue comes from selling inventory, and they distinguish between purchases and other expenses.
- [16.2]** The cash receipts journal for a trading business records all cash receipts that result from selling inventory. The cash payments journal records all cash payments, which may include both purchasing inventory and paying for other expenses. Businesses that buy or sell on credit need to include additional columns to record cash flows for accounts payable and accounts receivable.
- [16.3]** A statement of receipts and payments is a report that summarises cash receipts and cash payments over a period of time. Cash sales and cash purchases are the two key items reported in the cash flows for a trading firm. If the business buys or sells on credit, the cash flows resulting from such credit transactions would also be seen as important items.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Cash journals: Simple versions

The following transactions relate to Wally's Scooters for the first two weeks of July 2028.

Receipts

Jul	1	Capital	\$10 000 (EFT)
	3	Cash sale (Rec. 101)	\$900 plus \$90 GST
	4	Cash sale (EFT)	\$800 plus \$80 GST
	5	Cash sale (Rec. 102)	\$840 plus \$84 GST
	6	Loan – YQ Finance (EFT)	\$6500
	8	Cash sale (Rec. 103)	\$810 plus \$81 GST
	9	Cash sale (Rec. 104)	\$770 plus \$77 GST
	11	Cash sale (EFT)	\$950 plus \$95 GST
	14	Cash sale (Rec. 105)	\$900 plus \$90 GST

Payments

Jul	1	Cash purchases of inventory (EFT 5401)	\$2500 plus \$250 GST
	2	Shop fittings (EFT 5402)	\$1800 plus \$180 GST
	3	Wages (EFT 5403)	\$490
	4	Drawings (EFT 5404)	\$500
	5	Advertising (EFT 5405)	\$350 plus \$35 GST
	8	Cash purchases of inventory (EFT 5406)	\$2300 plus \$230 GST
	10	Wages (EFT 5407)	\$480
	14	Drawings (EFT 5408)	\$800

- Prepare a simple cash receipts journal with columns for Date, Details, Receipt number, Amount banked, Amount received and GST received.
- Prepare a simple cash payments journal with columns for Date, Details, EFT number, Total paid, Amount paid and GST paid.
- Prepare a statement of receipts and payments for the two weeks ended 14 July 2028, showing a summary of the firm's cash transactions and the bank balance at that date.



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2

Simple and multi-column journals

Ollie's Outdoor Furniture is a small business that sells both furniture and barbecues.

On 1 August 2028, the business had \$3400 in its bank account.

During the first two weeks of August, the following transactions take place.

Aug	1	Received \$900, plus \$90 GST, from M Vine for a furniture setting: cash sale (Rec. 181)
	2	Sold a barbecue for \$450 cash, plus \$45 GST (Rec. 182), to R O'Keefe
	3	Paid rent for week \$900, plus \$90 GST (EFT 4441)
	4	Received \$800 (plus GST \$80) from S Walker for a furniture sale (Rec. 183)
	5	Received \$550 for a barbecue sold to R Pearce, including \$50 GST (EFT)
	6	Cash purchases of deck chairs \$840, plus \$84 GST (EFT 4442)
	7	Received \$600, plus \$60 GST, for a cash sale of furniture (EFT)
	8	Cash sale of furniture to J Dean \$550, including \$50 GST (Rec. 184)
	8	The proprietor withdrew \$450 for personal use (EFT 4443)
	9	Purchased inventory for cash \$1480, plus \$148 GST (EFT 4444)
	10	Paid weekly rent \$900, plus \$90 GST (EFT 4445)
	11	Cash sale of furniture of \$160, plus \$16 GST (EFT)
	13	Received \$80 for sale of two chairs to S Edwards (GST received \$8, Rec. 185)
	14	Cash withdrawal by the owner \$250 (EFT 4446)
		Sold a barbecue to L Connop for \$560 (Rec. 186, GST collected \$56)

- Prepare simple versions of cash receipts and cash payments journals for Ollie's Outdoor Furniture.
- Redraft your journals in part **a** to a multi-column format.
- Prepare a statement of receipts and payments for the fortnight ended 14 August 2028.
- State two advantages of using multi-column cash journals.



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3

Multi-column cash journals

Connie's Computers is a small business that sells computers, printers and accessories.

On 1 September 2028, the firm had a bank overdraft of \$830.

The following transactions occur during the first two weeks of September 2028.

Sep	2	Sold a computer for \$2200 cash, plus \$220 GST (EFT)
		Purchased goods on credit from Computer Solutions for \$4200, plus \$420 GST (Inv. 12234)
	3	Paid advertising \$340 + \$34 GST (EFT 2813)
	4	Received \$460 for sale of a printer (GST collected \$46, Rec. 892)
	5	Paid weekly wages \$540 (EFT 2814)
	7	Received \$2100 for cash sale of computer (Rec. 893, GST received \$210)
	8	Sold accessories for \$140 cash, plus \$14 GST (EFT)
	9	Purchased accessories for cash \$630, plus \$63 GST (EFT 2815)
	10	Paid supplier for last month's credit purchases \$4300 (EFT 2816)
		Paid for advertising in local paper \$340, plus \$34 GST (EFT 2817)
		Negotiated with the bank for an increase in the overdraft limit to \$8000
	11	Received \$600 for a printer (Rec. 894), GST collected \$60
	12	Sold a computer for \$2430, plus \$243 GST (Rec. 895) and a printer for \$550, including \$50 GST (EFT)
		Paid weekly wages \$560 (EFT 2818)
		Bought new cash register for \$1200, plus GST of \$120 (EFT 2819)
	13	The proprietor withdrew \$450 cash for personal use (EFT 2820)
		Sold a printer for \$490 and GST \$49 (EFT) and accessories for \$110 (GST \$11, Rec. 896)
	14	Sold a computer for \$2500 cash, plus \$250 GST (Rec. 897)
		Cash purchases of inventory \$600, plus GST of \$60 (EFT 2821)
		Paid accounts payable for purchases made on 2 September \$4620 (EFT 2822)
		The owner withdrew \$860 (EFT 2823)

- Design multi-column cash journals for Connie's Computers and then record the above transactions in these journals.
- Prepare a statement of receipts and payments to summarise the two weeks' cash transactions.

4 Multi-column cash journals

Vanguard Vans is a small business that specialises in caravan sales. The business sells three different models: standard, deluxe and prestige. On 1 October 2028, the business had cash at bank of \$4300. All payments by the business are made via EFT using online banking.

The following transactions take place during October 2028.

Credit transactions

- Oct 1 Received Invoice 73754 from Oz Caravans for \$72 400, plus GST of \$7240
- 3 Sold one standard van to P Camilleri on credit for \$12 800, plus \$1280 GST (Inv. 83844)
- 12 Issued Invoice 83845 to T Franklin for \$16 500 for one deluxe caravan (plus \$1650 GST)
- 19 Purchased inventory from Oz Caravans for a total cost of \$82 600 (Inv. 73762). GST charged was \$8260

Cash receipts

- Oct 2 Sold a standard model for \$12 000 cash, plus \$1200 GST (Rec. 838)
- 4 Sold one deluxe for \$16 500 + \$1650 GST (Rec. 839) and one standard for \$11 800 + \$1180 GST (Rec. 840)
- 6 Sold one standard for \$12 000, plus GST of \$1200 (Rec. 841)
- 7 Cash sales: one prestige model for \$22 000 + \$2200 GST (Rec. 842) and one standard for \$12 200 + \$1220 GST (Rec. 843)
- 9 Sold one deluxe model for \$16 850, plus GST of \$1685 (Rec. 844)
- 10 The owner contributed an extra \$5000 cash to the business (EFT)
- 11 Received \$8000 from P Camilleri (Rec. 845)
- 12 Sold a standard caravan for \$11 900, plus \$1190 GST (Rec. 846)
- 14 One prestige van was sold for \$21 500 cash, plus \$2150 GST (Rec. 847)
- 17 Borrowed \$10 000 from the Quick Fix Finance Co. (EFT)
- 19 Sold one deluxe and one standard (Rec. 848 for \$16 900 + \$1690 GST and Rec. 849 for \$11 900 + \$1190 GST)
- 24 Collected \$5000 on debt owed by T Franklin (Rec. 850)
- 31 One prestige van was sold for \$22 600 + GST of \$2260 (Rec. 851)

Cash payments

- Oct 3 Paid fortnight's rent of property \$3000 plus \$300 GST (EFT 401)
- 5 Paid wages of assistant \$480
- 6 Owner withdrew \$1200
- 8 Transferred \$12 000 to Oz Caravans
- 12 Weekly wages were paid \$520
- 14 Advertising paid \$550, plus \$55 GST
- 17 Paid rent \$3000 + \$300 GST
- 19 Paid wages \$490
- 22 Transfer of \$22 000 to Oz Caravans
- 26 Wages of \$560 were paid
- 27 The proprietor withdrew \$900
- 31 Paid advertising \$550, plus \$55 GST

- a Select the relevant items from those listed above and prepare cash journals for Vanguard's Vans for the month of October 2028. Use appropriate columns for recurring items.
- b Prepare a statement of receipts and payments for the month of October 2028.



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5 Multi-column cash journals

Bruce Waldron is the proprietor of Waldron's Tools, a small business that sells electric drills, saws and sanders. The following transactions occur during the month of August 2028.

Receipts

Aug 1	Loan from JB Finance Co. (EFT)	\$20 000 by EFT
3	Cash sale of one drill (Rec. 555)	\$100 plus \$10 GST
4	Sold a sander for cash (Rec. 556)	\$80 plus \$8 GST
5	Cash sale – one drill (Rec. 557)	\$100 plus \$10 GST
6	Cash sale – one electric saw (Rec. 558)	\$120 plus \$12 GST
7	Additional capital contributed by Waldron	\$12 500 by EFT
8	Sold a sander for cash (Rec. 559)	\$90 plus \$9 GST
11	Cash sale – one drill (Rec. 560)	\$100 plus \$10 GST
14	Cash sale – one sander (Rec. 561)	\$80 plus \$8 GST
18	Sold a drill for cash (Rec. 562)	\$110 plus \$11 GST
21	Receipt 563 issued for sale of saw	\$120 + \$12 GST
25	Cash sale – electric saw (Rec. 564)	\$130 + GST of \$13
29	Sold a sander for cash (Rec. 565)	\$90 plus \$9 GST
31	Cash sale – two drills for a total of \$210	GST \$21 (Rec. 566)

Payments

Aug 1	Cash drawings (EFT 8888)	\$1200
2	Advertising for month (EFT 8889)	\$1200 plus \$120 GST
4	Cash purchases of inventory (EFT 8890)	\$3000 + \$300 GST
7	Paid weekly wages (EFT 8891)	\$640
10	Bought new cash register (EFT 8892)	\$690 plus \$69 GST
12	Cash purchases of inventory (EFT 8893)	\$1800 plus \$180 GST
14	Weekly wages (EFT 8894)	\$650
17	Owner withdrew cash (EFT 8895)	\$800
20	EFT 8896 completed for insurance	\$820 plus \$82 GST
21	Wages paid for week (EFT 8897)	\$580
23	Bought inventory (EFT 8898)	\$600 + GST of \$60
25	Paid accounting fees (EFT 8899)	\$470 plus \$47 GST
28	Paid wages (EFT 8900)	\$720

- Design multi-column cash journals for Waldron's Tools and record the above transactions in these journals.
- Prepare a statement of receipts and payments for the month ended 31 August 2028, showing a summary of the firm's cash transactions and the bank balance at that date.
Note: The business had an overdraft of \$300 as at 1 August 2028.
- The owner of Waldron's Tools is unsure if transactions recorded by his EFTPOS terminal meet the demands of *verifiability*. Discuss.

6 Multi-column cash journals

Claudette Dallas owns a retail outlet trading as Dallas Locks. She has asked you to design suitable multi-column cash journals for her business.

Dallas has \$1520 cash in the bank at the start of September 2028. She uses a summary from her cash register to record her cash sales and asks you to make the notation 'CRS' in her receipts journal.

The following events take place during September.

Sep	2	Sold goods for cash \$450, plus \$45 GST
	4	Paid security company weekly fee (EFT 7155) \$80 plus \$8 GST
	5	Sold goods for cash \$650 + \$65 GST
	6	Bought inventory items on credit from Locks 'R' Us \$2100, plus \$210 GST (Inv. 675)
	9	Received interest from term deposit \$45 (EFT)
	10	Bought inventory for cash \$560 + \$56 GST (EFT 7156)
	11	Cash sales amounted to \$430 plus GST of \$43 EFT no. 7157 for security expenses \$80 + \$8 GST
	13	Received \$508 owing from Accounts receivable – J Eid (EFT)
	15	Owner withdrew \$900 for personal use (EFT 7158)
	16	Cash sales \$880, GST collected \$88
	17	Bought goods for cash \$760, GST paid \$76 (EFT 7159)
	18	Paid security company \$80 plus \$8 GST (EFT 7160)
	20	Purchased goods on credit from Locks Incorporated for \$1230, plus \$123 GST (Inv. 3124 was received from the supplier)
	22	Banked cash sales \$660, including \$60 GST
	23	Owner withdrew \$500 for personal spending (EFT 7161)
	25	Security expenses paid by EFT 7162 \$88, including \$8 GST
	27	Collected money owing from Accounts receivable – A Ryan via EFT \$1200
	28	Paid \$880 cash for a new colour printer for the office (EFT 7163). The payment included GST of \$80. Dallas jumped at the opportunity, as she had seen the exact same printer advertised for \$975.
	29	Cash sales banked \$540, plus \$54 GST
	30	Paid Locks 'R' Us \$600 on account (EFT 7164)

- Prepare a suitably designed cash receipts journal for Dallas Locks. Select the relevant information from that listed above and enter all receipts for the month of September 2028.
- Design a multi-column cash payments journal for Dallas Locks and enter the relevant transactions for September 2028.
- Prepare a statement of receipts and payments for September 2028, clearly showing the final cash balance at the end of the month.
- Explain how your cash journals have satisfied the demands of *verifiability*.
- Explain how your statement of receipts and payments satisfies the demands of *understandability*.
- State the qualitative characteristics you have followed in recording the purchase of the printer on 28 September. Explain fully.



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EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Cash sales aren't the only items recorded in a receipts journal. **State** four other items that could be recorded in a cash receipts journal prepared for the business trading as A1 Furniture.

Question 2 (3 marks)

A small business owner stated: 'The statement of receipts and payments is a crucial report as it shows me the profit I've earned for each month of the year.' Do you agree with this statement?

Explain your answer.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 17

15 16 17 18 19 20 21 22 23 24 25

Accounting for inventory

KEY TERMS

Stocktake
Inventory sheet
Perpetual inventory system
Identified Cost
First-In, First-Out (FIFO)
Inventory card
Inventory loss
Inventory gain
Purchases return
Sales return
Credit note

In this chapter, you will learn how small businesses account for their inventory, including the use of inventory cards and methods of identifying and recording costs. You will also examine how to record sales and purchases returns in accounting records.

Learning objectives

By the end of this chapter, you will be able to:

- **describe** the processes involved in a physical stocktake [17.1]
- **outline** what is involved in the perpetual inventory system [17.2]
- **explain** the difference between the Identified Cost and First-In, First-Out methods [17.2]
- **prepare** an inventory card under both inventory methods [17.2]
- **adjust** an inventory card for an inventory loss or an inventory gain [17.3]
- **describe** the circumstances that exist for an inventory loss or an inventory gain to occur [17.3]
- **explain** the purpose of a credit note [17.4]
- **record** sales returns and purchases returns in an inventory card [17.4]

PRIOR KNOWLEDGE

CHAPTER 15 The twofold effect of transactions



Estimated time required: 2 weeks





17.1 The physical stocktake

stocktake the process of physically counting the number of units of inventory on hand on a particular date

A trading firm must undertake a physical stocktake at least once every year. A **stocktake** involves physically counting all the inventory on hand on a particular date. An accurate count is needed because it is used to calculate an annual profit figure for the business. It is also needed to satisfy the requirements of the taxation authorities.

There are two processes involved in a stocktake:

- 1 physically counting the number of units of every type of inventory in the store or warehouse
- 2 determining the cost price of all inventory items (i.e. how much the firm originally paid to purchase the goods).

Note

The *selling prices* of inventory aren't relevant when performing a stocktake.

It's important to take an organised approach when doing a stocktake, which is often a long, boring and detailed process. If it's done in a haphazard manner, some goods may be counted twice or others may not be counted at all.

An **inventory sheet** is a simple accounting document used to record all details of inventory on hand during a stocktake. Figure 17.1 shows an inventory sheet for Balmain Board Games.

inventory sheet a document used to record details of all inventory on hand during a stocktake

Figure 17.1 Inventory sheet

Item	Quantity	Cost \$	Total \$
Gloomhaven	100	45	4 500
Pandemic	100	40	4 000
Deluxe Scrabble	200	10	2 000
Pokemon Legends starter decks	100	7	700
Pokemon Legends booster packs	200	4	800
Total inventory on hand			12 000

This sheet clearly doesn't show the entire inventory of the store! Normal stocktake practice is to use a different sheet for each warehouse shelf or section of the store. This makes it easier to double-check the sheet by counting again and to spot any errors that have occurred.

When doing a stocktake, every single item must be counted in order to get an accurate value of inventory on hand.



Recording cost prices

It's easy enough to count the number of units of inventory on hand, but how is the cost price of every product recorded? One method is to locate the most recent invoices received, which would show the latest purchase prices. However, this could be impractical, as the goods in inventory may be from a range of different purchase lots. Simpler alternatives are needed.

As an introduction to this area of accounting, you will learn about two simple systems for calculating the cost prices of inventory: the mark-up method and coded price tags.

The mark-up method

With the mark-up method, a fixed percentage is added to the cost price of a good to determine its selling price.

For example, if Balmain Board Games applies a 100% mark-up to all the goods it sells, it's simply a matter of halving the price to *determine* the cost price of each item. So, a copy of Pandemic, which has a cost price of \$40, would have \$80 on its price tag, plus GST of \$8: a total of \$88. (Note that price tags on display in shops are expected to include the GST as part of the selling price.)

Other mark-ups aren't as easy to work out, which makes the following formula very useful.

$$\text{Cost price of inventory} = \frac{\text{Selling price} \times 100}{100 + \text{Mark-up}}$$

EXAMPLE 17.1

Inventory with a selling price of \$66 on its price tag was found in the stocktake of a firm that marks everything up by 50%.

To determine its cost price, first remove the GST from the equation; we can do this by dividing the selling price by 11. \$66 divided by 11 is \$6, so \$6 of GST is included in the selling price. The actual selling price is \$60.

The formula then becomes:

$$\begin{aligned}\text{Cost price of inventory} &= \frac{\$60 \times 100}{100 + 50} \\ &= \frac{\$6000}{150} = 40\end{aligned}$$

You can always check this answer by working from the cost price back to the selling price.

Mark-up	=	50% of \$40	=	\$20
Selling price	=	\$40 + \$20	=	\$60
Plus 10% GST			=	\$6
Price as per price tag			=	\$66

In order for such a system to work, it's assumed that the selling prices (and therefore the mark-ups) haven't changed over time. If the usual mark-up hasn't been maintained, perhaps because some inventory is being sold at a reduced price, the system must be adjusted to account for this.

Coded price tags

Another option is to put a code on each product that reflects its original cost price. Computer-generated barcodes do exactly this; the cost price can be read from the barcode using a scanner. However, many small businesses are run by one person who needs a simple, inexpensive approach. These businesses owners could use simple codes they create themselves.

Consider this price tag found on a hammer at Horsham Hardware, shown in Figure 17.2.

Figure 17.2 Price tag with coded cost price



In this case, the owner/manager has used a method that records the date of purchasing the inventory as well as the actual cost price. The string of numbers – 1210154010 – is actually the purchase date (12/10), the cost price (\$15.40) and an identification number for the supplier (10). This information can be understood by staff, but not by customers.

A similar method uses an alphabetical code to indicate the cost price to staff. Consider the price tag in Figure 17.3.

Figure 17.3 Price tag with alpha-code



The letters on the tag are meaningless unless you know the code being used. In this case, the owner of the business, Chris Duong, has used the letters in her name to stand for particular numbers:

C	H	R	I	S	D	U	O	N	G
1	2	3	4	5	6	7	8	9	0

C = 1, R = 3, S = 5 and G = 0, while the '/' symbol is used to separate dollars and cents. So, this price tag is for an item of inventory with a cost price of \$13.50.

Any letters can be used in such a code, as long as no letters are repeated. However, the code should be easily translated into dollars and cents, so that staff know the exact cost price when dealing with customers. This is particularly useful in industries where customers often try to get the price reduced (e.g. electrical appliances).

Regardless of how cost prices are recorded, coding can simplify the task of completing a stocktake. It's common for a particular item to have been purchased at several different prices during the one period. Therefore, if 20 units of a product are in inventory at the end of the year, it may not be correct to assume that all were purchased at the same price. Coding methods allow an accurate stocktake to be achieved because they identify the actual cost price of each item of inventory, which can be entered straight into the inventory sheets.

17.2 The perpetual inventory system

A **perpetual inventory system** is a method of continuously recording inventory movements throughout a reporting period. That is, every time inventory is purchased, the event *must* be recorded. Similarly, every transaction involving the sale of inventory must be recorded. If this is done, management should have up-to-date information about its various inventory lines.



perpetual inventory system
recording movements of inventory by maintaining continuous records throughout a period

Inventory methods

There are two approaches to recording the cost prices of inventory sold during a period. You have just learnt about the first of these, which identifies the actual cost price of each item. Actual cost prices can be recorded when goods are sold by using codes on price tags or by applying consistent mark-ups to products. This method is known as the **Identified Cost** method. It requires considerable work throughout the accounting period, as the owner must constantly identify the actual cost price of all items in one way or another.

In some cases, it may not be possible to identify the actual cost price of each inventory item. For example, a petrol station may have 10 000 litres of fuel on hand at a cost price of \$1.00 per litre. It may receive a delivery of another 5000 litres of fuel, but the price has increased to \$1.05 per litre. When a customer purchases 50 litres of fuel, how can the owner determine the actual cost price of this sale?

The simple answer is that it is *not* possible to do so. As the fuel is all mixed in together in one tank, it isn't physically possible to determine the cost price of each litre. Therefore, the Identified Cost method isn't suitable for all trading businesses.

Also, some owners may simply choose not to try to identify the cost price of each item, because it is so time consuming. Instead, they may use the **First-In, First-Out (FIFO)** inventory method. The FIFO system is based on a simple assumption: *the first goods bought will be the first goods sold*.

This assumption about the flow of inventory may not represent the actual physical flow of goods. However, it's a fair assumption to make that most businesses attempt to sell their oldest inventory first – particularly if they are selling perishable items.

Identified Cost an inventory system that allows the actual cost of each inventory item to be identified

First-In, First-Out (FIFO)
a system of recording inventory movements, based on the assumption that the first goods purchased are the first goods sold

Inventory cards

In a perpetual inventory system, every transaction involving the sale of inventory must be recorded. However, the main accounting records in a single entry accounting system are the cash journals. These journals record movements of cash, not inventory. An additional record, the **inventory card**, is therefore required to cope with the demands of the perpetual inventory system.

A business using perpetual inventory should have an inventory card for every different type of inventory being sold. Figure 17.4 shows an example of an inventory card.

inventory card a document used to record all movements of a particular line of inventory

Figure 17.4 Inventory card

An inventory card should be maintained for every line of inventory and be updated daily.

Inventory item: Megafast computer		Product code: PC186291 Location: South warehouse			Valuation method: FIFO			Min: 5	Max: 10	
Supplier: Advanced Computers Pty Ltd		IN			OUT			Balance		
Date	Document no.	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Aug 1	Balance							5	1 200	6 000
2	Inv. 2101	5	1 300	6 500				5 5	1 200 1 300	6 000 6 500
3	Rec. 3301				2	1 200	2 400	3 5	1 200 1 300	3 600 6 500
4	Rec. 3302				2	1 200	2 400	1 5	1 200 1 300	1 200 6 500
5	Rec. 3303				1 1	1 200 1 300	1 200 1 300	4	1 300	5 200
6	Inv. 2120	6	1 300	7 800				10	1 300	13 000

Note that this inventory card has been prepared using the FIFO method of inventory recording, which assumes that the first goods to come into the business are the first to go out of the business.

Working day by day through the inventory card shows how it's used.

- **Aug 1:** Five computers were in inventory, each with a cost price of \$1200.
- **Aug 2:** Five more units were purchased on credit for \$1300 each, as noted by Invoice 2101. Note the impact on the 'Balance' column. The business now holds five units with a cost price of \$1200 and another five at a cost of \$1300 each.
- **Aug 3:** Two units were sold for cash (Receipt 3301). Note that because the first inventory bought cost \$1200 per unit, it's assumed that this inventory is the first sold. Therefore, two of the \$1200 inventory are moved to the 'Out' column, leaving only three at this cost price. All the \$1300 inventory remains in the business at this stage.
- **Aug 4:** Two more computers were sold (Receipt 3302). As the business still has three units left at \$1200 each, it's assumed that the two sold had a cost price of \$1200.
- **Aug 5:** This is where the application of the FIFO assumption is very important. Note that the business has one computer left at a cost of \$1200, with five others that cost \$1300. As two were sold on 5 August, it's assumed that one of these is from the earlier inventory purchased (\$1200). Once this assumption is made, the other one sold must have cost \$1300, because all the \$1200 inventory has now been sold.



Using the FIFO method, an inventory card assumes that the first goods that come into the business are the first to go out.

- **Aug 6:** Six new computers were purchased. Note that, for this purchase, the cost price is the same as that previously charged. This means that the units can simply be added to the existing inventory. This can *only* be done if the latest cost price is the same as the last lot of inventory purchased by the firm.

When inventory is purchased at different prices, these cost prices *must* be kept in order within the inventory card. Cost prices may increase or decrease, but this doesn't affect the application of the FIFO assumption. As long as the cost prices are kept in the order in which they occur, the FIFO rule can be applied when inventory is sold.

17.3 Accounting for inventory losses and gains



The use of inventory cards in the perpetual inventory system doesn't eliminate the need for a physical stocktake at the end of a period. An inventory card only lets management know how many units *should* be on hand at any point in time. The only way to find the number of units *actually* on hand is to physically count them, so a stocktake should be carried out from time to time to check on the number of goods still in inventory.

Note

If the FIFO assumption is being applied to a firm's inventory, cost prices don't have to be checked when performing a stocktake as it's assumed that the inventory first bought has all been sold. Only the number of units still on hand needs to be checked.

There are three possible outcomes from a stocktake.

- The number of units physically counted matches the number of units shown in the inventory card.
- The number of units physically counted is less than that shown in the inventory card.
- The number of units physically counted is greater than that shown in the inventory card.

If all units are accounted for (i.e. the first outcome), this means that none have been stolen and all the inventory card entries appear to be correct.

inventory loss when the number of units revealed by a stocktake is less than the quantity shown on an inventory card

Inventory losses

The second possible result may indicate a problem. An **inventory loss** exists if there are fewer items on hand than are shown by an inventory card.

An inventory loss may be caused by some or all of the following.

- *Theft:* Shoplifting is a major problem for many trading businesses. But, controls should *also* be kept on employees to ensure that inventory doesn't go missing.
- *Undersupply from suppliers:* When goods are delivered, the quantity shown on an invoice as being delivered should be physically checked against the goods that arrive. If this isn't done, a 'short order' may not be picked up. For example, 15 units may be charged on an invoice and be recorded on the inventory card, but if only 14 units were delivered and this error isn't picked up, it would appear that an inventory loss has occurred.
- *Oversupply to customers:* In this case, the problem is that too many units have left the business, compared to the amount stated on invoices. Fraudulent behaviour could involve staff members sending additional units to friends who haven't been invoiced. This problem calls for all invoiced quantities to be physically checked against the units that leave the business premises. This is particularly important for firms that post goods or send them out by courier.
- *Double invoicing by suppliers:* A supplier may have sent two invoices for one lot of inventory. If this isn't detected, an inventory loss will result because the inventory card will show that additional units should be on hand.
- *Stocktaking errors:* Stocktakes often involve boring, repetitive counting tasks. It's very difficult to guarantee that a stocktake is 100% accurate. Errors can be made, and if one section of the store hasn't been counted and this error isn't picked up, it may appear that the business has a serious inventory loss problem.
- *Recording errors:* As with any accounting record, inventory cards may contain errors. There are checks that can minimise errors, but some may slip through. A common error is when the owner of a business withdraws inventory for personal use and forgets to make a note of this event. Such errors may cause an inventory loss to show up at the end of the year.

Shoplifting and theft is a major cause of inventory loss. Management should identify the extent of inventory losses and take action to try to minimise the cost of these losses.



Adjusting for an inventory loss

When a stocktake reveals an inventory loss, the inventory card must be adjusted to reflect the true situation.

Consider the inventory card for the Megafast computer shown in Figure 17.4 (page 254). It shows that 10 computers were in stock on 6 August. Let's assume that a stocktake reveals only nine Megafast computers in inventory. Figure 17.5 shows how the inventory is adjusted for an inventory loss of one unit.

Figure 17.5 Inventory card adjusted for an inventory loss

Inventory item: Megafast computer		Product code: PC186291 Location: South warehouse			Valuation method: FIFO			Min: 5	Max: 10	
Supplier: Advanced Computers Pty Ltd		IN			OUT			Balance		
Date	Document no.	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Aug 1	Balance							5	1 200	6 000
2	Inv. 2101	5	1 300	6 500				5 5	1 200 1 300	6 000 6 500
3	Rec. 3301				2	1 200	2 400	3 5	1 200 1 300	3 600 6 500
4	Rec. 3302				2	1 200	2 400	1 5	1 200 1 300	1 200 6 500
5	Rec. 3303				1 1	1 200 1 300	1 200 1 300	4	1 300	5 200
6	Inv. 2120	6	1 300	7 800				10	1 300	13 000
6	Memo 101							9	1 300	11 700

Ten units should have still been in the store, but only nine units could be counted.

The document used to evidence inventory losses and inventory gains is a memorandum (or memo). The owner or manager completes the memo with details of the loss identified. It can then be referred to if there are queries in the future.

Note that the FIFO assumption also applies to inventory losses. If there is an inventory loss and different cost prices are shown on the inventory card, the inventory lost is assumed to be the earliest inventory purchased.

The adjustment for an inventory loss has two effects on a business's balance sheet.

- 1 Inventory on hand has decreased, which directly affects the value reported for inventory under the heading 'Current assets'.
- 2 Inventory losses represent a sacrifice of economic resources by a business, even if this sacrifice was unintentional. This means that inventory losses are actually an *expense* to the business. Therefore, expenses increase, leading to a lower profit, which leads to a lower value for owner's equity.

Inventory gains

inventory gain when the number of units revealed by a stocktake is greater than the quantity shown on an inventory card

While an inventory loss is the more likely event, it's also possible for a trading firm to experience an **inventory gain**.

An inventory gain could be caused by the following.

- **Oversupply from suppliers:** If this error isn't picked up, the quantity stated on the invoice will be entered on an inventory card. If the invoice states 12 units, but 12 *dozen* units were delivered, an inventory gain is almost certain! This type of error should be detected at the time of delivery and the supplier should be notified immediately.
- **Undersupply to customers:** If an error is made when packing a customer's order, it may not be picked up when the goods are delivered to that customer. Perhaps the inventory card shows that 40 units left the business, but only 14 units were actually delivered.
- **Stocktaking errors:** If a stocktake is done carelessly, one section of a store could be counted twice, artificially inflating the value of inventory on hand.
- **Recording errors:** Inventory cards can include errors that will produce either an inventory loss or an inventory gain.

Adjusting for an inventory gain

Regardless of the cause of an inventory gain, inventory cards must be adjusted to reflect the actual situation on balance day. Let's look again at the Megafast computer example. Assume now that 11 computers were found to be in inventory on 6 August. Figure 17.6 shows the entry to record the inventory gain.

Figure 17.6 Inventory card adjusted for an inventory gain

Inventory item: Megafast computer		Product code: PC186291 Location: South warehouse			Valuation method: FIFO			Min: 5	Max: 10	
Supplier: Advanced Computers Pty Ltd		IN			OUT			Balance		
Date	Document no.	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Aug 1	Balance							5	1 200	6 000
2	Inv. 2101	5	1 300	6 500				5	1 200	6 000
								5	1 300	6 500
3	Rec. 3301				2	1 200	2 400	3	1 200	3 600
								5	1 300	6 500
4	Rec. 3302				2	1 200	2 400	1	1 200	1 200
								5	1 300	6 500
5	Rec. 3303				1	1 200	1 200	4	1 300	5 200
					1	1 300	1 300			
6	Inv. 2120	6	1 300	7 800				10	1 300	13 000
6	Memo 101	1	1 300	1 300				11	1 300	14 300

According to the inventory card, 10 units should remain in the store, but the count revealed that 11 units were on hand.

On balance day you can't tell which units were incorrectly recorded or wrongly supplied. Therefore, when recording inventory gains, it's assumed that the latest cost price paid for inventory most *faithfully represents* the value of the gain. Regardless of whether prices have increased or decreased during the period, the most current cost price should be used.

Inventory gains will also have a twofold effect on a firm's balance sheet.

- 1 As inventory on hand increased, this directly affects the value reported for inventory under the heading 'Current assets'.
- 2 Inventory gains represent an inflow of resources to the business and are therefore classified as a revenue item. Therefore, inventory gains *increase total revenue*, leading to a higher profit; this then leads to a higher value for owner's equity on the balance sheet.

17.4 Accounting for returns of inventory

A further complication for trading businesses is accounting for returns of inventory. This may happen when the business needs to return goods to its supplier, which is known as a **purchases return**. If a business has dissatisfied customers, a **sales return** may occur.

Returns of inventory may happen for a variety of reasons, including:

- the goods were faulty
- the products were damaged
- the items were the wrong size (e.g. clothing)
- the goods were the wrong colour or the wrong brand
- the buyer simply changed their mind.



purchases return a return of inventory items to the supplier

sales return the return of goods originally sold to accounts receivable on credit

Credit notes

When inventory is returned, the supplier issues a **credit note** as proof that the business has accepted the return of the goods.

A trading business may issue credit notes to accounts receivable when goods are returned. They may also receive credit notes when they return inventory to their supplier (i.e. accounts payable).

A credit note reduces the amount the credit customer owes, so an invoice is used to create a debt. If inventory is returned, it will decrease the debt created by the invoice.

Figure 17.7 shows an example of a credit note created by Richmond Tiles.

credit note a business document confirming that goods have been returned and credit has been granted to the customer

 Richmond Tiles 287 Bridge Road Richmond VIC 3121 Credit Ricky the Renovator 192 Hoffman Road Elsternwick VIC 3185	CREDIT NOTE no. 281 Date 15/11/2028 Reason Damaged																
<table><thead><tr><th>Description</th><th>Quantity</th><th>Unit price</th><th>Subtotal</th><th>GST</th><th>Total</th></tr></thead><tbody><tr><td>30 mm white tiles</td><td>20</td><td>\$2.00</td><td>\$40.00</td><td>\$4.00</td><td>\$44.00</td></tr></tbody></table>						Description	Quantity	Unit price	Subtotal	GST	Total	30 mm white tiles	20	\$2.00	\$40.00	\$4.00	\$44.00
Description	Quantity	Unit price	Subtotal	GST	Total												
30 mm white tiles	20	\$2.00	\$40.00	\$4.00	\$44.00												
<i>Richmond Tiles – for all your tiling needs!</i>																	

Figure 17.7 Credit note

This credit note informs Ricky the Renovator that the goods he returned have been approved for credit. Richmond Tiles would then deduct \$44 from the amount that Ricky the Renovator owes.

Recording purchases returns in inventory cards

When a business returns inventory to a supplier, it must adjust the inventory card. The supplier issues a credit note, which includes details of the cost price of the inventory being returned.

Consider the following example and Figure 17.8.

Jul 4	Purchased 10 shirts for \$20 each, plus GST (Invoice 432)
6	Returned one damaged shirt (purchased on 4 July) to the supplier and received credit note number 12

Figure 17.8 Inventory card with a purchases return recorded

Inventory item: Shirts		IN			OUT			Balance		
Date	Document no.	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Jul 1	Balance							5	20	100
Jul 2	Invoice 432	10	20	200				15	20	300
Jul 6	Credit note 12				1	20	20	14	20	280



As the goods have been returned to the supplier, and therefore have left the business, the purchases return is entered in the 'Out' column, reducing the number of units on hand.

Note that the supplier must approve the return in exchange for credit. The supplier will identify the cost price of the inventory and provide details on the credit note issued.

Recording sales returns in inventory cards

When a credit customer returns goods, the amount owing by accounts receivable should be reduced by the amount the customer was originally charged.

If a customer purchased four shirts at \$40 each, plus GST, the total sale would be \$160 and \$16 GST. If they then returned one shirt, the seller would issue a credit note for \$40 + \$4 GST = \$44. Accounts receivable would still have a debt of $3 \times \$40 = \$120$, plus \$12 GST, for a total debt of \$132.

However, the recording of a sales return at cost price is more complex. The process depends on the valuation method being used for inventory. If Identified Cost is used, the business can identify the actual cost price of each inventory item at the time of sale.

EXAMPLE 17.2

Ultimate Bathroom Emporium uses different-coloured price tags to identify which batch of stock has been sold on each trading day. The following transactions show both the sale and sales return transactions between Ultimate Bathroom Emporium and Hanwood Hotel.

Aug 1	Inventory on hand: Towels with blue tags 10 @ \$20 Towels with red tags 15 @ \$22
Aug 2	Sold 5 towels with red tags at \$40 each, plus \$4 GST, to Hanwood Hotel (Invoice 978).
Aug 3	One towel was the wrong colour and was returned by Hanwood Hotel. Ultimate Bathroom Emporium didn't have a replacement in the correct size. Therefore, it issued credit note 65 for \$44 (\$40 + \$4 GST = \$44).

Figure 17.9 shows how the cost price is recorded in the inventory card.

Figure 17.9 Inventory card with a sales return using Identified Cost

Inventory item: Monogram Series Towels					Valuation method: Identified Cost					
Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Aug 1	Balance							10	20	200
								15	22	330
Aug 2	Invoice 978 (red tags)				5	22	110	10	20	200
								10	22	220
Aug 3	Credit note 65 (red tags)	1	22	22				10	20	200
								11	22	242

As this business identifies all its inventory with coloured tags, the cost price of each item can be identified both when the sale is made and when a sales return occurs. However, this requires a lot of organisation; it's easier for many businesses to simply adopt the FIFO valuation assumption.



It can be simpler and easier to use the FIFO method when determining the cost of inventory being sold.

EXAMPLE 17.3

If Ultimate Bathroom Emporium adopted the FIFO system, the coloured tags would no longer be necessary. The transactions with Hanwood Hotel using the FIFO system would be recorded as shown in Figure 17.10.

Figure 17.10 Inventory card with a sales return using FIFO

Inventory item: Monogram Series Towels					Valuation method: FIFO					
Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Aug 1	Balance							10 15	20 22	200 330
Aug 2	Invoice 978				5	20	100	5 15	20 22	100 330
Aug 3	Credit note 65	1	20	20				6 15	20 22	120 330

When the sale is made, it's assumed that the towels came from the \$20 inventory. When a sales return occurs, the last price issued in the 'Out' column would be used as the assumed cost price of the return.

What if two cost prices were in the 'Out' column for the most recent sale? Consider the inventory card shown in Figure 17.11, which is for the bath sheets sold by Ultimate Bathroom Emporium.

Figure 17.11 Inventory card with a sales return using FIFO

Inventory item: Bath sheets					Valuation method: FIFO					
Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Aug 1	Balance							3 10	50 55	150 550
Aug 3	Invoice 989				3 2	50 55	150 110	8	55	440
Aug 5	Credit note 666	1	55	55				9	55	495

Five bath sheets were sold on credit on 3 August. Under FIFO, it's assumed that three of them had a cost price of \$50, while the other two are allocated a cost of \$55 each. When one bath sheet was returned on 5 August, which one was returned?

The rule is to *always* use the latest issued price in the 'Out' column. The last issued price was \$55, so it's assumed that the sales return had a cost price of \$55.

Always keep in mind that the owner doesn't really know which inventory was sold or returned, as FIFO is completely based on assumptions. Therefore, the sales return is actually *based* on the reverse of FIFO. The price to be used is the latest one issued, so to determine the cost price, we work backwards up through the 'Out' column.



Practise and apply

17



REVISION: SUMMARY OF KEY CONTENT

- [17.1]** Trading firms should conduct a stocktake at least once a year to physically count all the inventory on hand on a particular date. The cost price of every product should also be recorded. This can be done using barcodes, but small businesses might also use techniques such as codes or fixed mark-ups.
- [17.2]** A perpetual inventory system involves continuously recording inventory movements throughout a reporting period and keeping track of those movements on inventory cards. The system could either identify the cost of every inventory item or use the First-In, First-Out (FIFO) assumption to assign costs. The choice of method will determine how inventory cards are updated.
- [17.3]** Regular stocktakes may reveal either inventory losses or gains – disparities between the records on the inventory cards and the amount of inventory actually on hand. The inventory cards should be adjusted to reflect the disparity and a memo written to document the change.
- [17.4]** A further complication is accounting for returns of inventory. A purchases return involves a business returning goods to its supplier, while a sales return involves customers returning inventory to the business. Both types of returns need to be recorded in inventory cards. For a purchases return, the supplier also issues a credit note.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



Workbook
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XL template

1 Inventory sheets

The manager of Greendale Trading completes a physical stocktake and finds the following inventory on hand.

Item no. 16790	520 units with a cost price of \$24.00 each
Item no. 16791	300 units @ \$19.50 each
Item no. A854	145 units @ \$10.00 each
Item no. CB76	580 units @ \$4.50 each
Item no. 60175	170 units @ \$32.00 each and 400 units @ \$34.00 each

- Prepare the inventory sheets for the physical stocktake. Show clearly the value of each inventory item.
- Calculate the total cost of inventory on hand.



Workbook
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XL template

2 Cost prices from mark-ups

As part of an annual stocktake, the following goods are identified as being part of inventory. The selling price (including GST) of each item is also listed.

AFL footballs	\$99
NSL soccer balls	\$66
NBL basketballs	\$33

- Calculate the GST included in each of the selling prices stated and determine the price the business charges for each item.
- Calculate the cost price of each of the items if the firm used a mark-up of:
 - 100%
 - 80%
 - 65%
 - 50%
 - 20%.
- Prove your answers to part **b(iii)** by working from the cost prices back to the selling prices.



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XL template

3 Cost prices from codes

Castlemaine Home Appliance Centre supplies the following information from its physical stocktake.

Item	Units on hand	Selling price	Cost price
Electric toasters	80	\$39.90	QI/RL
Microwaves	30	\$399.00	UQR/LL
Blu-ray players	15	\$550.00	AER/FR
Televisions	20	\$645.00	DLO/ER

Before goods are put on sale, all price tags are encoded with cost prices using the following system.

Q	U	A	D	R	E	F	O	I	L
1	2	3	4	5	6	7	8	9	0

- Convert the coded cost prices into dollars and cents.
- Prepare inventory sheets to determine the value of inventory on hand.

4 Identified Cost versus FIFO

Brunswick Trail Bikes purchases bicycle chains on several different occasions during 2028, as shown below.

July 1	Purchase lot #1	10 chains @ \$50
August 1	Purchase lot #2	10 chains @ \$52
September 1	Purchase lot #3	20 chains @ \$54
October 1	Purchase lot #4	30 chains @ \$54
November 1	Purchase lot #5	30 chains @ \$55

On 30 November 2028, a physical stocktake shows that there were 30 bicycle chains in inventory. An examination of the price tags on these chains reveals the following cost prices.

- 5 had a cost price of \$50
 - 5 had a cost price of \$52
 - 15 had a cost price of \$54
 - 5 had a cost price of \$55.
- a Using the Identified Cost method of inventory valuation, calculate the value of the cost of sales for bicycle chains for the year ended 30 November 2028.
 - b What is the value of inventory on hand as at 30 November 2028 if this business used Identified Cost?
 - c Using the FIFO assumption of inventory flows, calculate the value of the cost of sales for bike chains for the year ended 30 November 2028.
 - d What is the value of inventory on hand as at 30 November 2028 under the FIFO method?
 - e Which method, Identified Cost or FIFO, will determine the most accurate profit for this business? Explain your answer.

5 Cost prices from codes

Ron Wu owns Williamstown Gym Equipment. He uses a coding system to identify the cost price of all his inventory items, based on the following letters.

R	O	N	A	L	D	S	G	Y	M
1	2	3	4	5	6	7	8	9	0

On 30 June 2028, Wu completed a stocktake and determined the following quantities on hand.

Inventory item	Quantity on hand	Price code	Quantity sold this period
Exercise bikes	24	ONM/LM	80
Home gymnasiums	8	ROMM/	22
Electric treadmills	12	DSM/YL	27
Sets of weights	20	YG/AL	110

- a Using the coding system provided, determine the cost of inventory on hand as at 30 June 2028.
- b If Wu applies a mark-up of 100% to all inventory sold, prepare an income statement to determine his gross profit for the year ended 30 June 2028.



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6 Identified Cost versus FIFO

The following transactions relate to the Big Kahuna Smoker, one of several models of barbecues bought and sold by Bellarine Barbecues. The owner of this business uses the Identified Cost method.

Jul 1	Six Big Kahunas were in inventory. Each one cost the business \$200, plus GST of \$20
2	Sold one Big Kahuna for \$390, plus \$39 GST (Rec. 283)
3	Sold two Big Kahunas for \$780, plus \$78 GST (Rec. 284)
4	Purchased 10 barbecues for \$220 each, plus \$22 GST (Inv. 3929)
5	One of the barbecues purchased on 4 July was found to be damaged and was returned to the supplier. The supplier issued credit note number 32
6	Sold two barbecues for \$390 each, plus \$39 GST (Rec. 285 and 286). Both barbecues had a cost price of \$220
7	Sold two Big Kahunas for \$780, plus \$78 GST (Rec. 287); cost price of both \$220

- Prepare an inventory card for the Big Kahuna Smoker under the Identified Cost method.
- The owner is interested in how the FIFO method works. Prepare the inventory card again, this time using the FIFO assumption of inventory flow. (Assume that the actual cost prices weren't available to the owner.)
- Comment on the differences between the two methods by determining cost of sales under each one.
- Which method do you believe should be used in this business? Explain your answer.
- How many smokers should be in inventory on 7 July?
- Is it possible for a business selling barbecues to experience an inventory loss? Explain your answer.



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7 Identified Cost versus FIFO

Acme Furniture is a small business specialising in furniture for sporting clubs. One of its products is the Deluxe Bar Stool.

The following information relates to the purchases and sales of the Deluxe Bar Stool during July 2028. On 1 July, there were 10 bar stools on hand with a cost price of \$56 each.

Purchases			Sales		
Inv. 32	Jul 2	50 units @ \$56 each	Jul 4	40 units @ \$112 each	Inv. 132 (cost price \$56)
Inv. 39	5	40 units @ \$60 each	6	15 units @ \$120 each	Inv. 135 (cost price 5 @ \$56, 10 @ \$60)
Inv. 44	11	50 units @ \$60 each	13	30 units @ \$120 each	Inv. 142 (cost price \$60)
Inv. 54	24	50 units @ \$64 each	21	50 units @ \$128 each	Inv. 150 (cost price 5 @ \$56, 45 @ \$60)
			27	20 units @ \$128 each	Inv. 164 (cost price 5 @ \$60, 15 @ \$64)
			29	20 units @ \$128 each	Inv. 168 (cost price \$64)

On 31 July, a physical stocktake reveals 15 units on hand (Memo 38). These units have a cost price of \$64.

- Using Identified Cost, prepare an inventory card for the month of July for Deluxe Bar Stools.
- Prepare a second inventory card, this time using the FIFO inventory assumption.
- Explain to the owner the effect on profit for July if the FIFO method was used, rather than Identified Cost.

8 Sales returns: Identified Cost

The following stock card extract has been prepared for a furniture store that sells student desks.

Item: Student desks		Valuation method: Identified Cost								
Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Sep 1	Balance							4 10	250 260	1 000 2 600
Sep 3	Invoice 43				3 2	250 260	750 520	1 8	250 260	250 2 080

Sep 4 One of the student desks sold on 3 September had a mark on it. The customer returned it and requested a full credit. This was granted and credit note 64 was issued. The returned desk came from the \$250 inventory and was sold for \$390.

Record the required entry for the sales return in the inventory card shown above.

9 Sales returns: FIFO

The inventory card in Question 8 has been reproduced below. If FIFO was being used, rather than Identified Cost, complete the entries for:

- the sale on 3 September.
- the sales return on 4 September.

Item: Student desks		Valuation method: FIFO								
Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Sep 1	Balance							4 10	250 260	1 000 2 00
Sep 3	Invoice 43									

10 Inventory loss or gain

The following information is extracted from an inventory card prepared under the FIFO assumption.

Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Sep 28	EFTPOS				2	100	200	9 20	100 105	3 000
29	EFTPOS				3	100	300	6 20	100 105	2 700

- How many units were on hand at the close of business on 27 September?
- If a physical stocktake carried out on 30 September revealed that there were 23 units in inventory, what is the value of the inventory loss or gain experienced by this business?
- Justify why an adjustment for inventory loss/gain should be made on 30 September, with reference to a qualitative characteristic of accounting.



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11 Inventory loss or gain

The owner of Seaford Skis provides the following extract from one of his inventory cards. It relates to Elite Skis, which sell for about \$170 per pair, plus GST.

Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Aug 28	Inv. 3199	10	80	800				2 10	75 80	150 800
30	Rec. 194									

- On 30 August, the business sold three pairs of Elite Skis for cash. At what value should these skis be recorded in the 'Out' column of the inventory card if the FIFO assumption was followed?
- No other transactions occurred in relation to the Elite Skis in August. A stocktake on 31 August revealed that there were 10 pairs of skis still on hand. What adjustment is necessary in the inventory card because of the information revealed by the stocktake (Memo 32)?
- Copy out the above inventory card and make all entries required at the end of August 2028.
- State two possible reasons why the quantity revealed by the stocktake on 31 August was different from that shown on the inventory card.



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12 Inventory loss or gain

This extract of an inventory card was prepared by Brett Holzer, the manager of a retail business that uses the perpetual inventory system.

Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Jul 29	Rec. 909				21	40	840	9 80	40 42	360 3 360
31	Inv. 2916	100	44	4 400				9 80 100	40 42 44	360 3 360 4 400

A physical stocktake conducted on 31 July reveals that 174 units were still on hand.

- Using the FIFO assumption of inventory flows, determine the value of any inventory loss or gain revealed by the stocktake on 31 July. (Show all workings.)
- State and explain three different causes of the inventory loss (or gain) you have identified in part **a**.
- State the twofold effect of the inventory loss (or gain) on the business's balance sheet.



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EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Explain why a stocktake should be done at the end of every reporting period.

Question 2 (4 marks)

State and explain two reasons why a business owner may use the FIFO inventory method.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 18

15 16 17 18 19 20 21 22 23 24 25

Managing a trading business

KEY TERMS

Gross profit
Adjusted gross profit
Net profit
Just-in-time ordering
Lead time
Inventory turnover

In this chapter, you will learn how owners and managers of trading businesses use accounting records to inform their decisions. You will also calculate some key financial indicators for a trading business and consider how to actively manage inventory.

Learning objectives

By the end of this chapter, you will be able to:

- **record** transactions for drawings of inventory and using inventory for advertising [18.1]
- **prepare** an income statement to determine a gross profit figure [18.2]
- **outline** the principles of efficient inventory management [18.3]
- **describe** various measures used to protect inventory [18.3]
- **determine** inventory turnover and **evaluate** turnover rates for a period [18.4]

PRIOR KNOWLEDGE

CHAPTER 17 Accounting for inventory



Estimated time required: 2 weeks





18.1 Making use of inventory

The primary purpose of inventory is to generate revenue for a trading business. However, inventory is an asset, and the owners and managers of a trading business may use it in other ways. In this chapter, we look at two common transactions involving inventory that managers may choose to make for other purposes.

Drawings of inventory

It is common for a business owner to withdraw cash from their business, particularly when they make their living from the profits. Throughout this text, such transactions appear in the cash payments journal, where they decrease the bank account of the business as well as owner's equity.

The owner of a trading business may also choose to withdraw inventory for personal use. They may have their own needs for items such as computers, hardware, clothing and so on, and may choose to take those items from their own assets at any time. The effect on the balance sheet is a decrease in inventory, with a corresponding decrease in owner's equity.

If an owner withdraws inventory, it should be noted on an office memo, such as the one shown in Figure 18.1. The details are then recorded on the relevant inventory card.

Figure 18.1 Office memo for the withdrawal of inventory

<i>BARRY JOHN MENSWEAR</i>		MEMO NO. 201
DATE	2/8/28	
OFFICE MEMO	Withdrawal of one navy blue suit Cost price: \$250	
SIGNED	<i>B John</i>	

This memo provides all the details required to update the inventory card: the date of the event, the item withdrawn and its cost price. The relevant inventory card would then be updated as shown in Figure 18.2.

Figure 18.2 Inventory card updated for a withdrawal of inventory

Inventory item: Navy blue suits		Valuation method: Identified Cost								
Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Aug 1	Balance							4	250	1 000
2	Memo 201				1	250	250	3	250	750

Note that the Identified Cost method is used in this example. If the business used the FIFO method, the cost price would be sourced from the inventory card in the usual way. That is, it would be assumed that the suit withdrawn was from the oldest inventory in the balance of the inventory card at that time.

Inventory used for advertising purposes

A business may also use inventory to advertise its business. For example, the owner may donate goods from the business to a local charity, school or fete. In return, the donation might be recognised with a certificate of thanks that can be displayed in the business's premises as a sign that it supports the local community. Such donations hopefully result in locals supporting the business.

When inventory is used for advertising purposes, details of the inventory sacrificed should be noted in a memo and the inventory card updated to reflect the situation. Figure 18.3 shows an example for Strathmore Science Supplies.

Strathmore Science Supplies

Memo no. 150

Date 2/9/28

Office memo Donation of two microscopes
Cost price: $\$80 \times 2 = \$160$

Signed Kay Sheedy

Figure 18.3 Office memo for inventory used for advertising purposes

Inventory item: Microscopes		Valuation method: FIFO								
Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Sep 1	Balance							5 10	80 85	400 850
2	Memo 150				2	80	160	3 10	80 85	240 850

If a business is using the FIFO method, inventory used for advertising must also follow the FIFO assumption.

This business uses the FIFO system (as stated on the inventory card), so it's assumed that the donated microscopes came from the \$80 lot, rather than the \$85 inventory.

As you can see, memos are used for several different transactions. These include inventory losses, inventory gains, withdrawals of inventory and inventory used for advertising. It's important that business owners keep copies of all memos to confirm details of all transactions being recorded in inventory cards.

18.2 Determining gross profit



As you have learnt, a single entry accounting system consists of cash journals as a starting point. This cash-based system may be supplemented by inventory cards so that the owner can manage inventory efficiently.

The cash journals are used to record, among other things:

- the cash paid for purchases of inventory
- the cash received from sales of inventory.

Inventory cards record:

- the cost price of inventory when purchased
- the cost price of inventory when sold.

All these details must come together at the end of the period so that the owner of a trading business can determine if a profit or loss has been made on the inventory sold.

Calculating profit

Inventory is always valued at cost price. When it is purchased, the cost paid is noted in the journals. When it is sold, the cost price is recorded in the 'Out' column of the appropriate inventory card.

The customer, of course, doesn't pay cost price (under normal circumstances). The selling price received is recorded in the cash journals as sales. The difference between the cost price of the inventory and the selling price represents the business's profit made on the sale.

To demonstrate this, the accounting records shown in Figure 18.4 have been provided for the business of Camilleri's Computers for the month of September. This retail outlet sells both the Megafast and the Economax tablet computer models.

Figure 18.4 Camilleri's Computers: Cash receipts journal

Date	Details	Receipt no.	Amount banked \$	Sales Megafast \$	Sales Economax \$	Sundry receipts \$	GST received \$
Sep 3	Cash sales	001	2 200		2 000		200
6	Cash sales	002	5 500	5 000			500
8	Cash sales	003	2 750	2 500			250
11	Cash sales	004	3 850		3 500		350
14	Cash sales	005	4 950	4 500			450
15	Capital	EFT	5 000			5 000	
16	Cash sales	006	2 750	2 500			250
19	Cash sales	007	5 720		5 200		520
22	Cash sales	008	3 960		3 600		360
24	Cash sales	009	7 700	7 000			700
28	Cash sales	010	1 980		1 800		180
29	Loan – NAB	EFT	4 000			4 000	
30	Totals		50 360	21 500	16 100	9 000	3 760

The total cash sales for September can be found by adding the two columns used for the sales of the two types of computers:
 $\$21\,500 + \$16\,100 = \$37\,600$ total sales revenue.

Add up the two columns used for sales of two types of tablet computers to calculate total cash sales.



The capital contribution made on 15 September isn't included as revenue because it represents owner's equity. The loan taken out on 29 September is also excluded from the definition of revenue, because it represents a liability of the business.

The inventory cards in Figures 18.5 and 18.6 show what happened to the firm's inventory in September.

Figure 18.5 Inventory card for Megafast tablet computer

Inventory item: Megafast tablet		Product code: PC186291 Location: South warehouse			Valuation method: FIFO			Min: 5	Max: 10	
Supplier: Advanced Computers Pty Ltd		IN			OUT			Balance		
Date	Document no.	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Sep 1	Balance							8	1 300	10 400
6	Rec. 002				2	1 300	2 600	6	1 300	7 800
8	Rec. 003				1	1 300	1 300	5	1 300	6 500
12	Inv. 3838	5	1 350	6 750				5 5	1 300 1 350	13 250
14	Rec. 005				2	1 300	2 600	3 5	1 300 1 350	10 650
16	Rec. 006				1	1 300	1 300	2 5	1 300 1 350	9 350
24	Rec. 009				2 1	1 300 1 350	2 600 1 350	4	1 350	5 400
26	Inv. 3894	6	1 370	8 220				4 6	1 350 1 370	13 620

Figure 18.6 Inventory card for Economax tablet computer

Inventory item: Economax tablet		Product code: PC14321 Location: South warehouse			Valuation method: FIFO			Min: 5	Max: 10	
Supplier: Advanced Computers Pty Ltd		IN			OUT			Balance		
Date	Document no.	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Sep 1	Balance							10	1 000	10 000
3	Rec. 001				1	1 000	1 000	9	1 000	9 000
11	Rec. 004				2	1 000	2 000	7	1 000	7 000
19	Rec. 007				3	1 000	3 000	4	1 000	4 000
21	Inv. 3864	6	1 050	6 300				4 6	1 000 1 050	10 300
22	Rec. 008				2	1 000	2 000	2 6	1 000 1 050	8 300
28	Rec. 010				1	1 000	1 000	1 6	1 000 1 050	7 300
30	Memo 205				1	1 000	1 000	6	1 050	6 300

A stocktake completed on 30 September revealed that there were 10 Megafast and six Economax tablets in inventory. This means that the firm has suffered an inventory loss of one Economax model, so the required adjustment has been entered in the inventory card (Memo 205).

Gross profit

gross profit sales revenue for a period less the cost of sales over that same period

The **gross profit** for September is determined by calculating the total cost of sales for the month. Look at the 'Out' column of the inventory cards for the two models (lines) to determine the cost of sales.

The cost of sales for the month doesn't include inventory losses or gains. Any inventory losses should be reported as a separate expense item in an income statement.

Megafast model	
Date	Cost of sales \$
Sep 6	2 600
8	1 300
14	2 600
16	1 300
24	2 600
24	1 350
Total	11 750

Economax model	
Date	Cost of sales \$
Sep 3	1 000
11	2 000
19	3 000
22	2 000
28	1 000
Total	9 000

To determine the total cost of sales for the month for this business, the two inventory lines are added together.

$$\text{Cost of sales} = \$11\,750 + \$9\,000 = \$20\,750$$

Sales revenue for the month has already been noted as \$37 600 (from the cash receipts journal).

The following accounting report can now be prepared.

CAMILLERI'S COMPUTERS: INCOME STATEMENT FOR MONTH ENDED 30 SEPTEMBER 2028

	\$
Cash sales	37 600
Less: Cost of sales	20 750
Gross profit	16 850

This report shows both the amount of revenue received by the business and the cost of inventory that was sacrificed to earn this revenue. The difference is the gross profit for the period.

The amount of gross profit earned by a trading business will depend on several factors, including:

- how many units are sold within the given period
- what mark-up percentage has been added to the cost price of the inventory to determine selling prices
- whether selling prices are rigid, or allowances are made for 'haggling' with customers at the point of sale to clinch a sale.



Accounting for losses and gains

The management of a business may want to extend the income statement to account for inventory losses or gains. Our example included an inventory loss of one Economax tablet computer, at a cost of \$1000. This, too, can be incorporated into the report.

**CAMILLERI'S COMPUTERS: INCOME STATEMENT
FOR MONTH ENDED 30 SEPTEMBER 2028**

	\$
Cash sales	37 600
Less: Cost of sales	20 750
Gross profit	16 850
Less: Inventory loss	1 000
Adjusted gross profit	15 850

Cost of sales and Inventory loss values come from the inventory cards

Note

If a trading firm experiences an inventory gain in a period, this gain is simply added to gross profit.

In the example below, Camilleri's Computers has reported an inventory gain of \$1350 at the end of October's trading period.

**CAMILLERI'S COMPUTERS: INCOME STATEMENT
FOR MONTH ENDED 31 OCTOBER 2028**

	\$
Cash sales	50 000
Less: Cost of sales	25 750
Gross profit	24 250
Plus: Inventory gain	1 350
Adjusted gross profit	25 600

The **adjusted gross profit** figure should truly reflect the success (or otherwise) of a trading business. It reports on the firm's sales revenue, deducts the cost of goods sold, and is then adjusted for any inventory losses or gains as revealed by a stocktake.

adjusted gross profit sales revenue minus cost of goods sold and any adjustment for inventory loss (or plus any adjustment for an inventory gain)

Other expenses

The only thing not yet considered in the above report is the range of other expenses that a trading firm may experience, such as rent, wages and advertising. To prepare a full income statement, such expense items are simply deducted from the gross profit figure to reach a final **net profit** result.

For example, rent, wages and advertising would be shown in the report as follows.

**CAMILLERI'S COMPUTERS: INCOME STATEMENT
FOR MONTH ENDED 31 OCTOBER 2028**

	\$	\$
Cash sales		50 000
Less: Cost of sales		25 750
Gross profit		24 250
Plus: Inventory gain		1 350
Adjusted gross profit		25 600
Less: Other expenses		
Rent	1 600	
Wages	1 200	
Advertising	800	3 600
Net profit		22 000

net profit sales revenue less all expenses incurred by a business

It's also important to recognise the link between inventory cards and the balance sheet. The value of the current asset Inventory comes directly from the totals of the individual inventory cards.

In the previous example, inventory on hand would be determined as follows.

Inventory item:	Value as at 30 September (\$) (from final balance of inventory cards)
Megafast computers	13 620
Economax computers	6 300
Total of inventory on hand	19 920

This value is simply reported in the balance sheet, along with the firm's other current assets, as shown in the extract below.

Current assets	\$	\$
Cash on hand	300	
Cash at bank	5 400	
Inventory	19 920	25 620

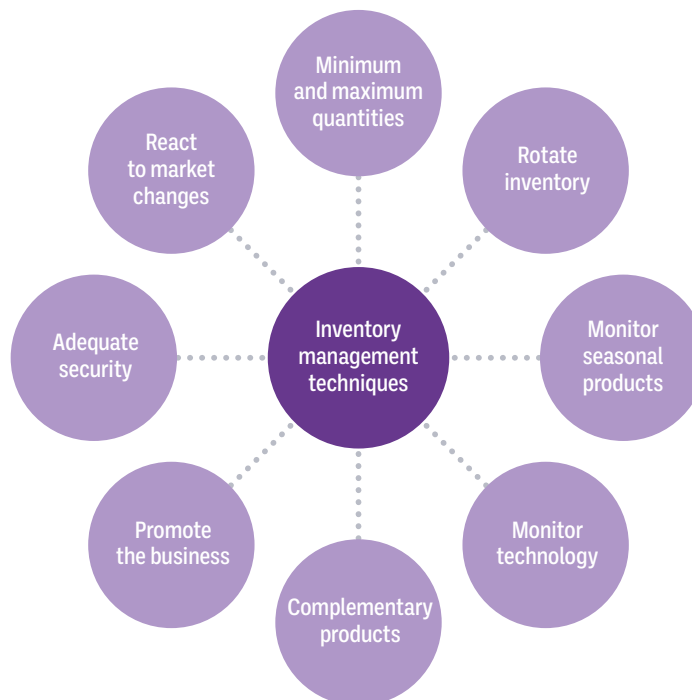


18.3 Managing inventory

Inventory cards provide an owner with information about how well inventory has been selling during a period. These cards reflect the decisions of management and show the day-to-day movement of goods as they are bought and sold. Sound management of inventory can lead to an increase in sales, and therefore in profit.

Figure 18.7 shows a number of principles for managing inventory efficiently.

Figure 18.7 Inventory management principles



To manage inventory effectively, management must consider a number of factors.

Determining minimum and maximum quantities

For each particular line of inventory, management should determine a *maximum* quantity to keep in inventory. Once this amount is purchased, sales can be made until the *minimum* number is reached. At this stage, an order should be placed to bring stock levels up to the maximum number of units.

In a perfect situation, the minimum quantity should be just enough to satisfy sales until the new delivery arrives. This is known as **just-in-time ordering**. However, this method depends on the **lead time** of deliveries from the suppliers. Lead time is the number of days it takes from the moment an order is made until the actual delivery of goods. It is risky to carry too little inventory, as sales opportunities may be missed and customers may go elsewhere.

just-in-time ordering

purchasing inventory so that it arrives just before the business runs out of inventory

lead time the time from when an order is made until the goods are delivered

Rotation of all inventory

When a new delivery of goods takes place, inventory items must be *rotated* so that the older units are on prominent display.

- If goods are stacked up (e.g. shirts in boxes), the older inventory should be on top with the new delivery at the bottom of the stack.
- If goods are on display shelves, the new inventory should be put at the back of the shelf.

Rotation is particularly important for perishable items (e.g. food), but it also matters for other types of inventory with use-by dates, such as batteries and medicines.

Almost all types of inventory should be rotated, because all products have a risk of becoming shop-soiled, dusty, dirty or marked. The longer an item sits in a shop, the more likely it is to become damaged.

Monitoring of seasonal products

Some businesses have inventory items that are prone to seasonal demand, such as woollen jumpers and heavy coats in winter, or bathers and swimming pool accessories in summer. Shops involved in sporting goods are particularly affected by seasonal factors (e.g. there is little value in having a large supply of football jumpers over summer).

Management must ensure that, towards the end of a season, this inventory is run down to a minimum, perhaps even to zero. Dead inventory is items that have been paid for but aren't generating sales, so they cost the business money to just sit there on display. The selling price of such items may have to be reduced to clear them as the season ends.

Monitoring technological advances

Some industries are affected by rapid technological change.

Computers, tablets and smartphones are examples of products that shouldn't be ordered in large quantities. The technology of these products is subject to rapid change, and consumers generally want the latest developments. To manage such inventory effectively, owners and managers must keep up to date in terms of technology.



Consideration of complementary products

A useful inventory management method is to offer a range of complementary products. This means that the business provides a variety of inventory items that complement one other.

For example, a menswear store will usually sell ties and belts, as well as shirts and trousers. A mobile phone shop will sell mobiles, chargers, cases, power banks and screen protectors. The sales of one particular item can then promote sales of other items.

Promoting the business and its products

Many stores offer special prices on old or out-of-season items because they want to get rid of that inventory. However, business owners should also consider special promotions on current items. Doing something different keeps customers involved with the business.

Managers should *always* be looking for new ways to promote their inventory. The lifeblood of a trading firm is the turnover of the actual goods in inventory, so it's vital to keep sales moving!

Special deals, discount prices, in-store celebrities, two-for-one offers, free movie passes, lucky draws ... management should consider all these methods, and more, as a way to keep the business in the public eye.

Ensuring adequate security

Management must pay attention to the security of inventory. Inventory items are often the target of thieves and may be taken by customers or by staff if there isn't adequate security in place.

Some devices and/or tactics that management may consider include:

- security guards
- undercover security personnel
- video surveillance
- security tags on all products
- two-way mirrors
- dye bombs
- electronic security gates at all exits
- random checks on staff.

Naturally, single-owner businesses cannot always afford, or may not need, some of these security measures. Management should consider what security is required for their particular store.

Reacting to changes in the market

Inventory management demands continuous attention. Many businesses slowly die out because owners think they can just sit back and things will take care of themselves.

Business owners must be willing to watch over inventory cards on a daily basis to detect slow-moving items, as these may have to be discontinued. Fast-moving lines must also be identified, as they will likely sell out. All other inventory must be checked to ensure that items aren't damaged or dirty and that displays are as required.

Management must be ready and able to make decisions in reaction to changes in the general market, such as changes in prices and products.

18.4 Inventory turnover



The success of a trading firm depends largely on management's ability to buy inventory and turn it into sales. A firm that purchases the wrong type of inventory, or too much inventory, will end up with money tied up in an investment that provides no return. There is no point in a business buying inventory if it doesn't move off the shelves! Inventory is only effective as an investment if it can be turned into revenue.

A financial indicator that measures the performance of management in this area is inventory turnover. **Inventory turnover** is determined by dividing the average level of inventory for the period by the cost of goods sold for the period and then multiplying the result by the number of days in the reporting period. This shows how many days it takes management to turn its inventory into sales.

inventory turnover a financial indicator that shows how many days it takes a business to turn its inventory into sales

$$\text{Inventory turnover} = \frac{\text{Average inventory}}{\text{Costs of goods sold}} \times 365 \text{ days}$$

As the level of inventory changes over time, it's common practice to use an average value of inventory for the year. Inventory at the end of the year could be used, but if inventory levels have recently increased or decreased, this may provide misleading figures.

Inventory for the beginning and end of the period may be used to determine an average. Monthly inventory figures may also be used – just total up the 12 monthly values and divide by 12.

EXAMPLE 18.1

The owner of Starjammer Skateboards considers the business's inventory levels for the 2027–28 financial year.

Inventory as at 1 July 2027	\$38 000
Inventory as at 30 June 2028	\$42 000
Cost of goods sold for the year ended 30 June 2028	\$160 000

Using this data, the calculation of inventory turnover would be:

$$\begin{aligned} \text{Inventory turnover} &= \frac{\text{Average inventory}}{\text{Cost of goods sold}} \times 365 \text{ days} \\ &= \frac{\left(\frac{\$38\,000 + \$42\,000}{2} \right)}{\$160\,000} \times 365 \text{ days} \\ &= \frac{\$40\,000}{\$160\,000} \times 365 \text{ days} = 91.25 \text{ days} \end{aligned}$$

This shows that Starjammer Skateboards turned its inventory into sales every 91 days (on average) during the year.



Evaluating inventory turnover

It's important to be careful when interpreting the results of inventory turnover. There is no standard, desirable rate for all trading firms.

Remember that a key factor in turning over inventory is the *type* of product being sold. It's reasonable to expect a greengrocer to need a rapid inventory turnover; perishable products must be turned over quickly, or they have to be thrown out as rubbish. However, shops trading in furniture or electrical appliances don't have the same pressure to turn their inventory over quickly.

In order to evaluate inventory turnover, management should consider:

- the nature of the goods being sold
- industry averages (i.e. turnover rates for similar businesses)
- the trend in the ratio (the rates that were achieved in the last two or three periods)
- the budgeted rate (what management expected to achieve).

A business may also experience fluctuations in turnover due to seasonal factors. For example, a business selling wood heaters would experience a much faster turnover rate in the colder months and a slower turnover during summer. The inventory turnover rate will reflect the average turnover for the period. If inventory values at the beginning and end of a year are used in the calculation, the final result will show an average of the ups and downs a business may experience in a typical year.





Practise and apply

18



REVISION: SUMMARY OF KEY CONTENT

- [18.1]** The owners and managers of trading businesses may choose to use their inventory, rather than just selling it. If inventory is withdrawn for personal use, or is given away for advertising purposes, the effect on the balance sheet is a decrease in both inventory and owner's equity. The transactions should be noted on an office memo and the details recorded on the inventory card.
- [18.2]** The information in cash journals and inventory cards is part of the process used to determine if a profit or loss has been made. The difference between the amount of revenue received by the business and the cost of inventory sacrificed to earn this revenue is the gross profit for the period. This may be adjusted to account for inventory loss or gain. Subtract all other business expenses for the period to calculate final net profit.
- [18.3]** Business owners must manage their inventory effectively in order to increase sales and therefore profit. A number of principles ensure efficient inventory management, such as setting minimum and maximum quantities, rotating inventory, promoting products using sales, and ensuring adequate security.
- [18.4]** Inventory is only effective as an investment if it can be turned into revenue. The inventory turnover rate measures how fast inventory is converted to revenue; it's determined by dividing the average level of inventory for the period by the cost of goods sold for the period. While most businesses will want to turn over inventory quickly, there is no standard, desirable rate for all firms.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Drawings of inventory

The following information is found in an inventory card at the start of October 2028. The card has been prepared under the Identified Cost method.

Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Oct 1	Balance							5 25	24 26	120 650

On 2 October, the owner decided to withdraw two units of inventory for a birthday present for his daughter. The two units each had a price tag on them of \$52. The owner applies a mark-up of 100% on all inventory held by the business. He wrote out Memo 54 and noted the details of his withdrawal.

- Copy out the details in the above inventory card and record the withdrawal of inventory by the owner using Identified Cost.
- Would the amount you recorded for drawings of inventory on 2 October be the same if this business used the FIFO method? Explain your answer.
- Describe the twofold effect of Memo 54 on the balance sheet of this business.



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2 Inventory used for advertising purposes

Bea Queen, a pharmacy owner, donated three expensive bottles of perfume to the neighbourhood school for its upcoming fete. The principal of the school gave the pharmacy a half-page advertisement in the school's newsletter as a sign of gratitude.

Queen's business uses the FIFO method of inventory valuation. The inventory card for the perfume is shown below. Memo 85 was completed for this transaction on 30 August.

Date	Document no.	IN			OUT			Balance		
		Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Aug 30	Inv. 415	20	90	1 800				2 20	75 90	1 950

- Complete the entry in the inventory card on 30 August for the inventory used for advertising.
- Queen believes this entry should be recognised as 'drawings', as she took the inventory from the business. Do you agree? Explain your answer.
- Does Memo 85 create an expense item for this business? Explain, with reference to the definition of an expense.

3 Inventory cards to income statement

Isabella Cavedon is the proprietor of Bella's Outdoor Furniture. This small business sells two types of outdoor folding chairs. The Standard model retails for \$30, plus \$3 GST; the Deluxe model, which features a drink holder and footrest, usually sells for \$40, plus \$4 GST. Cavedon primarily sells to individual consumers, but also sells chairs to sporting clubs and businesses. In recording inventory movements, she follows the FIFO assumption.

The following events occur during August 2028.

Aug 1	Inventory on hand: Standard model: 32 chairs, seven with a cost price of \$12 and 25 with a cost price of \$13. Deluxe model: 17 chairs, all costing \$18 each
3	Cash sale of six Standard chairs for \$30 each, plus GST of \$3 (Rec. 939)
5	Sold three Deluxe chairs for \$110 cash, plus \$11 GST (EFT)
7	Cash sale of five Deluxe chairs for \$190, plus \$19 GST (Rec. 940)
9	Purchased 25 more Deluxe model chairs at a cost of \$20 each, plus \$2 GST (Inv. 3820)
11	Sold six Standard chairs for \$170 cash, plus \$17 GST (Rec. 941)
14	Made a sale to the local football club at a special price: 10 Standard chairs for \$250 (plus \$25 GST) and five Deluxe chairs for \$180 (plus \$18 GST) for a total cash sale of \$430 + \$43 GST = \$473 (Rec. 942)
17	Purchased 30 Standard chairs for \$15 each (Inv. 3727: \$450 + \$45 GST = \$495)
18	Owner withdrew one Standard chair for personal use (Memo 34)
20	Sold three Standard chairs for \$120, plus \$12 GST (Rec. EFT)
23	Cash sale of six Deluxe chairs for \$220, plus \$22 GST (Rec. 943)
25	Sold one Standard \$30 and one Deluxe chair \$40 for a total of \$70, plus GST of \$7 (EFT)
28	Sold three Deluxe chairs for \$110, plus \$11 GST (Rec. 944)
31	A physical stocktake revealed the following quantities on hand at the end of the month: Standard model 31 chairs, Deluxe model 20 chairs (Memo 102)

- a** Prepare an inventory card for each of the two types of chairs sold by Bella's Outdoor Furniture.
- b** Check your inventory cards against the details of the physical stocktake and make any necessary adjustments on 31 August.
- c** Calculate the total value of cash sales for August for each model of chair sold.
- d** Using your inventory cards, calculate the cost of sales for August for each model of chair sold.
- e** Using your calculations from parts **c** and **d**, prepare an income statement to determine the firm's gross profit for the month. (Include any adjustments for inventory losses or gains, as appropriate.)



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4 Inventory cards to income statement

Hill's Hockey Hideout is a small business owned by Michael Hill. He sells a range of hockey memorabilia, including signed hockey sticks that come in two sizes: junior and senior.

On 1 September 2028, the business has the following inventory of signed hockey sticks: junior – 22 sticks and senior – 19 sticks. The inventory cards for these two items have the following balances as at 31 August.

Junior sticks	5 @ \$15	\$75	Senior sticks	9 @ \$24	\$216
	17 @ \$16	\$272		10 @ \$23	\$230
	22	\$347		19	\$446

The following transactions occur during September 2028.

- Sep 2 Sold three junior sticks at \$29 each, plus GST of \$2.90 each (EFT)
- 3 Purchased on credit 20 junior sticks at a cost of \$17 each, plus GST of \$1.70 (Inv. 943)
- 4 Sold for cash four senior sticks for a total of \$180, plus \$18 GST (Rec. 294)
- 5 Cash sale of two senior sticks for \$45 each, plus \$4.50 GST (EFT)
- 7 Sold four junior sticks for \$118, plus \$11.80 GST (Rec. 295)
- 9 Issued receipt no. 296 for a cash sale of two senior sticks for \$90, plus \$9 GST
- 11 Cash sale: three junior sticks for \$85, plus \$8.50 GST (EFT)
- 14 Purchased on credit 15 senior sticks at \$25 each, plus \$2.50 GST (Inv. 933)
- 16 Sold for cash two senior (\$40 each) and two junior sticks (\$30 each) for \$140, plus \$14 GST (Rec. 297)
- 18 Sold four junior sticks for \$122, plus \$12.20 GST (Rec. 298)
- 20 Cash sale: two senior sticks for \$90, plus \$9 GST (Rec. EFT)
- 22 The owner donated one junior hockey stick and one senior stick to the Doxa Youth Club (Memo 21)
- 23 Issued Receipt no. 299 for \$105 (plus \$10.50 GST) for a cash sale of two junior (2 at \$30) and one senior sticks (1 at \$45)
- 25 Sold for cash one junior stick \$32, plus \$3.20 GST (Rec. 300)
- 28 Cash sale of three senior sticks for \$130, plus \$13 GST (Rec. 301)
- 30 Physical stocktake completed. Quantities on hand: junior sticks 17
senior sticks 15 (Memo 007)

- Prepare an inventory card for September for each of the two types of hockey sticks sold.
- Verify your inventory card balances with the details of the physical stocktake and make any necessary adjustments on 30 September.
- Calculate the total value of cash sales for September for each type of hockey stick sold.
- Using your inventory cards, calculate the cost of sales for September for each type of hockey stick.
- Using your calculations from parts **c** and **d**, prepare an income statement to determine the firm's gross profit for the month. (Include any adjustments for inventory losses or gains, as appropriate.)
- Given the results of the physical stocktake completed on 30 September, comment on Hill's level of control over his inventory.
- Suggest two possible strategies that Hill's could adopt in this business to improve control over inventory.



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5 Inventory turnover

A business had inventory of \$28 000 at the beginning of the year and \$33 000 at the end of the year. Cost of sales during the year amounted to \$152 500.

- Calculate the inventory turnover in days.
- Comment on the adequacy of the inventory turnover determined in part **a**.

6 Inventory turnover

A fashion boutique recorded sales of \$180 000 for the year ended 30 June 2028. The business applies a mark-up of 100% to all its inventory. Inventory at the beginning of the year was \$22 000, and at the end of the period it was \$27 000.

The owner believes that inventory turnover should be around 90 days, as she likes to move inventory in line with the four seasons. However, she is keen to have any new items and fashions in the shop and usually purchases a few units of everything that's available.

- a Calculate the inventory turnover in days for the year ended 30 June 2028.
- b Has the owner reached her objective in terms of turnover? Explain your answer.
- c Comment on the owner's approach to buying inventory, taking into account the inventory turnover calculated in part a.

7 Comparisons of inventory turnover

Consider the following financial information relating to two local businesses.

	Sam's Sports	Carol's Chocolates
Inventory turnover 2027	32 days	30 days
2028	30 days	37 days

- a Which of these two businesses has managed its investment in inventory more efficiently in 2028? Explain your answer.
- b Should Carol be concerned about her management of her inventory? Justify your answer.
- c 'All businesses should use the FIFO method, as it ensures that the oldest goods are sold first.' Do you agree? Explain your answer.
- d Describe two benefits of having a faster inventory turnover.

MODELLING EXERCISE

The owner of Northcote Jeans is looking for ways to increase her business's profit. At present, she buys jeans for \$45 a pair and sells them for \$100. She usually sells about 70 pairs a month. As there are quite a few competitors in the area, customers are very sensitive to price changes. The owner is unsure whether she should increase prices and make more profit on every sale or decrease her prices and sell more pairs. After completing some market research, she has compiled the following predictions.

Selling price	\$85	\$90	\$100	\$110	\$120
Predicted sales	90	85	70	60	50

- a Calculate the business's current monthly gross profit, using the selling price of \$100 and the turnover of 70 pairs per month.
- b Prepare a table to show the gross profit the owner can expect to earn for each of the four alternatives presented above (i.e. selling prices of \$85, \$90, \$110 and \$120).
- c Which selling price generates the highest amount of sales revenue?
- d Which selling price generates the highest gross profit?
- e Considering the current situation and the results in b above, which selling price would you recommend to the owner? Give reasons for your selection.



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CASE STUDY

Random Access Robotics sells a range of robots, drones and components. The business maintains inventory cards under the FIFO method for each item. The Skyranger drone has always been popular, but recently the owner has noticed increasing sales of both the Comet and Black Phantasm models.

The owner also maintains multi-column cash journals to account for all cash flows. No credit facility is offered, so all sales are made through EFTPOS or on a cash basis.

The following information has been made available.

RANDOM ACCESS ROBOTICS: CASH RECEIPTS JOURNAL

Date	Details	Rec. no.	Amount banked \$	Skyranger drones \$	Comet drones \$	Black Phantasm drones \$	Sundry receipts \$	GST received \$
Oct 1	Cash sales	645	440		400			40
2	Cash sales	646	220	200				20
3	Cash sales	647	660			600		60
4	Cash sales	EFT	880		800			80
5	Cash sales	648	660			600		60
8	Cash sales	EFT	440		400			40
9	Cash sales	649	440	400				40
11	Cash sales	650	880		800			80
12	Cash sales	651	1 320			1 200		120
15	Cash sales	EFT	880		800			80
16	Cash sales	652	440	400				40
18	Cash sales	653	1 320			1 200		120
19	Cash sales	654	440	400				40
23	Cash sales	655	660	200	400			60
24	Cash sales	EFT	880		800			80
25	Cash sales	656	1 100	400		600		100
29	Cash sales	657	880		800			80
30	Cash sales	EFT	1 320			1 200		120
31	Cash sales	659	880	400	400			80
31	Totals		14 740	2 400	5 600	5 400		1 340

RANDOM ACCESS ROBOTICS: CASH PAYMENTS JOURNAL

Date	Details	EFT no.	Total paid \$	Inventory \$	Advert. \$	Wages \$	Drawings \$	Assets \$	Sundry payments \$	GST paid \$
Oct 1	Advertising	21	165		150					15
5	Wages	22	420			420				
10	Drawings	23	600				600			
12	Wages	24	430			430				
15	Advertising	25	165		150					15
17	Cleaning	26	132						120	12
18	Computer	27	4 433					4 030		403
19	Wages	28	400			400				
22	Inventory	29	2 420	2 200						220
25	Drawings	30	600				600			
26	Wages	31	400			400				
31	Loan R/P	32	3 000						3 000	
31	Electricity	33	110						100	10
31	Totals		13 275	2 200	300	1 650	1 200	4 030	3 220	675



» *Note:* The business had a cash balance of \$4300 in the bank on 1 October 2028.

Additional information:

- The cash purchase of inventory on 22 October was for 20 Skyranger drones. Purchases of both the Comet and Black Phantasm drones are usually made on credit from the suppliers.
- On 25 October, 20 Comet drones were purchased on credit at a cost of \$205 each, plus GST of \$20.50 per drone.
- On the following day, 12 Black Phantasms were purchased on credit for \$310 each, plus GST of \$31.
- On 31 October, at about 10 pm, the owner was called to the business by the police. Someone had driven a heavy vehicle through the shop's front window! The owner conducted a stocktake immediately and found 16 Skyrangers, 21 Comets and 14 Black Phantasms on hand. No adjustments have been made to the inventory cards in response to these events.

INVENTORY CARDS

Inventory item: Skyranger Drone		Valuation method: FIFO								
Supplier: Deckards Drones		IN			OUT			Balance		
Date	Document no.	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Oct 1	Balance							9	100	900
2	Rec. 646				1	100	100	8	100	800
9	Rec. 649				2	100	200	6	100	600
16	Rec. 652				2	100	200	4	100	400
19	Rec. 654				2	100	200	2	100	200
22	EFT 29	20	110	2 200				2 20	100 110	2 400
23	Rec. 655				1	100	100	1 20	100 110	2 300
25	Rec. 656				1 1	100 110	100 110	19	110	2 090
31	Rec. 659				2	110	220	17	110	1 870

Inventory item: Comet drone		Valuation method: FIFO								
Supplier: Tek Supplies Pty Ltd		IN			OUT			Balance		
Date	Document no.	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Oct 1	Balance							5 10	190 200	2 950
1	Rec. 645				1	190	190	4 10	190 200	2 760
4	EFT				2	190	380	2 10	190 200	2 380
8	EFT				1	190	190	1 10	190 200	2 190
11	Rec. 650				1 1	190 200	190 200	9	200	1 800
15	EFT				2	200	400	7	200	1 400
23	Rec. 655				1	200	200	6	200	1 200
24	EFT				2	200	400	4	200	800
25	Inv. 939	20	205	4 100				4 20	200 205	4 900
29	Rec. 657				2	200	400	2 20	200 205	4 500
31	Rec. 659				1	200	200	1 20	200 205	4 300





Inventory item: Black Phantasm drone		Valuation method: FIFO								
Supplier: Vanguard One		IN			OUT			Balance		
Date	Document no.	Qty	Cost	Value	Qty	Cost	Value	Qty	Cost	Value
Oct 1	Balance							12	300	3 600
3	Rec. 647				1	300	300	11	300	3 300
5	Rec. 648				1	300	300	10	300	3 000
12	Rec. 651				2	300	600	8	300	2 400
18	Rec. 653				2	300	600	6	300	1 800
25	Rec. 656				1	300	300	5	300	1 500
26	Inv. 48311	12	310	3 720				5 12	300 310	5 220
30	EFT				2	300	600	3 12	300 310	4 620

- a** Calculate the value of the inventory loss experienced on 31 October 2028. (Show all workings.)
- b** Determine the value of inventory on hand as at 31 October 2028. (Show all workings.)
- c** Using the relevant information from the above sources, prepare a statement of receipts and payments for the month ended 31 October 2028.
- d** Extract all relevant information from the above sources and prepare an income statement for the month ended 31 October 2028.
- e** How much is the owner selling each type of drone for at the moment?
- f** The owner hasn't altered his selling prices for quite a while. Comment on his price-setting strategy in light of the purchases made on 22, 25 and 26 October.
- g** State one benefit for this business of buying some of its inventory on credit.
- h** Do you think this business should offer credit facilities to its customers? Explain your answer.
- i** The owner admits to only checking the inventory cards occasionally. Could this create a problem in this business? Refer to one or more of the inventory cards in your explanation.

EXAM-STYLE QUESTIONS

Question 1 (4 marks)

The following transactions took place in the first week of July 2028 in relation to the Jumbo Cricket Bat. On 1 July, there were three cricket bats in the store, with a cost price of \$240.

Jul 2	Sold 2 bats for \$450 each to D Sullivan, plus GST (Rec. 247)
3	Purchased 6 bats on credit for a total of \$1320, plus GST (Inv. 612)
6	Sold 4 bats to Carlton Cricket Club for \$440 each (Inv 241)

Record the three transactions above in the inventory card for Jumbo Cricket Bats.

Question 2 (3 marks)

Brunswick Book Store recently sold books on credit with a total cost price of \$800. The owner applies a mark-up of 75% to all books, before adding 10% GST. Before this transaction, the business had a GST liability of \$200.

Complete the following table to show the effect on the balance sheet equation of the above transaction.

Classification	Increase / Decrease / No effect	\$
Assets		
Liabilities		
Owner's equity		



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 19

15 16 17 18 19 20 21 22 23 24 25

Credit transactions for a trading business

KEY TERMS

Accounts receivable turnover
Bad debt
Accounts payable turnover

In this chapter, you will learn how trading businesses handle credit transactions. You will meet new concepts such as discounts, bad debts, and turnover rates for both accounts receivable and accounts payable.

Learning objectives

By the end of this chapter, you will be able to:

- **identify** the documents used to evidence credit transactions [19.1]
- **define** the terms 'accounts receivable' and 'accounts payable' [19.1]
- **maintain** a subsidiary record for both accounts receivable and accounts payable [19.2]
- **record** sales returns and purchases returns [19.3]
- **prepare** an accounts receivable or accounts payable schedule at the end of a period [19.3]
- **determine** GST liability, taking credit transactions into account [19.3]
- **determine** and **evaluate** turnover rates for accounts receivable and accounts payable [19.4]
- **record** bad debts in individual records for accounts receivable [19.4]

PRIOR KNOWLEDGE

CHAPTER 4 Single entry accounting for a small business

CHAPTER 9 Accounting for credit transactions



Estimated time required: 1 week



19.1 Revisiting credit transactions



Chapter 9 was about the concept of credit transactions. Let's start this chapter by revisiting those transactions, but for trading businesses. If you wish to revise any concepts first, look again at Chapter 9.

Credit sales and purchases

A credit transaction is one where goods are supplied immediately but payment is made at a later date.

Since the introduction of EFTPOS, few retail traders still provide credit facilities for customers. However, they may extend credit to corporate customers who place large orders – and most trading firms purchase their inventory on credit, because this allows them time to sell their goods before they have to pay for them.

Typical credit terms for trading businesses are 30 days, with some suppliers granting 60 days. The suppliers of such terms are often wholesale businesses providing inventory to retail outlets.

Discounts for payment

With basically all of their sales done on credit, wholesalers often offer discounts as an incentive for prompt payment. These are referred to as settlement discounts, as they encourage customers to settle (or pay off) their accounts quickly.

The period of time offered to credit customers, and the discounts available to them, make up the terms of a credit agreement. Typical credit terms would be notations such as:

- '5/7', meaning '5% discount if paid within 7 days'
- '2/30', meaning '2% discount if paid within 30 days'
- 'n/60', meaning 'the net amount payable due within 60 days' (i.e. no discount).

The credit terms are usually stated on the invoice the supplier gives to the customer.

Invoices

All credit transactions must be verified by source documents. An invoice is the document used to inform a customer of the cost of a credit transaction. The original invoice is given to the customer, and the supplier keeps a copy.

Figure 19.1 shows a sales invoice issued by Leeroy Jumpsuits to Walton's Workwear.

 LEEROY JUMPSUITS 32 Thomas Street Ascot Vale VIC 3032		Tax invoice No. 1888 Date 22/10/28	
Supplied to Walton's Workwear 452 Chapel Street Prahran VIC 3181		Credit terms 5/7; n/30	
Quantity	Description	Cost per unit	Total
100	Hi-vis vests	30	\$3000
	GST (10%)	3	300
TOTAL AMOUNT OWING			\$3300

Figure 19.1 Sales invoice

The credit terms should be stated clearly on all invoices.

This document represents a purchase invoice to Walton's Workwear, which is buying inventory from Leeroy Jumpsuits. Note the credit terms on the invoice. If Walton's pays the invoice within the seven-day discount period, it will receive a discount of 5%. While this helps Walton's, as it pays out less cash, it also benefits the cash flow of the supplier of the goods, as slow-paying accounts receivable can be very costly to businesses.

Accounts receivable and accounts payable

If you were accounting for Leeroy Jumpsuits, you would classify Walton's Workwear under the heading of accounts receivable. Accounts receivable are usually classified as current assets in a balance sheet, as they are expected to pay their debts within the next 12 months (hopefully, within one or two months).

Accounts payable include the businesses that supply goods or services to a business on credit. If you were accounting for Walton's Workwear, accounts payable would include the business trading as Leeroy Jumpsuits. The classification of accounts payable would include other businesses that supply items to Walton's Workwear, such as shirts, overalls, boots, safety helmets and so on.

Accounts payable are usually classified as current liabilities because they are seen as a short-term source of finance.

The accounts payable classification should include all suppliers who provide a trading business with their inventory items on credit.



19.2 Recording credit transactions

Most single entry accounting systems rely on cash journals as the main accounting record. As you saw in Chapter 9, subsidiary records need to be created if credit transactions are expected to occur frequently. Subsidiary records for a trading business are similar to those for a service firm, but with a few important differences.

Credit purchases journal

The first step in organising credit transactions is to create a credit purchases journal. Figure 19.2 shows a record for a small business, Waterworld Aquariums.

Figure 19.2 Purchases journal

WATERWORLD AQUARIUMS: PURCHASES JOURNAL					
Date	Accounts payable	Invoice no.	Inventory \$	GST \$	Accounts payable \$
Aug 1	Northern Aquarium Supplies	1011	2 400	240	2 640
5	Sandringham Sand & Glass	727	1 900	190	2 090
8	Port Fairy Fish Food P/L	9399	2 640	264	2 904
14	Northern Aquarium Supplies	1019	1 300	130	1 430
19	Northern Aquarium Supplies	1023	1 600	160	1 760
22	Port Fairy Fish Food P/L	9413	800	80	880
28	Northern Aquarium Supplies	1033	600	60	660
31	Totals for month		11 240	1 124	12 364

The total amount owing from each invoice should be recorded in the 'Accounts payable' column of the purchases journal.

The purchases journal keeps all credit purchases together in one record and can be referred to if there are any queries. All the key details of each invoice are recorded: the date, supplier's name, invoice number, transaction value, GST charged and total amount payable.

Individual records

Although this record shows all purchases on credit for a particular period, it doesn't show the amount owing to each individual supplier. A firm that relies on credit may also require individual records for each of its suppliers providing goods on credit.

Figure 19.3 shows individual records for Waterworld Aquariums' accounts payable.

Figure 19.3 Individual records for accounts payable

ACCOUNTS PAYABLE RECORD: NORTHERN AQUARIUM SUPPLIES				
Date	Details	Document no.	Amount \$	Balance \$
Aug 1	Inventory/GST	Inv. 1011	2 640	2 640
14	Inventory/GST	Inv. 1019	1 430	4 070
19	Inventory/GST	Inv. 1023	1 760	5 830
28	Inventory/GST	Inv. 1033	660	6 490

The running balance, showing the amount owing, should be updated after each transaction.

ACCOUNTS PAYABLE RECORD: SANDRINGHAM SAND & GLASS				
Date	Details	Document no.	Amount \$	Balance \$
Aug 5	Inventory/GST	Inv. 727	2 090	2 090

ACCOUNTS PAYABLE RECORD: PORT FAIRY FISH FOOD P/L				
Date	Details	Document no.	Amount \$	Balance \$
Aug 8	Inventory/GST	Inv. 9399	2 904	2 904
22	Inventory/GST	Inv. 9413	880	3 784

In these records, one entry has been made for each credit purchase. Each entry includes the GST charged as part of the total transaction.

An alternative approach is to break each entry down into two separate entries – one for the cost price of the inventory being purchased, and one for the GST being charged. Figure 19.4 shows how to do this for the Port Fairy Fish Food account.

Figure 19.4 Individual records for accounts payable: Alternative approach

ACCOUNTS PAYABLE RECORD: PORT FAIRY FISH FOOD P/L				
Date	Details	Document no.	Amount \$	Balance \$
Aug 8	Inventory	Inv. 9399	2 640	2 640
	GST charged		264	2 904
22	Inventory	Inv. 9413	800	3 704
	GST charged		80	3 784

Both approaches satisfy *verifiability*. The document numbers for the transactions are clearly stated, so the invoices can be traced at a later date to answer any queries.

These records simply break down all the credit purchases individually. The information is transferred – or *posted* – from the purchases journal to the individual records. A major benefit of maintaining individual records is that the current amount owing to each one is updated in the right-hand column each time a new transaction takes place.

Including cash transactions

These records only show part of the overall picture that exists for a typical business. Once credit purchases are recorded, a cash payment is expected at some time in the future.

Referring to the Waterworld Aquariums cash journals, two cash payments were located.

Aug 4	Paid Northern Aquarium Supplies \$2600 and received a discount of \$40
31	Paid Northern Aquarium Supplies \$1430

If these cash payments were included in the individual accounts payable's record for Northern Aquarium Supplies, the record would be as shown in Figure 19.5.

Figure 19.5 Accounts payable record with cash payment included

ACCOUNTS PAYABLE RECORD: NORTHERN AQUARIUM SUPPLIES				
Date	Details	Document no.	Amount \$	Balance \$
Aug 1	Inventory/GST	Inv. 1011	2 640	2 640
4	Cash payment	EFT 822	2 600	40
	Discount revenue		40	Nil
14	Inventory/GST	Inv. 1019	1 430	1 430
19	Inventory/GST	Inv. 1023	1 760	3 190
28	Inventory/GST	Inv. 1033	660	3 850
31	Cash payment	EFT 827	1 430	2 420

In the individual records, it's important to note the document numbers for each entry. This helps to meet the demands of *verifiability*.

As with inventory purchases and the GST, a cash payment to an accounts payable may be linked to a discount. These two items may also be combined into one entry.

In this record, the 4 August payment was \$2600. The supplier discounted \$40 for prompt payment. As this \$40 causes a decrease in the amount owing to the liability, it represents a revenue item and has been noted as *discount revenue*. If management prefers to join these two entries together, it can be recorded as 'Cash payment/Discount revenue \$2640'.

The record shown in Figure 19.5 is an ideal way to provide vital information about a firm's accounts payable. Because a running balance is recorded after every transaction, the amount owing to individual accounts payable is available at a glance. All document numbers are recorded for future reference, providing a history of the transactions with a particular accounts payable in one compact record.

Credit sales journal

The credit sales journal records the details of all invoices issued to customers for goods provided on credit. In this case, the original invoice is issued to the customer and a copy is used to record the details in the journal.

Figure 19.6 shows a typical design for a credit sales journal, again for Waterworld Aquariums.

Figure 19.6 Credit sales journal

WATERWORLD AQUARIUMS: SALES JOURNAL					
Date	Accounts receivable	Invoice no.	Credit sale \$	GST \$	Accounts receivable \$
Sep 1	Portland Marina	2011	4 200	420	4 620
3	Sea Shanty Restaurant	2012	1 000	100	1 100
9	A Curry	2013	900	90	990
11	Portland Marina	2014	1 200	120	1 320
14	B Manta	2015	160	16	176
21	Sea Shanty Restaurant	2016	500	50	550
26	Portland Marina	2017	400	40	440
30	Totals		8 360	836	9 196

Note that the invoice numbers always run in sequence in the sales journal.

The details in the sales journal include the date, customer's name, invoice number, selling price, GST charged and the transaction's total value. Invoice numbers should always run in sequence, because the document numbers used are created by the business selling the goods.



Individual records

As with accounts payable, businesses can create individual records for accounts receivable.

Let's assume Waterworld Aquariums receives the following cash receipts.

Sep 6	Received from Sea Shanty Restaurant \$1080, discount expense \$20 (Rec. no. 101)
16	Received from Portland Marina \$4620 (Rec. no. 102)
20	Received from Portland Marina \$1290, discount allowed \$30 (Rec. no. 103)
24	Received from A Curry \$990 (Rec. no. 104)

Figure 19.7 shows the individual accounts receivable records for Waterworld Aquariums, which include both the transactions in the credit sales journal and these cash receipts.

Figure 19.7 Individual records for accounts receivable

ACCOUNTS RECEIVABLE RECORD: PORTLAND MARINA

Date	Details	Document no.	Amount \$	Balance \$
Sep 1	Credit sale/GST	Inv. 2011	4 620	4 620
11	Credit sale/GST	Inv. 2014	1 320	5 940
16	Cash received	Rec. 102	4 620	1 320
20	Cash received/Discount expense	Rec. 103	1 320	Nil
26	Credit sale/GST	Inv. 2017	440	440

ACCOUNTS RECEIVABLE RECORD: SEA SHANTY RESTAURANT

Date	Details	Document no.	Amount \$	Balance \$
Sep 3	Credit sale/GST	Inv. 2012	1 100	1 100
6	Cash received/Discount expense	Rec. 101	1 100	Nil
21	Credit sale/GST	Inv. 2016	550	550

ACCOUNTS RECEIVABLE RECORD: A CURRY

Date	Details	Document no.	Amount \$	Balance \$
Sep 9	Credit sale/GST	Inv. 2013	990	990
24	Cash received	Rec. 104	990	Nil

ACCOUNTS RECEIVABLE RECORD: B MANTA

Date	Details	Document no.	Amount \$	Balance \$
Sep 14	Credit sale/GST	Inv. 2015	176	176

Managing accounts receivable

These records provide a clear summary of transactions relating to each individual credit customer. This makes it easy to see which customers haven't made a payment in the last month, or which ones have paid their accounts in full.

If an accounts receivable hasn't made a recent payment or has exceeded the credit terms noted on the invoice, the owner or manager must follow up. They should never assume that accounts receivable will pay on time, no matter who they are.

19.3 Other credit concerns



As well as the accounts payable and accounts receivable records, a trading business that uses or offers credit must maintain several other reports and records.

Modifying cash journals for discounts

If a business receives a discount from a supplier (discount revenue) or allows a discount to its accounts receivable (discount expense), it must record these items when the transaction takes place.

- Discount revenue occurs when a prompt payment is made to a supplier.
- Discount expense occurs when a credit customer pays within the discount period.

As both items occur when a cash transaction takes place, it makes sense to note them in the cash journals. The two cash journals can be modified slightly to record account discount revenue and discount expense. To demonstrate this, consider two transactions you saw earlier in the chapter.

Waterworld Aquariums received a discount for one of its credit payments.

Aug 4	Paid Northern Aquarium Supplies \$2600 and received a discount of \$40

This can be noted by adding a column to the cash payments journal.

WATERWORLD AQUARIUMS: CASH PAYMENTS JOURNAL (WITH COLUMN FOR DISCOUNT REVENUE)								
Date	Details	EFT no.	Total paid \$	Discount revenue \$	Accounts payable \$	Inventory \$	Sundry payment \$	GST paid \$
Aug 4	Northern Aquarium Supplies	EFT 23	2 600	40	2 640			

Note that the actual amount of cash paid must be recorded in the 'Total paid' column. If a discount was granted, this should be shown under 'Discount revenue'. The total effect on the supplier's account is then listed in the 'Accounts payable' column.



Waterworld Aquariums also provided a discount to one of its credit customers.

Sep 6	Received from Sea Shanty Restaurant \$1080, discount expense \$20

Again, this can be noted by adding a column to the cash receipts journal.

WATERWORLD AQUARIUMS: CASH RECEIPTS JOURNAL (WITH COLUMN FOR DISCOUNT EXPENSE)

Date	Details	Receipt no.	Amount banked \$	Discount expense \$	Accounts receivable \$	Cash sales \$	Sundry receipts \$	GST received \$
Sep 6	Sea Shanty Restaurant	Rec 213	1 080	20	1 100			

When cash is received from an accounts receivable, record their name in the receipts journal. This can then be used to update their individual record.

The actual amount of cash that has changed hands is shown in the 'Amount banked' column. If a discount has been granted to an accounts receivable, it should be shown under 'Discount expense', as the business has made an economic sacrifice and doesn't collect this amount in cash. The total effect on the customer's account should then be recorded in the 'Accounts receivable' column.

Purchases returns and sales returns

Chapter 17 introduced the concepts of sales returns and purchases returns in relation to inventory cards. Transactions involving returns also affect the individual records for accounts receivable and accounts payable.

In the case of purchases returns, the amount owing to suppliers will be decreased when a credit note is issued. Consider the following example for Ironclad Locks & Security.

Jul 1	Bought inventory from Wholesale Locks on credit. Invoice 312 for \$500, plus GST.
2	One of the locks purchased on 1 July was found to be faulty and was returned for credit. The lock cost \$50, plus GST. Credit note 68 was received from Wholesale Locks.
31	Paid Wholesale Locks the balance of their account via EFT.

The individual record for Wholesale Locks would appear as follows.

ACCOUNTS PAYABLE RECORD: WHOLESAL LOCKS

Date	Details	Document no.	Amount \$	Balance \$
Jul 1	Credit purchase/GST	Inv. 312	550	550
2	Purchases return/GST	Credit note 68	55	495
31	Cash payment	EFT 76	495	Nil

Credit notes may also be issued to accounts receivable if they return unsatisfactory goods. In this case, the entry becomes a sales return and the effect of the transaction is to decrease the individual accounts receivable.

Again, consider this example for Ironclad Locks & Security.

Aug 1	Sold 5 Mighty Tuff locks to Yarraville High School for a total of \$600, plus GST (Invoice 87).
2	Yarraville High School returned one lock, as it was faulty. The business issued a credit note for \$120, plus GST, as no more Mighty Tuff locks were in inventory at the time (Credit note 52).
31	Yarraville High School paid the amount owing via EFT.



The individual record for the relevant accounts receivable would look like the following.

ACCOUNTS RECEIVABLE RECORD: YARRAVILLE HIGH SCHOOL

Date	Details	Document no.	Amount \$	Balance \$
Aug 1	Credit sale/GST	Inv. 87	660	660
2	Sales return/GST	Credit note 52	132	528
31	Cash receipt	EFT 188	528	Nil

When recording both purchases returns and sales returns, always remember to record the GST as well as the invoice price. When an invoice is issued, it must include the GST on the sale. Similarly, when a return occurs, it must also include the invoice price and the GST. Both items should always be included in the individual record for accounts receivable and accounts payable.

Account schedules

When a balance sheet is being prepared, the total amount owing to the business by accounts receivable must be listed under 'Current assets'. Similarly, the total amount the firm owes to accounts payable must be listed under 'Current liabilities'. If a business is using a system of individual records for its accounts receivable or accounts payable, a summary of these records is required.

An accounts receivable schedule is a listing of all accounts receivable, with their amounts owing at a particular date. An accounts receivable schedule for Waterworld Aquariums would be prepared as follows.

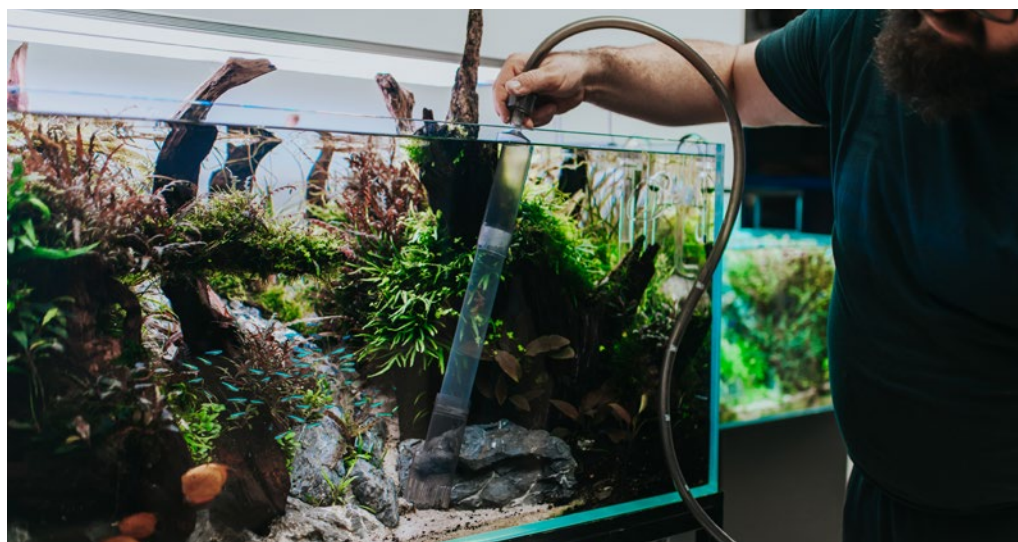
ACCOUNTS RECEIVABLE SCHEDULE AS AT 30 SEPTEMBER 2028

Portland Marina	\$440
Sea Shanty Restaurant	550
B Manta	176
Total amount owing	\$1166

The total amount owing by accounts receivable should be reported under current assets in the balance sheet.

Therefore, in the balance sheet of Waterworld Aquariums, accounts receivable of \$1166 would be shown as a current asset as at 30 September 2028.

An accounts payable schedule can be prepared in a similar way from the accounts payable records to show a listing of all accounts payable, with the amounts owing to them at a particular date.



Accounts receivable, accounts payable and the GST

As with a service business, there are four types of transactions that may impact on the GST debt of a business. These are:

- GST collected by a business on its cash sales
- GST paid by a business on its cash payments
- GST charged to accounts receivable when credit sales are made
- GST charged by suppliers when credit purchases are made.

When a business owner completes their business activity statement (BAS), they must determine their overall GST situation. Consider the following example.

GST collected on cash sales (from cash receipts journal)	\$1400
GST charged to accounts receivable on credit sales (from credit sales journal)	800
Total charged to customers	2200
GST paid on cash payments (from cash payments journal)	600
GST charged by accounts payable (from credit purchases journal)	400
GST charged by all suppliers	\$1000

The GST paid to and charged by suppliers is deducted from the GST collected from and charged to customers to determine the overall GST debt the business owes to the government.

The net result from the above would be:

GST charged to customers	\$2200
Less: GST charged by suppliers	1000
GST debt owing to the taxation office	\$1200

If the GST paid to suppliers exceeds the GST charged to customers, the business would be entitled to a GST refund. Both situations are allowed for when preparing the BAS.



19.4 Accounts receivable and payable turnover

Anyone managing a small trading business must control its inventory, accounts receivable and accounts payable. Failure to manage and control these areas will likely cause the business to fail. A business's success will depend on its ability to buy and sell inventory at a fast enough rate, and to manage the balancing act between collecting cash from accounts receivable and paying it to accounts payable.

Accounts receivable turnover

Once inventory has turned into sales, a business must collect the cash owed to it from accounts receivable. A business's ability to collect debts from credit customers will impact its success. If goods are sold for cash, the collection of the sales revenue happens immediately. However, when goods are sold on credit, the customer is typically allowed 30–60 days to settle their account.

Accounts receivable turnover is a measure of management's effectiveness in collecting the credit sales of the business. It measures, in days, the average time taken to actually collect the cash from accounts receivable. Note that this indicator only considers sales made on credit, as cash sales don't affect accounts receivable.

The accounts receivable turnover rate is calculated by dividing the average amount owing by accounts receivable by the credit sales for the period (including GST) and multiplying the result by 365 (the number of days in a year).

accounts receivable turnover
a financial indicator that shows the average time taken by accounts receivable to settle their accounts

EXAMPLE 19.1

Tempest Tech provides the following data for its accounts receivable in the 2027/28 reporting period.

Total accounts receivable as at 1 July 2027	\$14 000
Total accounts receivable as at 30 June 2028	\$16 000
Credit sales for the year ended 30 June 2028	\$150 000
GST charged on credit sales	\$15 000

$$\begin{aligned}
 \text{Accounts receivable turnover} &= \frac{\text{Average accounts receivable}}{\text{Net credit sales + GST}} \times 365 \\
 &= \frac{\left(\frac{\$14\,000 + \$16\,000}{2} \right)}{\$150\,000 + \$15\,000} \times 365 \\
 &= \frac{\$15\,000}{\$165\,000} \times 365 = 33.18, \text{ or } 33 \text{ days}
 \end{aligned}$$

As this indicator is based on an average of accounts receivable, it's acceptable to round the final result off to the nearest whole number.

This financial indicator shows that Tempest Tech took an average of 33 days to collect its debts from accounts receivable. Note that the indicator is based on an average. This means that some customers would have taken less than 33 days to pay their accounts, while others may have taken much longer.

Evaluating accounts receivable turnover

In order to evaluate its accounts receivable turnover, a business needs to consider the following:

- the credit terms it extends to its customers
- the trend in the ratio over the last few periods
- the budgeted, or desired, rate as set by management.

There is little point in comparing an accounts receivable turnover to any industry benchmark. As management determines the credit terms, it also has control over the payment of accounts receivable.

If a business owner grants credit terms of 30 days to credit customers, they may be satisfied with an average collection period of 30–35 days. Another business owner may be satisfied with a range of 30–40 days. However, most managers wouldn't be pleased with an average collection period of 60 days if the credit terms issued were only 30 days! Such a result is a warning that management has poor control over accounts receivable and isn't following up on overdue accounts.

The trend in this ratio is important. If the average collection period is always increasing, the firm needs to review its credit control procedures. Steps that a firm can take to reduce its average collection period include:

- offering discounts for accounts settled early
- sending reminders to overdue customers by phone or email
- sending copies of invoices to slow payers as a reminder
- issuing monthly statements with stickers indicating 'payment now due'
- making threats of legal action in the case of very late accounts
- employing a debt collecting agency
- threatening not to provide credit in the future.

Accounting for bad debts

Accounts receivable turnover can be used to measure management's effectiveness in collecting debts from credit customers. However, some debts can remain unpaid for a long period of time or may never be collected.

Some accounts receivable may just disappear and never respond to follow-up procedures. People who find themselves in financial trouble may move interstate or even overseas to avoid paying their debts. Others may be declared bankrupt through the court system, and their debts written off as irrecoverable – that is, the business owner is never going to receive the money the customer owes and suffers a loss as a result.

Keep in mind that accounts receivable are classified as assets, as they are expected to have future economic benefits for the business. If these benefits aren't going to be received and the account is written off, the business now has an expense instead of an asset. When this happens, the customer being written off is known as a **bad debt**.

bad debt an accounts receivable that is written off as an uncollectable debt, possibly due to bankruptcy

EXAMPLE 19.2

C Chance, a customer of Tempest Tech, hasn't made a payment for more than 12 months. Emails and letters have gone unanswered, so the owner of Tempest Tech has finally written off the account as a bad debt.

ACCOUNTS RECEIVABLE RECORD: C CHANCE

Date	Details	Document no.	Amount \$	Balance \$
1 Jul 2027	Credit sale/GST	Inv. 184	3300	3300
1 Sep 2027	Cash received	Rec. 345	300	3000
31 Dec 2028	Bad debts	Memo 25	3000	Nil

As the business isn't going to collect all the money owed to it, the bad debts amount is treated as an expense item and therefore will decrease net profit.

A bad debt should be noted on an office memo (Memo 25, in this case). Once the bad debt entry is made in the record of the accounts receivable, a zero balance is shown. The business should then report the value of the bad debt (\$3000, in the above record) in its income statement as an expense. This entry reduces the profit reported for the period.

Partial repayment of bad debts

If a credit customer disappears without trace, the entire amount owing is written off as a bad debt. However, when a person is declared bankrupt, the courts may decide that they do have some assets and these assets should be sold off. The funds generated are then divided among all the debts the person owes. The result is expressed as something like: *All debts will be paid at the rate of 10 cents in the dollar*. That is, individuals and businesses owed money will receive 10% of the amount owing, with the other 90% being written off as a bad debt.

EXAMPLE 19.3

If C Chance paid 10 cents in the dollar, this should be recorded first, followed by the bad debt entry. As \$3000 remains unpaid, 10% of \$3000 would be received in cash – that is, \$300.

This means that \$2700 is still unpaid and this amount would then be written off as a bad debt.

The record would be prepared as follows.

ACCOUNTS RECEIVABLE RECORD: C CHANCE

Date	Details	Document no.	Amount \$	Balance \$
1 Jul 2027	Credit sale/GST	Inv. 184	3300	3300
1 Sep 2027	Cash received	Rec. 345	300	3000
31 Dec 2028	Cash received	Rec. 422	300	2700
31 Dec 2028	Bad debts	Memo 25	2700	Nil



accounts payable turnover
a financial indicator that shows the average time a business takes to settle its accounts with suppliers

Accounts payable turnover

Accounts payable turnover may be calculated in a similar way to accounts receivable turnover. This financial indicator evaluates how well accounts payable are managed and calculates the average time (in days) taken to settle accounts with suppliers. Instead of credit sales, credit *purchases* for the period are used, and this figure is compared to the average amount owed to the firm's accounts payable.

Note that this financial indicator only considers those purchases made on credit, as cash purchases don't affect accounts payable.

EXAMPLE 19.4

Tempest Tech provides the following data for its accounts payable in the 2027/28 reporting period.

	2027	2028
	\$	\$
Credit purchases		50 000
GST on credit purchases		5 000
Total accounts payable	6 000	5 000

$$\begin{aligned}\text{Accounts payable turnover} &= \frac{\text{Average accounts payable}}{\text{Net credit purchases} + \text{GST}} \times 365 \\ &= \frac{\left(\frac{\$6\,000 + \$5\,000}{2} \right)}{\$50\,000 + \$5\,000} \times 365 \\ &= \frac{\$5\,500}{\$55\,000} \times 365 = 36.5, \text{ or } 36 \text{ days}\end{aligned}$$

Accounts payable turnover may be compared to the accounts receivable turnover. When managing cash in a small business, it is important to balance the time taken to complete the collection of cash with the time taken to settle with accounts payable. At times, management may have to extend the accounts payable turnover simply because it's unable to collect cash on time from accounts receivable.

Things to consider when interpreting results of the accounts payable turnover include:

- credit terms offered by suppliers
- previous periods' results (i.e. the trend)
- management's expectations or budget objectives.

A business owner should take great care when dealing with accounts payable. Some suppliers may tolerate an occasional late payment, but generally they won't be happy if their credit terms are continually abused. If this happens, the supplier may decide not to provide a credit facility to a business in the future, or even refuse to sell to it at all. This may be very damaging to a business, particularly if the supplier's products are a fast-moving inventory item.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [19.1]** A credit transaction is one where goods are supplied immediately but payment follows at a later date. An invoice is the source document used to inform a customer of the cost of a credit transaction. Accounts receivable are the credit customers who owe a business money; accounts payable are suppliers that the business owes money to for their goods or services.
- [19.2]** In single entry accounting, subsidiary records are used to keep track of credit accounts. The purchases journal is used to keep all of a business's credit purchases together in one record. The sales journal is used to keep all of a business's credit customers together in one record.
- [19.3]** If a business receives a discount from a supplier (discount revenue) or allows a discount to its accounts receivable (discount expense), these items must be recorded when the transaction takes place. The two cash journals can be modified with an additional column to record discount revenue and discount expense.
- [19.3]** Transactions involving returns affect the individual records for accounts receivable and accounts payable. In the case of purchases returns, the amount owing to suppliers will decrease; for sales returns, the individual accounts receivable decreases. Schedules of accounts receivable and accounts payable summarise all account balances for entering into the balance sheet.
- [19.4]** Accounts receivable turnover is a measure of how long it takes to actually collect cash from accounts receivable. Some accounts receivable may vanish or go bankrupt, and these are usually written off as bad debts, which are an expense. Accounts payable turnover is the average time (in days) taken to settle accounts with suppliers.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Calculating discounts

For each of the following situations, state the amount of cash paid to the accounts payable and the discounts received.

- a** A \$100 purchase on 4 June 2028 on credit terms of 5/7, n/30. Payment was made on 7 June 2028.
- b** Invoice for \$200 dated 14 July 2028, with credit terms of 2/30, n/60. Payment occurred on 1 August 2028.
- c** On 8 August 2028, goods were purchased for \$350 on terms of 5/14, n/30. The invoice was paid on 25 August 2028.
- d** On 11 September 2028, an invoice was received for materials purchased. The total cost was \$180 and the terms were 2/30, n/60. The account was settled on 8 October 2028.



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2 Accounts payable

The following credit purchases were made by Gifts Galore during September 2028.

Sep 2	Bought inventory on credit from Rosa's Rings. Invoice no. 401: \$600, plus \$60 GST
5	Credit purchase from Kitchens Plus \$250, plus \$25 GST: Invoice no. 8234
9	Received Invoice no. 924 from Galaxy Games for goods purchased, a total of \$440, including GST of \$40
13	Bought goods on credit from Rosa's Rings for \$210, plus \$21 GST: Invoice no. 445
19	Received Invoice no. 945 for \$230 worth of goods, plus \$23 GST, purchased from Galaxy Games
22	Some of the goods received on 19 September were damaged. These goods were returned to Galaxy Games and Credit note no. 11 was received for \$30, plus \$3 GST
24	Rosa's Rings supplied inventory. Invoice no. 476 received for a total of \$220, plus GST of \$22

- a** Enter the above transactions in a credit purchases journal.
- b** Transfer the information into individual records for accounts payable.
- c** Prepare an accounts payable schedule as at 30 September 2028.

3 Accounts payable

The owner of Balwyn Bats & Balls supplies the following information in relation to the firm's accounts payable.

Credit purchases:			GST
Nov	1	Invoice no. 124 received from Ace Tennis Supplies for \$350	\$35
	5	Doncaster Sports provided Invoice no. A834 for \$340	34
	10	Ace Tennis Supplies, \$420 (Inv. no. 138)	42
	13	Invoice no. 152, from Ace Tennis Supplies, for \$430	43
	17	\$980 from Kooka Sports: Invoice no. 3912	98
	25	Doncaster Sports, Invoice no. A867, for \$780	78
Payments to accounts payable:			
Nov	11	Paid Ace Tennis Supplies Co. via EFT \$385	
	16	EFT payment approved for Doncaster Sports \$374	
	23	Paid Kooka Sports \$500 via EFT	
	31	Bank transfer completed for EFT to Ace Tennis Supplies \$442	

- a Prepare a credit purchases journal for November 2028.
- b Record both the credit purchases and cash payments in the individual records for accounts payable. (All entries must be in chronological sequence.)
- c Prepare an accounts payable schedule as at 30 November 2028.

4 Accounts receivable

Lilydale Laptops provides its goods to regular customers on credit.

The following credit transactions occurred during August 2028.

Aug	1	Invoice no. 206 issued to Craigieburn College for goods provided. The total amount charged was \$4400, including \$400 GST
	4	\$1500 for a credit sale, plus \$150 GST. Invoice no. 207 issued to L Hanna CPA
	8	Emailed Invoice no. 208 to L Simpson for credit sale of \$2300, plus \$230 GST
	11	Craigieburn College charged \$3300, including GST (Inv. no. 209)
	18	L Hanna CPA billed for \$1500 plus \$150 GST, Invoice no. 210
	22	Charged Craigieburn College \$2950, plus \$295 GST, by issuing Invoice no. 211
	29	Invoice no. 212 was sent to Kew College for a total of \$4730, including GST
	31	Kew College sent one laptop back to Lilydale Laptops and a credit note was issued for \$1200, plus \$120 GST (Credit note 142)

- a Enter the relevant transactions from above into a credit sales journal for Lilydale Laptops.
- b Post the information to individual records for accounts receivable.
- c Prepare an accounts receivable schedule as at 31 August 2028.



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5 Accounts receivable

Five-Star Comics & Novels supplies the following information regarding transactions with accounts receivable in September 2028.

Credit sales charged to accounts receivable:			GST
Oct	1	Invoice no. 539 to Spotswood TAFE, for \$580	\$58
	3	To Coburg Library, Invoice no. 540 for \$490	49
	7	Invoice no. 541 to K Norton for \$150	15
	12	Spotswood TAFE, Invoice no. 542, for \$1400	140
	17	Spotswood TAFE, Invoice no. 543, for \$1800	180
	21	Coburg Library, Invoice no. 544, for \$290	29
	24	Invoice no. 545, to J West, for \$160	16
	28	Spotswood TAFE, Invoice no. 546, for \$680	68
	31	Invoice no. 547, to Coburg Library, for \$270	27
Cash receipts from accounts receivable:			
Oct	10	Received from Coburg Library \$539 via EFT	
	13	Spotswood TAFE paid \$638 (Rec. 901)	
	16	Received from K Norton \$150 by EFT	
	21	Receipt no. 902 issued to Spotswood TAFE for \$700	

- Record the credit sales for October in a suitably designed credit sales journal.
- Enter both the credit sales charged to accounts receivable and the cash received from accounts receivable in individual records for accounts receivable. (All entries must be in sequence.)
- Prepare an accounts receivable schedule as at 31 October 2028.
- Explain why the document numbers in the sales journal run in sequence.



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6 Accounts payable and accounts receivable

The following transactions relate to a small business trading as Kitchen & Cellar Catering Supplies.

Nov	1	Invoice no. 234 issued to Berwick Hotel for \$560, plus \$56 GST
	4	Received Invoice no. 101 from Olinda Knife Co. \$1940, plus GST of \$194
	6	Invoiced Berwick Hotel \$275 (including \$25 GST): Invoice no. 235
	9	Charged Ferntree Motel \$380, plus \$38 GST: Invoice no. 236
	11	Received Invoice no. 313 from Wholesale Glassware for \$550, including \$50 GST
	12	Received \$616 from Berwick Hotel via EFT
	16	Invoiced Olinda Pasta Bar \$380, plus \$38 GST: Invoice no. 237
	18	Made an EFT to Olinda Knife Co. for \$1000
	21	Charged Ferntree Motel \$270, plus \$27 GST: Invoice no. 238
	23	Purchased inventory on credit from Olinda Knife Co.: Invoice no. 129 \$960, plus \$96 GST
	25	Received \$275 through EFT from Berwick Hotel
	26	Paid Wholesale Glassware \$550 by EFT
	28	Invoice no. 239 to Olinda Pasta Bar, \$240, plus \$24 GST
	29	Received \$418 from Ferntree Motel via EFT
	30	Received Invoice no. 172 from Olinda Knife Co. \$310, plus \$31 GST Charged Berwick Hotel \$290 plus GST of \$29: Invoice no. 240

- Using the information provided above, enter the relevant transactions in a credit sales journal and a credit purchases journal.
- Prepare individual records for both the accounts receivable and accounts payable of Kitchen & Cellar Catering Supplies.
- Draw up an accounts receivable schedule and an accounts payable schedule as at 30 November 2028.

7 Accounts payable

The following information is a summary of the business transactions with Wholesale Toys Pty Ltd in the month of June 2028. At the start of June, this supplier was already owed \$1400.

Credit purchases:		
Jun 3	Invoice 216	\$440 plus \$44 GST
8	Invoice 223	\$360 plus \$36 GST
12	Invoice 254	\$270 plus \$27 GST
21	Invoice 276	\$450 plus \$45 GST
30	Invoice 301	\$380 plus \$38 GST
Purchases returns:		
Jun 9	Credit note 12	\$40 plus \$4 GST
22	Credit note 15	\$20 plus \$2 GST
Cash payments:		
Jun 4	EFT 827	\$1400
14	EFT 844	\$340
	Discount received	\$12
29	EFT 877	\$484
30	EFT 901	\$270

- Prepare the individual record for Wholesale Toys Pty Ltd, showing all transactions during the month of June 2028.
- Explain how *verifiability* has been satisfied in your record for this accounts payable.
- State one benefit of taking advantage of discounts for prompt payment (refer to 14 June above).
- State one disadvantage of making a prompt payment in order to get a discount.

8 GST: Refund or debt?

Gail Turner has the following events take place in her business during July 2028.

GST collected on cash transactions	\$2 900
GST paid on cash payments	\$1 450
GST charged by suppliers on credit purchases	\$1 150

Considering the above information, does Turner owe the taxation office in relation to the GST or is she owed a tax refund? Explain fully.

9 GST: Refund or debt?

On 1 October 2028, Laz Vassiliadis owed the taxation office \$290 as a result of GST transactions in his business. During October, he experienced the following events in his business.

GST charged by suppliers on credit purchases	\$950
GST charged to accounts receivable on credit sales	\$880
GST paid on cash payments	\$850
Cash payments not attracting GST	\$6 200
GST received on cash sales of inventory	\$580
Cash receipts not attracting GST	\$9 000

- Calculate the GST debt or GST refund due as at 31 October 2028.
- How would you classify your answer to part **a** in the balance sheet of Vassiliadis's business? Explain your answer.



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10 Accounts receivable and accounts payable

Designer Jeans is a retail store that buys inventory on credit and allows credit to trusted customers. Discounts are granted to customers who settle their accounts quickly.

On 1 November 2028, the following amounts were already owed by accounts receivable: D Jones \$200, J Douglas \$90 and B Trouble \$450. The following events take place during November 2028.

Nov 2	Invoice no. 184 issued to K Stackpole for \$120, plus \$12 GST
3	Purchased inventory from Jeans Plus at a cost of \$3400, plus \$340 GST. Invoice no. 285 was received
8	D Jones paid \$194 by EFT and was granted a discount of \$6
12	Issued Invoice no. 185 to J Scholes for \$180, plus \$18 GST
13	K Stackpole paid \$127 via EFT and was allowed \$5 discount
14	Bought goods from Denim Imports for \$1400, plus \$140 GST, Invoice no. 261
16	Issued Invoice no. 186 to J Douglas for \$160, plus \$16 GST
17	J Douglas returned faulty goods and was issued credit note 21 for \$30, plus \$3 GST
19	EFT 65 to Jeans Plus \$3700 and received a discount of \$40
20	J Scholes paid \$150, Receipt no. 26
23	Charged C Kinnear \$290, plus \$29 GST, for a credit sale. Invoice no. 187
28	Paid Denim Imports by EFT 66 \$740 and received \$10 discount
30	Purchased \$1600 of goods from Jeans Plus and received Invoice no. 299 (GST charged \$160) Invoiced D Jones \$160 plus \$16 GST, Invoice no. 188 B Trouble hasn't made a payment on his account since December 2027. The owner has now received advice that Trouble has disappeared overseas and so has decided to write off the account as a bad debt (Memo 28).

- Enter the relevant transactions from the list above into a credit purchases journal.
- Prepare an extract from the cash payments journal to show how the payments on 19 November and 28 November would be recorded.
- Prepare individual records for the accounts payable, showing all entries in correct sequence.
- Select the appropriate transactions from the list above and prepare a credit sales journal.
- Prepare an extract from the cash receipts journal to show how cash received during the month would be recorded.
- Prepare individual records for the accounts receivable, with all relevant entries.
- Prepare accounts receivable and accounts payable schedules as at 30 November 2028.
- Using your credit journals, determine the GST situation of this business at the end of November 2028. Explain your answer.

11 Accounts receivable and accounts payable

Healesville Furniture is a small business that buys and sells inventory on credit. The proprietor offers discounts to accounts receivable to encourage them to settle their accounts quickly.

On 1 July 2028, the following accounts receivable were already in existence: G Smyth \$1450, R Larkin \$600, IB Gone \$900 and D Berry & Co. \$2200.

Balances owing to accounts payable at that date were: Classic Importers \$5100 and Classic Furniture \$3200.



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- Aug 1 Paid Classic Importers \$3100: EFT 42
- 2 Invoice no. 919 issued to R Larkin for \$380, plus \$38 GST
- 3 Purchased goods from Classic Furniture for \$5800, plus \$580 GST. Invoice no. 217
- 6 Sold goods to G Smyth for \$550, including \$50 GST. Invoice no. 920
D Berry & Co. paid \$1850 and was granted a discount of \$30 (Rec. 332)
- 9 Issued Invoice no. 921 to R Larkin for \$540, plus \$54 GST
- 11 G Smyth paid \$1430 and was allowed \$20 discount (Rec. 333)
- 12 Issued Invoice no. 922 to St Andrew's Secondary College for \$3800, plus \$380 GST
- 15 Bought goods from Classic Importers for \$4200 (Inv. no. 6545): GST charged \$420
- 18 Sold goods on credit to I Wrigglesworth for \$1800, plus \$180 GST (Inv. 923)
- 21 Paid Classic Importers \$3160 and received a discount of \$40 (EFT no. 43)
- 22 Issued Invoice no. 924 to St Andrew's Secondary College for \$1520, plus \$152 GST
- 23 R Larkin completed an EFT for \$600 for overdue payment
- 24 Sold goods on credit to G Smyth \$540, plus \$54 GST (Inv. 925)
- 26 Purchased inventory on credit from Oz Furniture for \$3900, plus \$390 GST (Inv. A654)
- 28 I Wrigglesworth paid \$855 on account and was allowed a discount of \$25 (Rec. 335)
- 29 Invoiced D Berry & Co. for credit sale of \$4800, plus GST of \$480 (Inv. 926)
- 30 Purchases from Classic Furniture for \$5400, plus GST of \$540 (Inv. 927)
D Berry returned goods sold for \$55, including GST. The goods supplied were the wrong colour and a full credit was granted
- 31 Sold goods on credit to G Cusack for \$3360 (Inv. 928): GST charged \$336
The owner of Healesville Furniture has been informed that one of the firm's customers, IB Gone, has been declared bankrupt and is paying all debts at the rate of 20 cents in the dollar. An EFT transfer was made on 31 August for the appropriate amount. The remainder of the account is to be written off as a bad debt.

- a** Prepare the following journals for the month of August 2028, with all relevant transactions:
- i** credit sales journal
 - ii** cash receipts journal
 - iii** credit purchases journal
 - iv** cash payments journal.
- b** Prepare individual records for accounts receivable with all relevant entries in correct sequence.
- c** Prepare individual records for accounts payable showing all entries for August.
- d** Prepare accounts receivable and accounts payable schedules as at 31 August 2028.
- e** Determine whether this business has a GST debt or is owed a GST refund at the end of August 2028 (show workings).
- f** Explain the effect a bad debt has on the:
- i** income statement
 - ii** balance sheet.



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12 Accounts receivable turnover

The total value of accounts receivable on 1 January 2028 was \$15 000, while on 31 December the total value was only \$12 000. Credit sales for the year were \$74 250, plus GST. The business offers credit customers 30 days to settle their accounts.

- Calculate the accounts receivable turnover for 2028.
- Comment on the performance of the firm in controlling its accounts receivable.
- Make a list of what the business could do to improve the present situation.



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13 Accounts receivable turnover

The following information relates to Commercial Computer Systems.

	1 Jan 28	31 Dec 28
Accounts receivable balance	\$12 000	\$16 000
Credit sales for the year – excluding GST		\$168 000
Cash sales for the year		\$152 000
Cost of sales for the year		\$174 000
Standard credit terms for accounts receivable		30 days

- Calculate accounts receivable turnover in days.
- Comment on the success of the firm in meeting its objectives with regard to the turnover of accounts receivable.



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14 Accounts payable turnover

The total value of accounts payable on 1 January 2028 was \$25 000, while on 31 December the total value was \$32 000. Credit purchases for the year were \$162 000, plus GST. The business has been provided with 30 days' credit.

- Calculate the accounts receivable turnover for 2028.
- Comment on the performance of the firm in relation to meeting its debts on time.
- Taking into account the results of the accounts payable turnover, what would be a possible response from the suppliers to this business? Explain fully.



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15 Accounts payable turnover

The following information relates to Supersonic Cleaning Products.

	1 Jan 28	31 Dec 28
Accounts payable balance	\$15 000	\$10 000
Credit purchases for the year – excluding GST		\$202 000
Cash purchases for the year		\$112 000
Standard credit terms from accounts payable		30 days

- Calculate accounts payable turnover.
- Comment on the success of the firm in meeting its obligations to its accounts payable.
- Do you think it is important to always meet the credit terms offered by suppliers? Discuss.

ETHICAL CONSIDERATIONS

The owner of Waterworld Aquariums, Mary Fisher, sells a range of aquarium products and supplies to individual and corporate customers. Over the past three years, she has bought inventory from 10 different suppliers who operate out of Melbourne and the surrounding area.

Lately, Fisher has become increasingly concerned about price increases introduced by her accounts payable. After extensive research, she has discovered that she can save up to 20% on the cost prices if she buys overseas, rather than using the Melbourne suppliers. She has asked for your advice as to what she should do.

- a** Should Fisher be concerned about buying from overseas? Describe any disadvantages of the proposed idea.
- b** Some business owners suggest that you should always support local industries. Do you agree? Discuss.
- c** What would you do if you were in Fisher's situation? Are there any concerns that you have about buying inventory from other countries? Discuss fully.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

An item may be reported as inventory for one business, but the same item could be reported as a non-current asset for another business.

Explain how this is possible.

Question 2 (4 marks)

Many retail businesses record inventory losses.

State and explain two events that may lead to an inventory gain being recorded.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 20

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Income statements for a trading business

In this chapter, you will revisit the income statement, then learn how to design and prepare one for a trading business. You will also explore ways of presenting the information from such statements in different formats – in particular, graphs and charts.

Learning objectives

By the end of this chapter, you will be able to:

- **prepare** an income statement for a trading business [20.1]
- **distinguish** between gross profit and net profit [20.1]
- **distinguish** between cost of goods sold and cost of sales [20.2]
- **use** various means of presenting performance data, including graphs [20.3]
- **evaluate** the results reported by an income statement [20.4]
- **calculate** and **interpret** financial indicators such as return on owner's investment [20.4]

KEY TERMS

Net sales
Cost of goods sold
Cost of sales
Cartage
Net profit margin
Return on owner's investment (ROI)

PRIOR KNOWLEDGE

CHAPTER 1 Let's go accounting!

CHAPTER 8 Income statements for a service firm



Estimated time required: 1 week



20.1 Revisiting income statements



Most small businesses can rely on the two cash journals as their main tool for recording transactions. They can then extract information from these cash records in summarised form to prepare an income statement at the end of the period. This is essentially the basic structure of a single entry accounting system.



Business owners extract information from their cash and credit journals, plus other relevant information, to prepare their income statements.

Income statement for a service firm

To refresh your memory before you examine income statements for a trading business, Figure 20.1 shows an income statement for a service firm.

Figure 20.1 Income statement for a service business

**CHARLIE'S CLEANING ANGELS:
INCOME STATEMENT FOR YEAR ENDED 30 JUNE 2028**

Revenue	\$	\$
Cleaning fees		90 000
Less: Expenses		
Wages	30 000	
Office expenses	4 000	
Insurance	2 000	
Advertising	1 000	
Vehicle expenses	3 000	40 000
Net profit		50 000

This report has two main parts. The revenue items are listed at the top of the report, followed by the firm's expenses items. The end result – the profit or loss for the period – is stated at the bottom of the report.

Income statement for a trading firm

The main change required when reporting for a trading business is that both *gross profit* and *net profit* should be stated in the income statement.

As a trading business has the basic function of buying and selling goods to earn its revenue, the income statement should report on these activities. The mark-up added to cost prices to determine selling prices will have a significant impact on the profit results of a trading firm.

Let's revisit some key terms in relation to trading businesses. You have seen these terms in previous chapters, but it's useful to have them all listed here again, because the income statement needs to address each of them in turn.

- **Sales:** Sales, whether cash or credit, are the main source of revenue for a trading business. The value of cash sales can be extracted straight from the cash journals. Credit sales for a period will be shown as the total of the credit sales journal.
- **Sales returns:** If some of its sales are returned, a business should report this in the income statement. Sales returns should be viewed as a negative revenue item, as they are deducted from the total sales made during the accounting period.
- **Net sales:** **Net sales** are the total sales for the period less any sales returns recorded during the same period.
- **Cost of sales:** This is the cost price of all inventory sold during the reporting period. The total cost of sales is the sum of the entries for the sales made in the 'Out' column of the firm's inventory cards (excluding inventory losses, inventory withdrawn by the owner and inventory used for advertising purposes).
- **Gross profit:** Gross profit is the difference between the sales revenue earned for a reporting period and the cost prices of the inventory sold during the period.
- **Adjusted gross profit:** The gross profit is then adjusted for any inventory losses or inventory gains to provide an adjusted gross profit figure.
- **Net profit:** The net profit figure is the final performance result for the period. Under the accrual accounting assumption, profit is the revenues earned for a period less all expenses for the same period. This provides management with a net profit result based on all the relevant transactions for the period. Thus, it satisfies the qualitative characteristic of *relevance*.

In terms of the income statement, net profit can be calculated by following the process shown in Figure 20.2.

net sales total sales for a period less sales returns

Figure 20.2
Calculating net profit

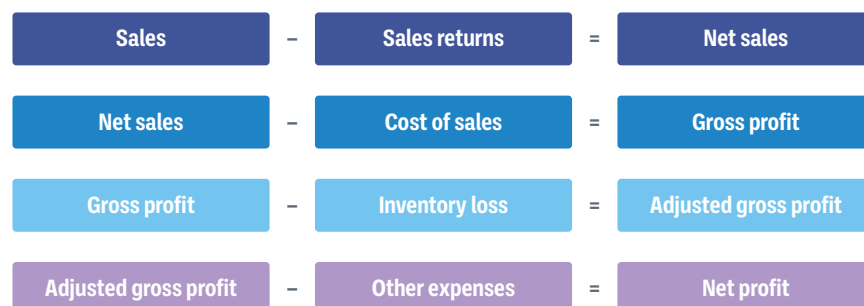


Figure 20.3 shows the layout of an income statement for a trading business.

Figure 20.3 Income statement for a trading business

CARMELINA'S GIFT SHOP: INCOME STATEMENT FOR YEAR ENDED 30 JUNE 2028			
Revenue		\$	\$
Cash sales		172 000	
Credit sales		33 000	205 000
Less: Sales returns			5 000
			200 000
Cost of sales			90 000
Gross profit			110 000
Less: Inventory loss			5 000
Adjusted gross profit			105 000
Less: Other expenses			
Wages		50 000	
Office expense		8 000	
Insurance		12 000	70 000
Net profit			\$35 000

The top section of the income statement is more complex when reporting for a trading business than for a service business.

This income statement reports on the key areas in which management would have an interest. The net sales earned by the business (\$200 000) and the gross profit made on the sales (\$110 000) are clearly stated, and the overall profit result for the year has been determined (\$35 000). These are all important factors for an owner or manager to consider at the end of a reporting period.



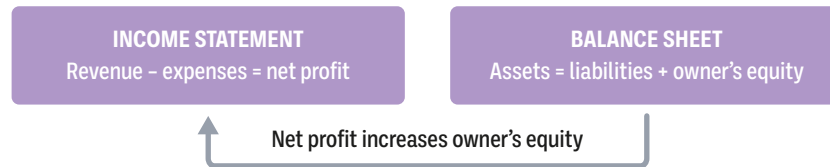
All revenues and expenses need to be considered when determining net profit at the end of a period.

Net profit and the balance sheet

The net profit figure, which is determined by preparing the income statement, is the result of deducting expenses from revenues, with a profit leading to an increase in owner's equity. The profit figure is therefore also reported as part of the balance sheet.

If a net profit is determined, it is added to owner's equity. If there is a net loss, it is deducted from owner's equity. Figure 20.4 shows this link between the two financial statements.

Figure 20.4 The income statement and the balance sheet



The relationship in this diagram is further evidence of the twofold effect of all transactions on the balance sheet.

- As revenues represent an inflow of resources, revenues will increase assets, usually through accounts receivable or cash at bank.
- Expenses, on the other hand, represent sacrifices of economic resources and will result in decreases in assets.

Therefore, the net result of all revenue and expense transactions will have an impact on two elements in the balance sheet: assets and owner's equity.

Rather than adjusting the value of owner's equity after every single transaction, the income statement acts as a summary of all revenue and expense transactions for the entire period.



20.2 Cost of goods sold versus cost of sales

cost of goods sold

all expenses incurred in getting goods into the business ready for sale

The cost price of the goods that a firm sells is deducted from its revenue in order to determine gross profit. However, sometimes a trading firm incurs other costs in getting its inventory ready to sell. An additional heading may be used in the income statement to bring all such expenses together. The heading '**Cost of goods sold**' includes all expenses incurred in acquiring inventory and preparing it for sale.

Cost of goods sold may include cost of sales, cartage inwards, packaging costs, buying expenses and customs duty.



Cost of goods sold may include such items as **cost of sales** (the cost price of inventory sold), **cartage** inwards (delivery costs into the business), packaging costs, buying expenses and customs duty (if goods are imported from overseas).

In the income statement, these items are listed together before the firm's gross profit is determined. Figure 20.5 shows an example of this layout.

cost of sales the cost price of inventory sold by a trading firm

cartage the cost of transporting inventory to or from a business

Figure 20.5 Income statement with 'Cost of goods sold' subheading

TOORAK TRADING STORE: INCOME STATEMENT FOR MONTH ENDED 30 JUNE 2028		
Revenue	\$	\$
Cash sales	8 000	
Credit sales	2 000	10 000
Less: Cost of goods sold		
Cost of sales	4 000	
Cartage inwards	500	
Buying expenses	500	5 000
Gross profit		5 000
Less: Other expenses		
Cartage outwards	200	
Wages – sales staff	2 400	2 600
Net profit		\$2 400

Cost of goods sold includes all costs incurred in buying inventory and preparing it for sale.

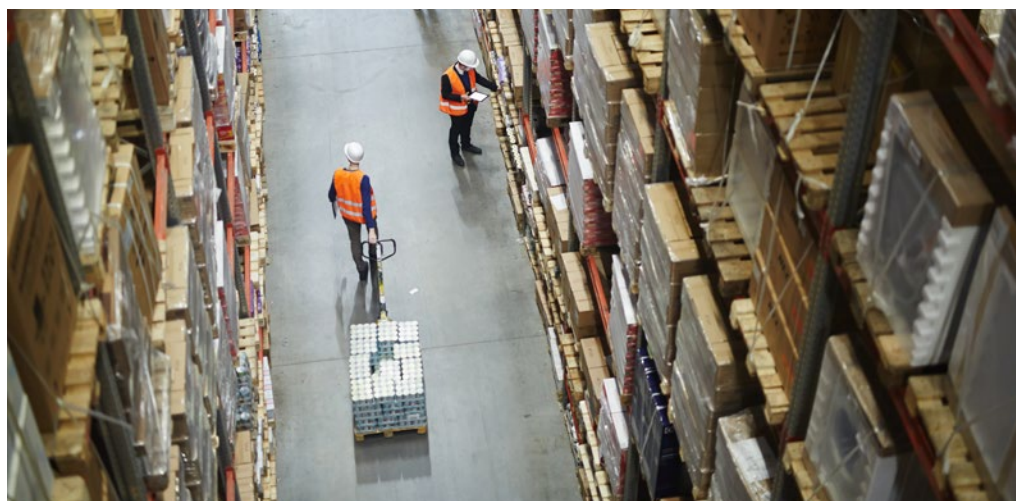
Note that in this report, the item 'Cost of goods sold' includes the actual cost of sales for the period.

Note also the two cartage items in the income statement.

- *Cartage inwards* is a delivery fee created when inventory is coming into the business
- *Cartage outwards* is an expense incurred when inventory leaves the business and is being delivered to customers.

As cartage outwards isn't created when inventory is being prepared for sale, it isn't considered part of cost of goods sold. Instead, it's listed under the 'Other expenses' heading. All other expenses are then listed in the bottom half of the report as part of this classification.

Sales staff are paid wages to help move inventory out of the business as quickly as possible. Therefore, wages of the sales team would also be listed under the 'Other expenses' heading, along with any other general expenses.



Expenses incurred in moving inventory out of a business, including sales staff wages, should all be reported under the heading of 'Other expenses'.



20.3 Presenting performance data

One of the important qualitative characteristics of accounting reports is *understandability*. Accounting information should be presented in such a way that users of the report can easily understand it.

Income statements such as those in Figures 20.2 and 20.5 can be prepared in an easy-to-read fashion, set out with headings, subtotals and all key figures suitably labelled. However, some users of financial reports find a page of numbers hard to understand.

To improve users' understanding of the statements, accountants sometimes present financial information in alternative ways, including as graphs and charts. Pie charts, line graphs and bar graphs can all be used to convey information in a clear, more easily understood fashion.

Pie charts

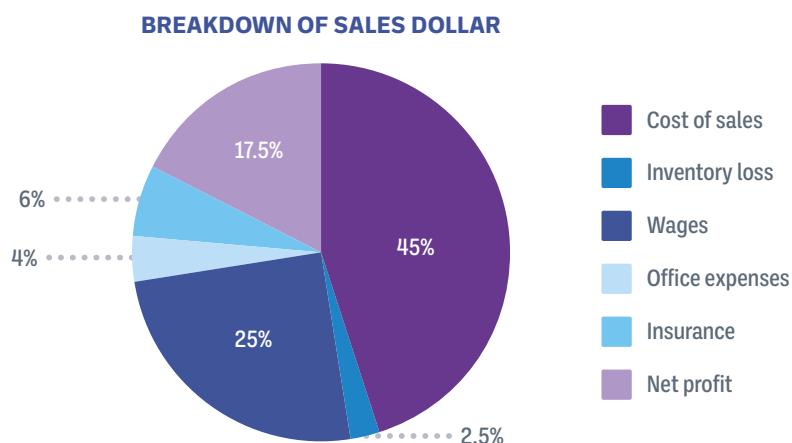
Consider the information presented in Figure 20.3, presented again here in an abbreviated form. In addition to the dollar values for each item, percentages have been included, with all the expenses being expressed as a percentage of the total sales revenue. When the dollar values are converted to percentages, it's much easier to present this data as a pie chart.

	\$	%
Net sales	200 000	100.0
Less: Cost of sales	90 000	45.0
Gross profit	110 000	55.0
Less: Inventory loss	5 000	2.5
Adjusted gross profit	105 000	52.5
Less: Wages	50 000	25.0
Office expenses	8 000	4.0
Insurance	12 000	6.0
Total expenses	70 000	35.0
Net profit	35 000	17.5

These percentages represent what happened to the average sales dollar earned by the business during the period. For example, 45% of the sales dollar was consumed by the cost price of the inventory. Another significant item was wages, which absorbed 25% of the sales revenue earned by the firm. After taking into account all expense items, this business still had 17.5% of each sales dollar remaining as net profit.

Figure 20.6 shows this information presented in a pie chart.

Figure 20.6 Pie chart showing breakdown of the sales dollar



Rather than showing details of every individual expense item, a simplified pie chart can be used that shows only summaries. For example, cost of sales and total expenses for the period are crucial figures in determining a trading business’s success. To highlight these two figures, as well as the profit for the period, an alternative pie chart can be prepared, as shown in Figure 20.7.

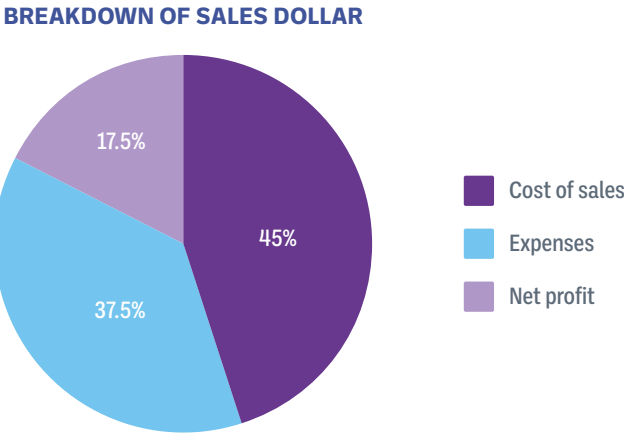


Figure 20.7 Pie chart showing breakdown of the sales dollar (summarised form)

As with all graphs, a pie chart should be designed to report on the key areas of the business. There are no set rules for graphs or charts in accounting. However, if they are going to be used to help satisfy the requirement for *understandability*, they should reveal all key information.

Figure 20.7 clearly shows that 45% of the sales dollar was consumed by cost of sales. However, because all expenses have been added together to make up a total of 37.5% of sales, the chart doesn’t identify the importance of wages. As the amount for wages was significant (\$50 000), it probably deserves its own segment in the pie chart.

Comparing consecutive periods

As pie charts can be used to show the breakdown of the sales dollar, changes in the firm’s operations over consecutive reporting periods are easy to identify.

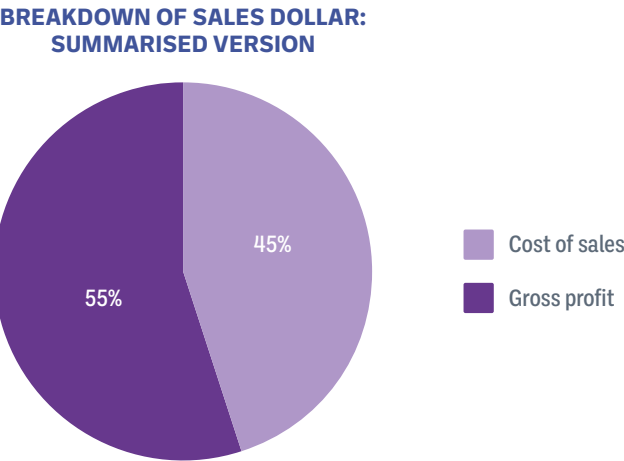


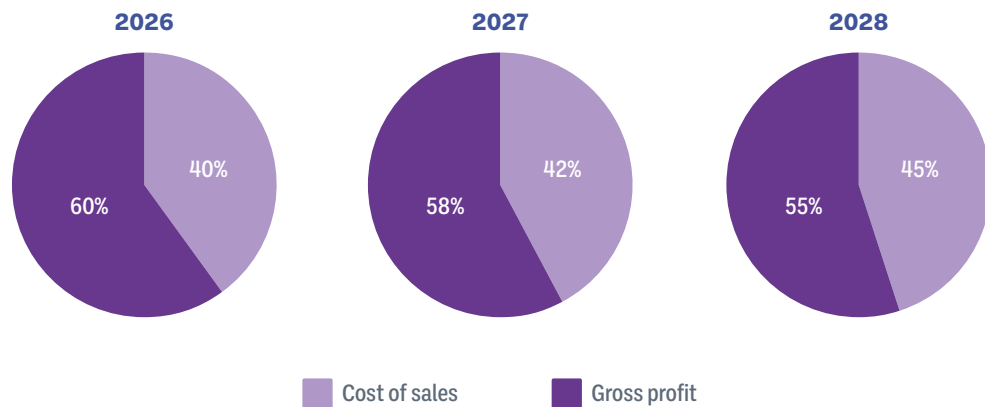
Figure 20.8 Pie chart showing cost of sales and gross profit

The pie chart in Figure 20.8 shows the breakdown of the sales dollar into two segments: cost of sales and gross profit. The chart is based on the following data.

	2026		2027		2028	
	\$	%	\$	%	\$	%
Sales	180 000	100.0	190 000	100.0	200 000	100.0
Less: Cost of sales	72 000	40.0	79 800	42.0	90 000	45.0
Gross profit	108 000	60.0	110 200	58.0	110 000	55.0

The three-year comparison in Figure 20.9 in dollar terms may not show exactly what has happened in this business. However, presenting the data graphically in percentage terms gives us a clearer picture.

Figure 20.9
Comparative pie charts
over consecutive
reporting periods



These graphs show that the percentage of sales that remains as gross profit has been shrinking over the three years.

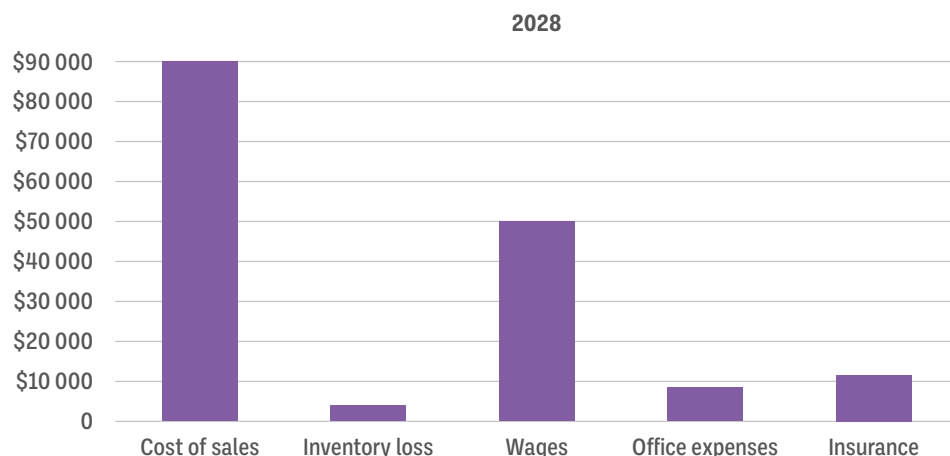
A very useful aspect of graphs in accounting is that changes can be identified easily, particularly if graphs have a consistent design, and colour or shading is used to good effect. Most people can identify such changes when information is presented graphically, even if they don't fully understand accounting reports. This clearly helps to satisfy the requirement for *understandability*, as the graphs help get the message across to the users of the report, which is the basic task of those who prepare reports.

Other graphs

Other graphs and charts may also be used to convey accounting information. Bar graphs, for example, allow for easy comparison of the various expense items incurred by a business.

Using the data previously provided for Carmelina's Gift Shop (see Figure 20.3), the expenses of this business could be presented as shown in Figure 20.10.

Figure 20.10 Bar graph
showing comparative
spending on expense
items



A variation of a bar graph is a stacked graph. This type of graph easily compares the revenue and expenses of a business. One part of the graph shows the firm's revenue, which can be broken down into credit and cash sales. The other half can be divided into segments representing all the expense items, plus one section showing net profit.

Figure 20.11 is an example of a stacked graph using data from Carmelina's Gift Shop.

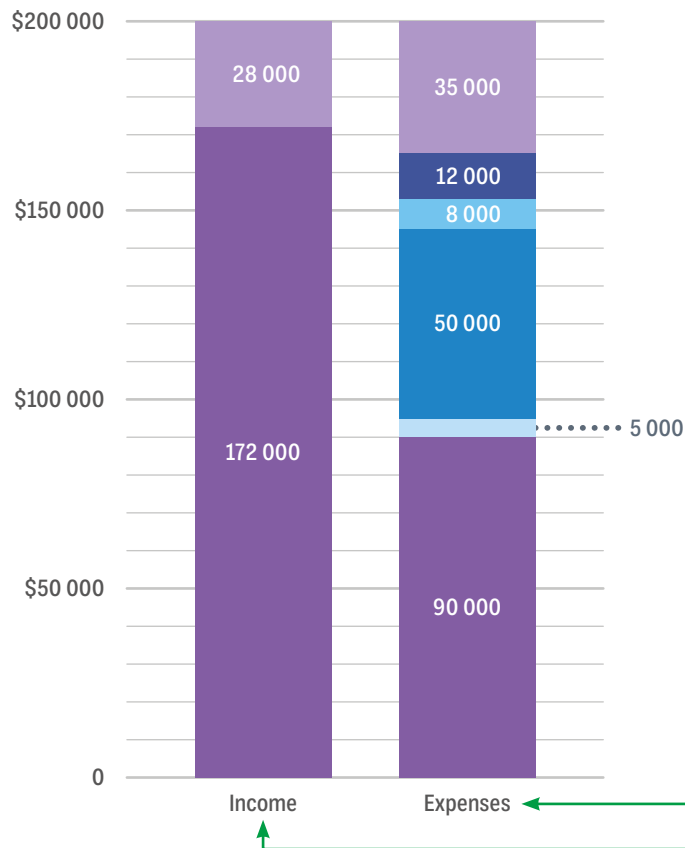


Figure 20.11 Stacked graph of revenues and expenses

Net profit \$35 000,
Insurance \$12 000,
Office expenses \$8 000;
Wages \$50 000;
Inventory loss \$5 000;
Cost of sales \$90 000

Credit sales \$28 000 and
Cash sales \$172 000

Always remember that one function of accounting is to convey information to the users of financial reports. If charts or graphs can show information more clearly than a page of numbers, accountants should view them as a useful additional tool.

20.4 Evaluating an income statement



Chapter 13 examined the evaluation of income statements for service businesses, and how to determine a final profit result. Managers of trading businesses can use their income statements in similar ways, but potentially draw additional information from them.

As with a service business, the first point to keep in mind is the length of the accounting period, which is stated in the heading of the report. Profit results need to be evaluated in the context of that period.

Performance benchmarks

In addition to the period covered, there are several financial benchmarks that management can use to evaluate performance (see Figure 20.12).

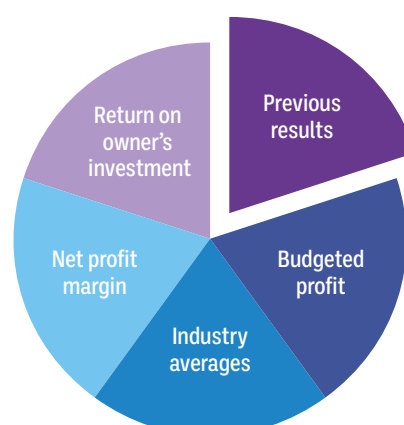


Figure 20.12 Performance benchmarks for a trading business

Business owners should consider a range of benchmarks when evaluating their profit results.

Comparing profit to previous results

This type of comparison provides management with a *trend* in the profit results over time. The trend may indicate an improved performance, or perhaps a declining profit. The results from several consecutive periods may provide the owner with a better idea of performance than just one period's results.

Consider the profit results of the two firms shown below.

Net profit results:	2024 \$	2025 \$	2026 \$	2027 \$	2028 \$
Business A	2 000	8 000	16 000	28 000	48 000
Business B	90 000	78 000	65 000	56 000	48 000

If the year 2028 is examined in isolation, the simple conclusion is that the two businesses earned the same net profit. However, when the trend is taken into account, a different picture emerges. Business A has been improving its profit every year, while Business B's profit has been steadily declining. Trends over time should always be considered, rather than only looking at one period, as they may help to predict the likely future results of a business.

Budgeted (or expected) profit

The past trend in a firm's profit results may be used to evaluate performance. However, even if profit has improved compared to previous results, it may still be unacceptable if it didn't meet management's expectations. Referring to Business A in the example above, the budgeted profit for 2028 might have been \$52 000. Even though the business increased its profit to \$48 000 from the previous year, if the target for the period was \$52 000, management may be disappointed.

Industry averages

An accountant may be able to advise a business owner as to how their business's financial performance compares to that of other similar businesses. If industry statistics are available, an owner can evaluate their business against the industry average. Is the business performance better than most? Has the business been falling behind in the last few years?

Net profit margin

net profit margin

the percentage of sales revenue left as profit after all expenses have been taken into account

The **net profit margin** (also known as the return on sales ratio) is a financial indicator that compares the net profit for a period to the amount of sales revenue generated. It determines the percentage of the sales dollar that remains after all expenses have been taken into account.

$$\text{Net profit margin} = \frac{\text{Net profit}}{\text{Net sales}}$$

For example, if a business has total sales of \$50 000 and net profit was \$5000, the net profit margin would be:

$$\frac{\text{Net profit}}{\text{Net sales}} = \frac{\$5000}{\$50\,000} = 10\%$$

This shows that 10% of the sales dollar was ultimately earned as net profit; that is, out of every sales dollar earned, 10 cents was profit. If expenses increase and selling prices remain the same, the net profit margin will decrease. This will happen because expenses are using up more of the sales dollar. The reverse of this is also possible: if selling prices increase and expenses remain constant, the net profit margin will increase.

Return on owner's investment

The **return on owner's investment (ROI)** compares the profit earned by the business to the funds (capital) contributed by its owner. It is calculated as follows:

$$\text{Return on owner's investment} = \frac{\text{Net profit}}{\text{Average capital}}$$

return on owner's investment (ROI) the return earned on the funds invested by a business owner

Most small business owners invest their capital in order to maximise their return. They could put their money into term deposits in a bank and have a secure, low-interest return. When they go into business the risks are greater, but so too are the potential rewards. A proprietor can use the ROI to evaluate whether it is still worthwhile to continue with their business investment.

Consider the following example for Bay & Creek Fishing Store.

Capital as at 1 January 2028	\$70 000
Capital as at 31 December 2028	90 000
Net profit for 2028	20 000

$$\begin{aligned} \text{Return on owner's investment} &= \frac{\text{Net profit}}{\text{Average capital}} \\ &= \frac{\$20\,000}{\left(\frac{\$70\,000 + \$90\,000}{2} \right)} \\ &= \frac{\$20\,000}{\$80\,000} = 0.25 : 1, \text{ or } 25\% \end{aligned}$$

This shows that for every dollar the owner invested, they earned a return of 25 cents. In order to compare the return with other possible investments, it may be simply stated that the owner has earned a return of 25% per annum.

Note that, in the above calculation, an average was determined for the owner's capital. An owner may contribute additional funds during a reporting period or may withdraw assets. Rather than using owner's capital at the start or end of the period, an average figure is usually used. This provides a more accurate assessment of the owner's return when their contribution has changed during a period.

When evaluating an owner's return on investment, don't only consider the percentage return. Many owners of small businesses work very long hours. While it's difficult to put a value on the risk taken and the hours worked, the return on an owner's investment should be substantially more than that available in the financial markets.





Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [20.1]** An income statement is an accounting report that compares revenues and expenses for one reporting period, allowing the user to determine the net profit or loss for the business in that period. Once a net figure is calculated, the amount is transferred to the owner's equity section of the balance sheet.
- [20.2]** 'Cost of sales' is the cost price of the goods that a firm sells; this figure is deducted from its revenue in order to determine gross profit. If a trading business incurs other costs in getting its inventory ready to sell, such as transport or wages, the additional heading 'Cost of goods sold' may be used in the income statement to bring all such expenses together.
- [20.3]** The data in an income statement can be presented using graphs, which may be easier for some business owners to analyse. Pie charts are useful for immediate comparison of information, while bar graphs and stacked graphs provide more detailed breakdowns of data.
- [20.4]** Trading businesses may be evaluated against several performance benchmarks, such as an analysis of profit trends, budgeted revenues or industry averages. Key mathematical indicators can also be calculated, such as the net profit margin and the return on owner's investment.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Income statement

Erika Zanini, who owns South Yarra Books, provides the following details of her trading results for the year ended 31 March 2028.

Cash sales	\$85 000	Credit sales	\$18 000
Cost of sales	45 000	Wages – sales assistant	25 000
Advertising	2 000	Interest expense	1 200
Postage expenses	800	Inventory loss	1 300
Sales returns	2 000	Insurance	1 000

- Prepare an income statement for the year ended 31 March 2028.
- Identify two items in your statement that could appear in a report for a service business.

2 Income statement from journal data

David Foss is the owner of Essendon Sports Store, a trading business that sells sporting equipment and apparel. He provides the following details from his records for the year ended 31 August 2028.

<i>From the cash journals:</i>		<i>From the sales journal:</i>	
<i>Cash receipts:</i>		Credit sales	\$34 000
Cash sales	\$95 400		
Capital	20 000	<i>From the inventory cards:</i>	
Loan	10 000	Cost of sales	58 600
GST collected	9 540		
<i>Cash payments:</i>		<i>From the stocktake of 31 August:</i>	
Casual wages	18 800	Inventory loss	2 400
Interest on loans	1 200		
Laptop computer	2 600	<i>From the credit notes issued:</i>	
Office expenses	3 400	Sales returns	1 400
Drawings	2 000		
Rent	35 000		
GST paid	4 100		

- There are several items listed above that are not relevant to an income statement. Identify these items and write a brief note explaining why they are irrelevant to this report.
- Using the relevant information from that provided, prepare an income statement for the year ended 31 August 2028.
- Comment briefly on the profit performance of this business.



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3 Income statement and balance sheet extract

Melissa McConnell is the owner of Melissa's Boutique. She has summarised her transactions for the three-month period ended 30 September 2028 and has made the following information available.

Advertising	\$1 320	Cartage inwards	\$640
Cartage outwards	340	Cash at bank balance	3 200
Cash sales	24 000	Cost of sales	17 200
Council rates	580	Credit sales	12 100
Drawings	4 300	Electricity expenses	340
Bad debts	430	Loan repayments	4 300
Stationery expenses	860	Vehicle expenses	540

On 30 September 2028, McConnell totalled all of her inventory cards and found that inventory on hand should be \$27 100. However, a physical stocktake carried out on this date revealed inventory on hand of \$27 800.

- Prepare an income statement for the three months ended 30 September 2028. (Use the heading 'Cost of goods sold' in your report.)
- State two ways in which the discrepancy revealed by the stocktake could have been created.
- If the owner's capital was \$34 000 on 1 July 2028, prepare an extract from the firm's balance sheet to show the owner's equity section of the report as at 30 September 2028.



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4 Income statement and balance sheet extract

Kevin O'Neill is the manager of Laser FX Lighting Store. He has supplied the following information, which relates to the period ended 30 June 2028.

Sales	\$112 000	Cartage in	\$1 250	Insurance	\$570
Rent	20 000	Capital (1/7/22)	32 000	Carry bags	680
Cleaning	940	Postage	450	Sales returns	1 400
Wages	17 000	Accounting costs	540	Telephone expenses	620
Rates	1 230	Interest on loans	980	Drawings	4 300
Inventory as per inventory cards	34 200	Cost of sales	47 600		
Inventory as per stocktake	32 400				

- Prepare an income statement for the year ended 30 June 2028, showing clearly the gross and net profits for the period.
- Prepare an extract from the firm's balance sheet to show the owner's equity section of the report.
- O'Neill admits to a regular working week of 60–80 hours. Comment on the performance of his business, taking into account this information and the amount of capital invested.

5 Net profit margin

The following information relates to Warrnambool Trading Store.

Net sales	\$125 000
Cost of sales	56 250
Wages	31 250
Office expenses	10 000

- Determine the net profit earned by this business.
- Calculate the net profit margin.
- Comment on the results of your calculation in part **b**, explaining clearly what this indicator shows.
- Prepare a pie chart, showing the breakdown of the sales dollar into the various expense items and the net profit that remains. (*Hint*: Use the chart wizard in Microsoft Excel to prepare your pie chart.)
- Prepare a bar graph for all expense items so that the owner can compare the spending in the various areas.

6 Net profit margin

Jordan Vu is the owner of JV's Gaming Rigs. He provides the following details and asks for your help in analysing the performance results of his business over the last three years.

	2026	2027	2028
Cash sales	\$120 000	\$132 000	\$138 000
Credit sales	40 000	48 000	62 000
Cost of sales	80 000	93 600	111 000
Sales staff wages	18 000	23 760	26 600
Bad debts	1 000	1 500	3 000
Advertising	5 000	9 060	12 800

- Calculate the net profit for each of the three yearly periods.
- Determine the net profit margin for each of the three years.
- Comment on the trend in the net profit margin over the three-year period.
- Prepare pie charts for each of the three years, showing clearly the breakdown of total sales revenue.

Hint

Use the chart wizard in Excel

7 Return on owner's investment

The following information relates to two similar businesses.

	Dandenong Furniture	Cranbourne Furniture
Net profit	\$55 200	\$56 000
Capital (1/7/27)	220 000	210 000
Capital (30/6/28)	240 000	190 000

- Calculate the return on owner's investment for the two business owners.
- Comment on the results from part **a**, indicating clearly which owner has the better return.
- State three benchmarks that may be used to evaluate the return on owner's investment.



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8 Net profit margin and return on owner's investment

Daniel Lee is the proprietor of Lee's East Street Pharmacy. He provides the following details from his most recent reporting periods.

	2026	2027	2028
Sales revenue	\$180 00	\$160 000	\$200 000
Net profit	27 000	28 800	30 000
Capital (start of period)	96 000	100 000	110 000
Capital (end of period)	100 000	110 000	120 000

- Calculate the net profit margin for each of the three periods and comment on the trend in this financial indicator.
- Calculate the return on owner's investment for each of the periods and comment on your results.



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9 Income statement and return on owner's investment

Evan Gulbis is the owner of Pascoe Vale Collectables. At the end of the current reporting period, he has prepared the following summary of events for the year ended 30 September 2028.

Cash sales	\$65 000	Credit sales	\$32 900	Sales returns	1 400
GST received	6 500	Advertising	1 230	Inventory loss	2 140
Customs duty	1 280	Interest paid	2 190	Drawings	9 830
Office equipment	5 650	Cost of sales	43 260	Cartage outwards	1 210
Shop rent	22 000	GST paid	2 663	Part-time wages	8 250
Bad debts	1 270	Cartage inwards	910	Security costs	3 760

- Prepare an income statement for the year ended 30 September 2028. Your report should show both gross and net profit results.
- Gulbis's capital was \$43 000 as at 30 September 2027. Prepare an extract from his balance sheet to show how owner's equity would be reported as at 30 September 2028.
- Calculate the return on owner's investment for the year and comment on the rate that Gulbis is earning.



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10 Income statement and financial indicators

The following details relate to the business of Altona Auto Parts for the period ended 31 March 2028.

Wages – shop assistant	\$24 300	Cash sales	\$89 100
Credit sales	68 600	Sales returns	2 400
Interest on loan	2 300	Postage & telephone	1 240
Promotional expenses	3 200	Cartage inwards	2 100
Cost of sales	63 400	Shop maintenance	5 400
Delivery costs to customers	2 400	Heating & lighting	1 320
Salary – receptionist	27 000	Buying expenses	1 200

Additional information:

- Owner's capital as at 1 April 2027: \$54 300.
- Total of inventory on hand according to inventory cards: \$32 400.
- Inventory on hand according to stocktake: \$31 600.





- a Prepare an income statement for the year ended 31 March 2028, showing clearly both gross profit and net profit.
- b Calculate the net profit margin and explain the significance of this financial indicator.
- c Calculate the return on owner's investment, given that the owner's capital as at 31 March 2028 was \$45 700.
- d The return on owner's investment should be approximately the same as that available on term deposits. Do you agree? Explain fully.

CASE STUDY

From journals to evaluation of reports

Fashion Forward is a retail outlet that sells the latest women's street fashions. It has been established for a number of years. The owner of the business, Bree Semini, keeps cash journals and a credit sales journal. She supplements these records with individual inventory cards and individual records for her accounts receivable.

At the end of the previous accounting period, the balance sheet for the business reported the following.

Assets	\$	Liabilities	\$	\$	\$
Cash at bank	3 210	GST debt		2 000	
Accounts receivable	4 320	Mortgage loan		173 000	175 000
Inventory	45 300	Owner's equity			
Shop fittings	12 000	Capital	415 430		
Office equipment	8 600	Plus: Net profit	28 000	443 430	
Premises	520 000	Less: Drawings		25 000	418 430
	593 430				593 430

Semini has prepared the following summary of events at the end of the current period.

<i>From her cash journals:</i>		<i>From her credit sales journal:</i>	
Cash sales	\$86 400	Credit sales	\$23 200
Receipts from accounts receivable	12 340	GST charged to accounts receivable	2 320
Capital	10 000		
Loan from NAB	12 000	<i>From her inventory cards:</i>	
GST received	8 640	Cost of sales	51 200
Cartage inwards	1 210	Inventory losses	2 300
Cash purchases of inventory	45 000		
Wages	22 400	<i>From the physical stocktake:</i>	
Advertising	1 470	Inventory on hand as at 30/9/28	36 800
Loan repayments	10 400		
Buying expenses	1 420	<i>From the credit notes issued:</i>	
Electricity	1 620	Sales returns	1 800
Drawings	37 000		
Office expenses	2 180		
Interest on loans	9 800		
Purchase of shop fittings	4 300		
GST paid	5 720		



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» Additional information:

- The mortgage loan is repayable at the rate of \$200 per week.
 - The loan from NAB is an interest-only loan. The total amount borrowed is due for repayment on 30 June 2030.
 - The firm's bankers have approved an overdraft facility to cover short-term shortages of cash.
- a** Prepare a statement of receipts and payments for the year ended 30 September 2028.
- b** Using the results from your statement in part **a**, comment on the firm's cash position at the end of the period.
- c** Prepare an income statement for the year ended 30 September 2028.
- d** Using a spreadsheet, prepare a pie chart to show the breakdown of the sales dollar. Divide the chart into three sections: cost of goods sold, expenses and net profit.
- e** Using your statement in part **c**, plus your chart in part **d**, comment on the profit performance of the business.
- f** Prepare a classified balance sheet as at 30 September 2028. (*Hint:* You will need to determine how much is owed by accounts receivable as at 30 September 2028 and the GST liability of the business.)
- g** In a spreadsheet, prepare a stacked graph of the firm's balance sheet. On one side of the graph, show the breakdown of the assets. On the other side, show the liabilities and owner's equity of the business.
- h** Using the data from the previous period's balance sheet, calculate the owner's return on investment.
- i** Using the balance sheet prepared as at 30 September 2028, calculate the owner's return on investment.
- j** Write a brief comment on the trend in the owner's return on investment over the two years.
- k** Semini is worried about the level of inventory losses that the business is suffering.
- i** State two possible causes of the inventory loss.
 - ii** State two security measures that may be appropriate for the business.
- l** Semini is confused. She is certain that her business made a profit again this year but is worried about the shortage of cash it is experiencing. Explain to her why she has run out of cash but has been able to report a profit again in the current period. Your explanation should state the items that affect cash on hand but don't affect profit.

ETHICAL CONSIDERATIONS

Ethan Paul has owned the local supermarket for a number of years. He values being a respected member of his local community and always tries to employ young people from the local schools. He currently has 10 students employed on a part-time basis, mainly working after school and on weekends. When they move on to university studies, some of them continue to work in the supermarket.

This year, Paul has become concerned about the downward trend in his profit results. He has analysed his income statements and noticed the significant increase in his wages cost, since many of his employees have turned 18 and are now on adult wages.

Paul has decided that he can't continue to employ the older students and will advertise in the local area for some new workers.

- a** Identify and discuss the potential benefits of Paul's decision.
- b** Are there any potential negative aspects of his decision? Explain fully.
- c** Do you believe that Paul's decision is acceptable on ethical grounds? Discuss fully.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

Explain the difference between the terms 'cost of goods sold' and 'cost of sales'.

Question 2 (2 marks)

The net profit margin for the local convenience store has dropped from 15% to 10%.

State and explain two causes of the change in the net profit margin.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 21

15 16 17 18 19 20 21 22 23 24 25

Cash flow statements for a trading business

In this chapter, you will prepare cash flow statements for a trading business and consider how they differ from those for a service business. You will also analyse those statements and explain how they inform owners and managers.

Learning objectives

By the end of this chapter, you will be able to:

- **classify** cash flows under the headings of operating, investing and financing activities [21.1]
- **prepare** a cash flow statement for a trading business [21.2]
- **prepare** a cash flow statement from cash journals [21.2]
- **analyse** the results revealed by a cash flow statement [21.3]
- **explain** the link between a cash flow statement and management decision-making [21.3]

PRIOR KNOWLEDGE

CHAPTER 7 Recording and reporting cash flows

CHAPTER 11 Cash flow statements



Estimated time required: 1 week



21.1 Revisiting cash flow classifications



The cash flow statement is divided into three main areas, with classifications for operating activities, investing activities and financing activities (see Figure 21.1). These three areas provide the basic format of the cash flow statement.

All cash inflows and outflows are classified according to these three groups, with a net figure being produced under each heading. The common practice is to label this net figure as either net cash provided or net cash used by each particular activity.

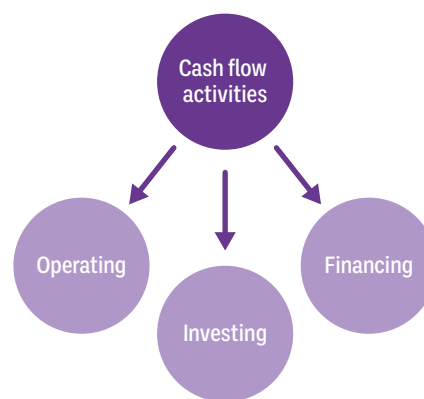


Figure 21.1 The three classifications of cash flows

All cash flows, both receipts and payments, are classified into three groups.

Operating activities

Operating activities are the cash inflows and outflows that occur as part of the day-to-day operations of a business. Cash sales and collections from accounts receivable usually make up the majority of operating cash inflows.

Credit sales *don't* involve a movement of cash at the time of sale, so they aren't included in the statement of cash flows. However, a cash flow will occur in the future when an accounts receivable settles its debt.

The cash outflows under operating activities include payments such as cash purchases of inventory, wages, office expenses, cartage inwards and outwards, insurance, and payments to accounts payable.

Investing activities

Investing activities are cash flows from the buying and selling of *non-current* assets, rather than current assets such as inventory.

When a business purchases non-current assets, it is making an investment for the long term, because non-current assets are expected to be controlled by the business entity for longer than 12 months. Because assets are expected to have future economic benefits for a business, they are viewed as investments made so that the business can generate revenue.

Investing activities thus include investing cash in the non-current assets of a business, as well as receiving cash at their time of disposal or sale. The cash flow statement reports both the cash outflows when these assets are purchased and the cash inflows from selling used or unwanted non-current assets.

Financing activities

The last classification in a cash flow statement is that of *financing activities*. This category refers to cash flows that have occurred due to changes in the financial structure of a business.

Small businesses are often funded by contributions from the owner, which are known as internal funds. However, there may also be funds borrowed from external sources, which means that liabilities have been created. Financing activities therefore include the owner's capital contributions (cash only) and cash withdrawals, as well as the taking out and repayment of loans.

How a business is financed is an important consideration when looking at its long-term future. The cash flows required to repay debts and support an owner's drawings are an important feature of the cash flow statement. Potential lenders and prospective owners will also be interested in this information.

Links between the financial reports

The links between the cash flow statement and the other two main financial reports become clearer when the three classifications are considered.

- *Operating activities* examines the cash flows relating to revenues and expenses, which are brought together in the income statement.
- *Investing activities* looks at part of the balance sheet, as it examines cash flows from non-current assets.
- *Financing activities* also focuses on part of the balance sheet, as it looks at changes in long-term liabilities and owner's equity.

The three sections of the cash flow statement therefore look at three different aspects of the business.

Table 21.1 provides some examples of the different nature of these cash flows.

Table 21.1 Examples of cash flows by classification

Operating activities	Investing activities	Financing activities
Cash inflows from:		
• Selling goods for cash • Providing services for cash • Collecting cash from accounts receivable • Commission received • Interest received • GST received • GST refunds	• Selling non-current assets for cash	• Capital injections by the owner • Borrowing cash via loans
Cash outflows from:		
• Purchasing inventory for cash • Paying cash to accounts payable • Paying cash for services • Paying cash for expenses • GST paid • GST settlements	• Buying non-current assets for cash	• Cash drawings • Loan repayments

The revenues and expenses captured in an income statement can relate to a broad range of operating activities.



21.2 Preparing a cash flow statement for a trading firm



The format of a cash flow statement is based on the three classifications described previously. The information reported in a cash flow statement will usually come from the two cash journals of the business, or from a summary of the cash receipts and payments for a period.

Figure 21.2 shows a cash flow statement for Mount Hotham Ski Essentials.

Figure 21.2 Cash flow statement

MOUNT HOTHAM SKI ESSENTIALS: CASH FLOW STATEMENT FOR YEAR ENDED 30 JUNE 2028		
	\$	\$
Cash flows from operating activities		
Cash sales	80 000	
Collections from accounts receivable	40 000	
GST receipts	8 000	
Cash purchases of inventory	(20 000)	
Payments to accounts payable	(40 000)	
Advertising	(6 000)	
Wages	(30 900)	
Office expenses	(3 000)	
GST payments	(5 800)	
Net cash provided by operating activities		22 300
Cash flows from investing activities		
Purchase of vehicle	(25 000)	
Purchase of computer	(4 000)	
Net cash used in investing activities		(29 000)
Cash flows from financing activities		
Capital contribution	50 000	
Loan from bank	25 000	
Owner's drawings	(35 000)	
Loan repayments	(3 000)	
Net cash provided by financing activities		37 000
Net increase (decrease) in cash held		30 300
Cash held at the beginning of the year		(7 000)
Cash held at the end of the year		23 300

A successful business will generate cash from its operating activities. This cash can then be used to fund investing and financing activities.

Note how each of the three classifications is clearly labelled, and how a subtotal is provided for each category. This helps to achieve the qualitative characteristic of *understandability*. The subtotals can then be used to highlight the net cash inflow or outflow for each classification.

Reading the cash flow statement

Business owners usually expect that their operating activities will generate cash. If the cash from operating activities was a *negative* result, this would be a bad sign that all wasn't well within the business!

There are no set expectations for the rest of the report. The areas of investing and financing may have a net cash inflow or outflow. If a business is expanding, there may be a significant use of cash for investing. In other periods, a business may not buy any new assets; if it disposes of old assets for cash, the investing area may reveal a 'net cash provided' figure.

Similarly, financing activities may result in net cash provided or net cash used. In some periods, cash may be raised from either the owner or liabilities, which may result in a net cash inflow. On the other hand, an established business may simply have cash outflows in this area. Loan repayments and the owner's drawings may result in a 'net cash used' final result.

Some cash flow statements have subheadings for cash inflows and cash outflows, and this is an acceptable way of presenting the information. As with all accounting reports, the most important thing is that the information is presented in a clear and concise manner, to meet the demands of *understandability*.

.....
Financing activities, which include taking out loans and making loan repayments, focus on one part of the balance sheet: the part that examines changes in long-term liabilities and owner's equity.



21.3 Cash flows and decision-making



As with all reports, there isn't much point preparing a cash flow statement if management doesn't analyse the results and use it to make decisions to correct problems or improve the business. A good starting point is to compare the results of the current period with those of the previous period. This allows management to identify changes in the three areas reported in the cash flow statement. For example, if the net cash provided by operating activities is decreasing over consecutive periods, this should set off alarm bells with management.

Consider the comparative reports in Figure 21.3, which again relate to Mount Hotham Ski Essentials.

Figure 21.3 Comparative cash flow statements

MOUNT HOTHAM SKI ESSENTIALS: CASH FLOW STATEMENTS FOR YEARS ENDED 30 JUNE 2027 AND 30 JUNE 2028				
	2027		2028	
	\$	\$	\$	\$
Cash flows from operating activities				
Cash sales	70 000		80 000	
Collections from accounts receivable	27 000		40 000	
GST receipts	7 000		8 000	
Cash purchases of inventory	(18 000)		(20 000)	
Payments to accounts payable	(45 000)		(40 000)	
Advertising	(4 000)		(6 000)	
Wages	(25 700)		(30 900)	
Office expenses	(2 000)		(3 000)	
GST payments	(3 300)		(5 800)	
Net cash provided by operating activities		6 000		22 300
Cash flows from investing activities				
Purchase of shop fittings	(9 000)		0	
Purchase of vehicle	0		(25 000)	
Purchase of computer	0		(4 000)	
Net cash used in investing activities		(9 000)		(29 000)
Cash flows from financing activities				
Capital contribution	0		50 000	
Loan from bank	0		25 000	
Owner's drawings	(10 000)		(35 000)	
Loan repayments	0		(3 000)	
Net cash used in financing activities		(10 000)		37 000
Net increase (decrease) in cash held		(13 000)		30 300
Cash held at beginning of the year		6 000		(7 000)
Cash held at the end of the year		(7 000)		23 300

The change in cash generated by each type of activity can be easily seen when comparative statements are prepared.

A comparison of cash flow statements may reveal a lot about a business.

For Mount Hotham Ski Essentials, there is good news in relation to operating activities. There has been an increase in the net cash provided by operating activities, with the net result in 2028 being \$16 300 above the figure achieved in 2027.

The investing activities reflect a considerable investment in assets over the past two years. In 2027, \$9000 was invested in shop fittings, followed by the purchase of a vehicle and a computer in 2028. These items required significant finance, and it is apparent that at the end of 2027 the business didn't have sufficient cash to fund these purchases.

However, in 2028 the owner made a cash contribution of \$50 000 and then borrowed an additional \$25 000. This cash inflow assisted the business to purchase the new non-current assets without using up all its cash. At the end of 2028, the overall cash position is in a sound state, having recovered from an overdraft of \$7000 in 2027 to a cash balance of \$23 300 as at 30 June 2028.

Investing activities include the purchase of shop fittings such as shelving and racks.





Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [21.1]** Cash flows can be classified into three main areas. Operating activities are cash flows relating to the day-to-day actions of the business. Investing activities are cash flows that result from the purchase of assets or the sale of non-current assets for cash. Financing activities are cash flows that relate to changes in the financial structure of a business.
- [21.2]** A cash flow statement for a trading business presents information under the headings of 'Cash flows from operating activities', 'Cash flows from investing activities' and 'Cash flows from financing activities'. Subtotals should be provided for each category. Some cash flow statements also have subheadings for cash inflows and cash outflows.
- [21.3]** The cash flow items describe what has happened in a business over a period, allowing changes and problems to be identified and decisions to be evaluated. The complete package of an income statement, balance sheet and cash flow statement provides management with a solid range of financial information.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



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1 Classification of cash flows

Classify the following items under the three classifications used in a cash flow statement. If you don't think an item should be reported in a cash flow statement, state 'non-cash item' for the irrelevant items.

- a** Cash purchases of inventory
- b** Credit purchases of inventory
- c** Cartage inwards paid
- d** Repayment of a loan
- e** GST collected on cash sales
- f** Withdrawal of inventory by the owner
- g** Cash sale of inventory
- h** Cash purchase of office furniture
- i** Capital contribution by owner
- j** Credit sale of inventory
- k** Withdrawal of cash by the owner
- l** GST paid on cash purchases
- m** Inventory loss
- n** Discount expense



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2 Operating activities

The proprietor of Montuoro's Shoe Emporium has provided the following information about his business.

Receipts	\$	Payments	\$
Cash sales	50 000	Cash purchases of inventory	35 000
Collections – accounts receivable	10 000	Part-time wages	19 000
Interest received	1 000	Interest paid	500
GST receipts	5 000	Office expenses	3 000
Capital contribution	10 000	Loan repayments	8 000
		GST payments	3 800

- a** Using relevant information from that provided, calculate the net cash provided by operating activities for the year ended 31 July 2028.
- b** Did you omit many items in your calculation in part **a**? If so, explain why.

3 Operating activities

Cheryl Hawk owns Hawk's Jeans. She has extracted the following information from the financial records of the shop.

Cash sales	\$112 000
Credit sales	33 000
Collections from accounts receivable	15 000
GST receipts	11 200
Cost of sales	55 000
Cash purchases of inventory	23 000
Sales returns by accounts receivable	1 200
Payments to accounts payable	32 000
Wages	34 600
Cartage inwards	1 200
GST payments	2 420

- Select the relevant items from the above list and calculate the net cash provided (or used) by operating activities.
- Explain your treatment of the items 'credit sales' and 'sales returns'.
- Would you expect net cash flows from operating activities to be a positive or a negative figure? Explain your answer.

4 Investing activities

The owner of Unlimited Nuts 'N' Jerky provides the following summary of events in relation to his cash flows over the past year.

Receipts	\$	Payments	\$
Cash sales	96 000	Cash purchases of inventory	39 000
Collections from accounts receivable	20 000	Purchase of computers	5 200
Sale of computer	2 200	Drawings	28 000
GST receipts	9 600	Wages	29 000
Commission revenue	2 300	GST payments	4 420

Using the relevant information from the lists above, calculate the net cash provided (or used) by investing activities.



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5 Investing activities

Jacinta Wong, the proprietor of Anime Imports, provides the following information about her small business.

Cash purchase of cash register	\$2 880
Cash purchase of inventory	42 500
Cash sales of inventory	87 500
GST receipts	8 750
Cash received from sale of office equipment	3 400
Purchase of display equipment for cash	19 820
Credit sales of inventory	12 320
GST payments	6 520

Prepare an extract from the cash flow statement to show the net cash provided (or used) by investing activities.



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6 Financing activities

During the year ended 30 June 2028, the owner of Shepparton Sports Store, Ken Faulkner, contributed assets worth \$32 000 to his business. This consisted of \$15 000 cash and a vehicle valued at \$17 000. His other receipts for the year were as follows.

Cash sales	\$99 800
GST receipts	9 980
Accounts receivable	28 000
Loan	18 000

Faulkner's cash payments for the year included the following.

Accounts payable	\$65 800
Loan repayments	6 880
Drawings	15 000
Insurance	2 500
New computer	3 580
GST payments	608

Determine the net cash provided (or used) by financing activities over the year ended 30 June 2028.



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7 Financing activities

The manager of Artisan Toys for Tots, Katrina Jansen, provides the following details about her business.

Receipts	\$	Payments	\$
Cash sales	83 000	Accounts payable	40 000
Capital	32 000	Loan repayments	3 200
Loan	15 000	Drawings	14 800
Accounts receivable	10 500	Purchase of office equipment	3 500
GST receipts	8 300	GST payments	350

Make a list of all the items relevant to financing activities and determine the net cash flow for the year in relation to financing.

8 Classified cash flow statement

Ismail Afif owns Afif's Islamic Clothing. She has prepared a simple statement of receipts and payments but is unsure how to prepare a formal cash flow statement. She has asked for your assistance in relation to the report prepared below.

AFIF'S ISLAMIC CLOTHING: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 31 MAY 2028

Receipts	\$	\$
Cash sales	132 000	
Collections from accounts receivable	21 700	
GST collections	13 200	
Loan from bank	22 000	188 900
Less: Payments		
Accounts payable	41 000	
Cash purchases of inventory	22 000	
Wages	31 400	
Interest on loan	1 000	
Office expenses	3 000	
Purchase of delivery van	19 200	
Advertising	1 200	
Purchase of office equipment	6 500	
GST payments	5 190	
Loan repayments	4 300	
Drawings	37 000	162 790
Excess of receipts over payments		26 110
Bank balance as at 1 June 2027		(4 500)
Bank balance as at 31 May 2028		21 610

- Prepare a cash flow statement, showing clearly the net cash provided (or used) by operating, investing and financing activities.
- Comment on the results achieved by this business over the last year, with reference to the three areas of cash flows.



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9

Classified cash flow statement

The following report has been submitted by the owner of Atkinson's Hardware.

ATKINSON'S HARDWARE: STATEMENT OF RECEIPTS AND PAYMENTS FOR YEAR ENDED 31 DECEMBER 2028

Receipts	\$	\$
Cash sales	128 900	
Collections from accounts receivable	52 760	
Capital	28 000	
Sale of delivery van	6 800	
Interest revenue	2 200	
GST receipts	13 570	
Loan from Lucky Finance Co.	22 500	254 740
Less: Payments		
Accounts payable	77 000	
Interest	1 200	
Cash purchases – inventory	22 000	
Stationery expenses	2 200	
Purchase of computer system	10 400	
Security expenses	5 200	
Wages	49 300	
GST payments	3 980	
Loan repayments	7 300	
Drawings	53 000	231 580
Excess of receipts over payments		23 150
Bank balance as at 1 January 2028		2 100
Bank balance as at 31 December 2028		25 250

- a Prepare a fully classified cash flow statement for the year ended 31 December 2028.
- b Comment on the firm's cash position at the end of 2028.

10 Classified cash flow statement

Blake Monzon, the owner of Heidelberg Headstones, has prepared the following summary of his cash transactions.

**HEIDELBERG HEADSTONES: STATEMENT OF RECEIPTS AND PAYMENTS
FOR YEAR ENDED 30 SEPTEMBER 2028**

Receipts	\$	\$
Cash sales	220 000	
Collections from accounts receivable	65 300	
Loan from CBA	15 000	
Sale of shop fittings	3 220	
Commission revenue	1 800	
Sale of equipment	8 600	
GST receipts	23 362	
Capital	26 000	363 282
Less: Payments		
Wages	48 000	
Cash purchases of inventory	29 000	
Accounts payable	152 000	
Cleaning costs	6 200	
Legal expenses	3 800	
Purchase of equipment	36 000	
Marketing expenses	4 500	
Loan repayments	3 200	
GST payments	9 200	
Purchase of shop fittings	12 500	
Drawings	28 000	332 400
Excess of receipts over payments		30 882
Bank balance as at 1 October 2027		(5 700)
Bank balance as at 30 September 2028		25 182

- a Prepare a fully classified cash flow statement for the year ended 30 September 2028.
- b Comment on the firm's cash position at the end of September 2028.



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11 Journals to cash flow statement

The cash journals presented below have been produced by the owner of Ballarat Best Computers.

CASH RECEIPTS JOURNAL

Date	Details	Receipt no.	Amount banked \$	Accounts receivable \$	Cash sales \$	Sundry receipts \$	GST received \$
Aug 1	Cash sales	654	1 980		1 800		180
2	Loan – NAB	EFT	5 000			5 000	
5	A Pitson	EFT	3 200	3 200			
8	Cash sales	655	242		220		22
11	M Morath	EFT	1 800	1 800			
14	Cash sales	656	1 980		1 800		180
16	G Giese	EFT	2 700	2 700			
17	Cash sales	657	319		290		29
20	Commission	EFT	220			200	20
23	Sale of equipment	EFT	550			500	50
26	Cash sales	658	1 760		1 600		160
27	Cash sales	659	1 760		1 600		160
29	G Honey	EFT	2 600	2 600			
31	Cash sales	660	1 925		1 750		175
31	Totals		26 036	10 300	9 060	5 700	976

CASH PAYMENTS JOURNAL

Date	Details	EFT no.	Total paid \$	Accounts payable \$	Wages \$	Drawings \$	Assets \$	Sundry pay. \$	GST paid \$
Aug 1	Drawings	344	1 200			1 200			
2	R James	345	5 600	5 600					
3	Shop fittings	346	13 200				12 000		1 200
6	Wages	347	1 200		1 200				
9	Stationery	348	253					230	23
11	Bento Pty Ltd	349	4 300	4 300					
13	Wages	350	650		650				
16	Drawings	351	2 000			2 000			
19	Display equipment	352	4 950				4 500		450
19	Wages	353	600		600				
25	Loan r/p	354	400					400	
26	Wages	355	640		640				
29	Drawings	356	2 800			2 800			
31	Mania Trading	357	2 600	2 600					
31	Totals		40 393	12 500	3 090	6 000	16 500	630	1 673

On 1 August 2028, the business had the following cash reserves:

- cash on hand: \$800
- cash at bank: \$6200.

- Prepare a fully classified cash flow statement for the month ended 31 August 2028.
- Comment on the changes in the cash position of the business during August 2028.

12 Journals to cash flow statement

The owner of The Mind & Spirit Bookstore, Graham Nash, has provided the following cash journals from his business.

CASH RECEIPTS JOURNAL

Date	Details	Receipt no.	Amount banked \$	Accounts receivable \$	Discount expense \$	Cash sales \$	Sundry receipts \$	GST received \$
Sep 2	Cash sales	274	990			900		90
2	Cash sales	275	880			800		80
5	M Cafra	EFT	3 100	3 150	50			
6	Cash sales	276	770			700		70
9	Cash sales	277	1 650			1 500		150
12	J Lombardo	EFT	4 100	4 140	40			
14	Cash sales	278	4 400			4 000		400
16	Cash sales	279	220			200		20
18	Interest revenue	EFT	350				350	
21	Sale of computer	EFT	825				750	75
22	Capital	EFT	6 500				6 500	
24	Cash sales	280	1 320			1 200		120
26	J Lo Presti	EFT	5 200	5 200				
27	M Simpson	EFT	2 270	2 300	30			
29	Cash sales	281	1 650			1 500		150
30	Totals		34 225	14 790	120	10 800	7 600	1 155

CASH PAYMENTS JOURNAL

Date	Details	EFT no.	Total paid \$	Accounts payable \$	Inventory \$	Drawings \$	Sundry pay. \$	GST paid \$
Sep 1	J Wade	641	2 200	2 200				
3	Display equipment	642	3 520				3 200	320
5	Inventory	643	9 900		9 000			900
7	Drawings	644	2 400			2 400		
10	J Sweeney	645	4 400	4 400				
12	Inventory	646	2 200		2 000			200
14	Loan r/p	647	1 650				1 650	
17	Drawings	648	1 800			1 800		
20	Advertising	649	550				500	50
24	Laptop computer	650	880				800	80
27	Inventory	651	990		900			90
28	N Smith	652	2 230	2 230				
28	Loan r/p	653	1 650				1 650	
30	Totals		34 370	8 830	11 900	4 200	7 800	1 640

The business maintains two bank accounts. On 1 September 2028, it had the following balances:

- account #1: \$2200
- account #2: bank overdraft (\$850).

- Prepare a fully classified cash flow statement for the month ended 30 September 2028.
- Comment on the changes in the cash position of the business during September 2028.



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13 Journals to cash flow statement

Adam Taylor, owner of AT's Barbecues & Camping Store, has prepared the following cash journals. He has also advised that his cash balance on 1 November 2028 was \$5460.

CASH RECEIPTS JOURNAL

Date	Details	Receipt no.	Amount banked \$	Accounts receivable \$	Cash sales \$	Sundry rec. \$	GST received \$
Nov 2	Cash sales	7331	638		580		58
7	Cash sales	7332	825		750		75
8	Cash sales	7333	605		550		55
11	Cash sales	7334	726		660		66
14	Cash sales	7335	1 320		1 200		120
15	Interest	EFT	1 300			1 300	
16	Cash sales	7336	979		890		89
22	Cash sales	7337	2 178		1 980		198
23	Sale of vehicle	EFT	9 900			9 000	900
26	Ed Rice	7339	1 375	1 375			
30	Capital	EFT	15 000			15 000	
30	Totals		34 846	1 375	6 610	25 300	1 561

CASH PAYMENTS JOURNAL

Date	Details	EFT no.	Total paid \$	Wages \$	Drawings \$	Inventory \$	Sundry pay. \$	GST paid \$
Nov 4	Inventory	243	2 420			2 200		220
9	Wages	244	1 550	1 550				
10	Drawings	245	1 870		1 870			
12	Advertising	246	1 760				1 600	160
15	Office furniture	247	3 300				3 000	300
16	Wages	248	1 580	1 580				
18	Drawings	249	3 000		3 000			
22	Wages	250	1 600	1 600				
25	Inventory	251	4 400			4 000		400
28	Wages	252	1 620	1 620				
28	Computer	253	2 750				2 500	250
30	Totals		25 850	6 350	4 870	6 200	7 100	1 330

- Prepare a fully classified cash flow statement for the month ended 30 November 2028.
- Taylor is concerned about the cash flows of the business. Comment on the cash position of the firm and the results revealed by your report in relation to the three areas of cash flows.

14 Comparative cash flow statements

The following cash flow statements relate to the business of Angela's Place, a local shop selling a range of fashion wear.



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**ANGELA'S PLACE:
CASH FLOW STATEMENTS FOR YEARS ENDED 31 DECEMBER**

	2027	2028
	\$	\$
Cash flows from operating activities		
Cash sales	85 000	92 000
Collections from accounts receivable	32 700	33 000
GST received	8 950	9 550
Payments to accounts payable	(45 000)	(43 500)
Part-time wages	(32 000)	(38 000)
Advertising	(6 000)	(8 000)
GST paid	(2 100)	(1 180)
Net cash provided by operating activities	41 550	43 870
Cash flows from investing activities		
Proceeds from sale of non-current assets	4 500	3 500
Purchase of non-current assets	(15 000)	(3 800)
Net cash used in investing activities	(10 500)	(300)
Cash flows from financing activities		
Loan repayments	(12 000)	(12 000)
Capital injection	30 000	–
Proprietor's drawings	(40 000)	(35 000)
Net cash used in financing activities	(22 000)	(47 000)
Net increase (decrease) in cash held	9 050	(3 430)
Cash held at beginning of year	2 340	11 390
Cash held at end of year	11 390	7 960

Comment on the changes that have taken place over the period covered by the two reports. Your comments should consider the changes that have occurred in operating, investing and financing activities.



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15 Comparative cash flow statements

The following cash flow statements relate to the business of Salim's Smartphones and Accessories. The owner is concerned about the bank overdraft situation and has asked for your assistance.

SALIM'S SMARTPHONES AND ACCESSORIES: CASH FLOW STATEMENTS FOR YEARS ENDED 30 JUNE

	2027	2028
	\$	\$
Cash flows from operating activities		
Cash sales	150 000	145 000
Collections from accounts receivable	45 000	50 000
GST received	15 130	14 500
Payments to accounts payable	(68 000)	(70 500)
Rent	(82 000)	(82 000)
Advertising	(15 000)	(18 000)
GST paid	(10 050)	(11 500)
Net cash provided by operating activities	35 080	27 500
Cash flows from investing activities		
Sale of computer	1 300	0
Purchase of computer	(3 500)	0
Purchase of shop fittings	0	(15 000)
Net cash used in investing activities	(2 200)	(15 000)
Cash flows from financing activities		
Loan	12 000	0
Loan repayments	0	(2 000)
Capital contribution	30 000	0
Drawings	(15 000)	(28 000)
Net cash used in financing activities	27 000	(30 000)
Net increase (decrease) in cash held	59 880	(17 500)
Cash held at beginning of year	(2 800)	57 080
Cash held at end of year	57 080	39 580

Compare the two cash flow statements provided and discuss the changes that have occurred over the past 12 months. Your comments should consider the cash flows in the areas of operating, investing and financing activities.



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ETHICAL CONSIDERATIONS

David Trump owns Trump Tyre and Auto, a small business with five employees. The shop has a prime position in the local shopping centre and has done very well for a number of years. Trump has recently advertised for a new employee and has just interviewed six people for the position. The most impressive person interviewed has vast experience in the industry, good people skills and can start work with a week's notice. Trump is hesitant to employ her, however, because all the other employees on the shop floor are young men and he readily admits that the shop has quite a masculine culture.

Some of the other applicants were quite good, but the female applicant was the stand-out. Trump is unsure what to do and has asked you for your recommendation.

Discuss the pros and cons for Trump of deciding whether or not to employ the female applicant. Consider the financial implications, any issues for the workforce, the customers and, most importantly, the ethical considerations behind his decision.

EXAM-STYLE QUESTIONS

Question 1 (2 marks)

State four items that may appear in a cash flow statement but which should never be included in an income statement.

Question 2 (3 marks)

Complete the following table to show how each of the items would be reported in a statement of cash flows.

Item	Operating or investing or financing	Inflow or outflow
Interest on term deposit		
Interest on loan		
Loan repayment		



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 22

15 16 17 18 19 20 21 22 23 24 25

Accounting for non-current assets

In this chapter, you will learn how businesses value non-current assets (assets that are under their control for more than 12 months). You will also learn how they monitor the value, usefulness and effectiveness of these assets over time and calculate and apply depreciation of that value using the straight-line method.

KEY TERMS

Fair value
Depreciation
Useful life
Straight-line method of depreciation
Residual value
Accumulated depreciation
Carrying value
Asset register
Asset turnover
Return on total assets

Learning objectives

By the end of this chapter, you will be able to:

- **explain** how non-current assets are valued [22.1]
- **define** 'depreciation' [22.2]
- **explain** how depreciation complies with the period assumption [22.2]
- **calculate** depreciation under the straight-line method [22.2]
- **explain** the effect of depreciation on accounting reports [22.2]
- **describe** the purpose of asset registers [22.3]
- **calculate** and **evaluate** asset turnover and return on assets [22.3]

PRIOR KNOWLEDGE

CHAPTER 1 Let's go accounting!

CHAPTER 15 The twofold effect of transactions

CHAPTER 20 Income statements for a trading business



Estimated time required: 1 week



22.1 Valuation of non-current assets



Non-current assets can come under the control of a business entity in one of two ways. The business can simply buy a new asset, or the owner may make a capital contribution to the business in the form of a non-current asset. The way an asset is treated in the balance sheet depends on how it became part of the business.

Purchasing a non-current asset

When a business takes control of a non-current asset, the owner needs to determine the dollar value that *faithfully represents* this economic event.

When an asset is purchased, whether for cash or financed by a loan, two elements must be identified:

- the invoiced cost of the asset, or the actual cost paid for the asset
- all other costs incurred to get the asset ready to earn revenue.

Verifiability can be easily satisfied with the first element. The cost of a non-current asset can usually be verified by documentary evidence, such as an invoice, an EFT document or a written contract.

The other costs relating to the purchase of an asset aren't always so easy to identify. Sometimes a business has to pay for one-off expenses, such as the delivery or installation of an asset. Such costs are necessary before the asset is ready to earn revenue. In this situation, the cost of the delivery and installation becomes part of the actual asset.

EXAMPLE 22.1

Kensington Kitchens purchased a new vehicle for \$30 000 cash and paid the following.

Government stamp duty	\$1000
Dealer's charges	\$800
Insurance and registration	\$900 per annum (p.a.)

The actual cost of the vehicle consists of the purchase price of \$30 000, plus the stamp duty of \$1000 and the dealer's charge of \$800: a total of \$31 800. These items must be paid to get the vehicle in a position to earn revenue for the business. Therefore, all of these payments actually become part of the cost of the asset.

Once such items have been paid, they don't occur again. Consider this when deciding if an item is actually part of a non-current asset. If costs are only paid once when an asset is purchased, they should probably be considered as part of that asset.

However, this isn't the case with insurance and registration. These items aren't included in the cost of the vehicle, as they will be paid each period, usually on a yearly basis. They are therefore seen as separate expense items.

EXAMPLE 22.2

Kensington Kitchens also purchased a new computer system for \$8000 and paid the following.

Installation fee	\$1000
Service contract	\$500 p.a.

The actual cost of the computer is \$9000. The installation must be paid to get the asset into a revenue-earning capacity and therefore becomes part of the cost of the asset.

The service contract is an annual expense that doesn't have to be paid before the asset is usable, so it's not part of the asset's cost.

As you can see, the true cost of a non-current asset isn't simply its invoice price. To satisfy *faithful representation*, the true cost of an asset when it's acquired should include all costs incurred in preparing the asset to produce revenue for the business.

Capital contribution of a non-current asset

Rather than purchasing an asset for their business, a business owner may simply contribute a personal asset. Most capital contributions take the form of cash, particularly when a business is first set up. However, a business owner may also contribute things such as office furniture, computer equipment and vehicles.

By definition, when an asset is contributed from an owner's personal assets, it's a second-hand asset. This means there won't be a business document such as an invoice when this asset is contributed. So, how is such an asset valued?

For example, consider a vehicle that the owner purchased for private use four years ago at a cost of \$45 000. Would the value of \$45 000 *faithfully represent* the value of the asset at the time it was contributed to the business? Most people would answer 'no' to this, but what value can be used instead?

'Fair value' is a term used to determine the value of an asset that is being contributed by an owner. Fair value is simply an estimate of the asset's value at that time. Fair values may be gained from sworn valuers or, depending on the asset, an expert working in the field.

Fair value is an estimate, so it cannot satisfy *verifiability*. However, it can be argued that a current estimated value would be more *relevant* than the price paid for the asset years ago. The demands of relevance therefore outweigh the demands of verifiability, so a fair value is considered acceptable.

fair value an estimate of the value of a non-current asset contributed to a business



22.2 Depreciation of non-current assets

Non-current assets such as vehicles, furniture and equipment cannot be included as expenses in an income statement because they aren't used up in one accounting period. However, such assets do represent a 'cost' to the business. How can this be represented?

A unique feature of non-current assets is that their cost generates an economic benefit to the firm over a number of years. For example, a delivery van may be a useful asset to a business for five years, as it helps to earn revenue for the firm during that time by delivering goods.

Under accrual accounting, revenue for the period is matched with the relevant expenses for that period. Therefore, if the delivery van is expected to be used for five years, it's logical to 'write off' its cost over that time.

Depreciation is the process of allocating the cost of a non-current asset over its **useful life**. It attempts to write off a portion of a non-current asset as an expense each accounting period.

depreciation the process of allocating the cost of a non-current asset over its effective useful life

useful life an estimate of the time a business expects to use an asset to generate revenue

Calculating depreciation

There are several methods of calculating depreciation on non-current assets. Two methods are covered in the Study Design for VCE Accounting.

This chapter will focus on the **straight-line method of depreciation**, which is also known as the fixed instalment method as it allocates depreciation at the same rate each year. Chapter 23 introduces a second method of depreciation.

To calculate depreciation under the straight-line method, three items need to be known. These are:

- the original cost of the asset
- the estimated life of the asset (usually expressed in years)
- the estimated **residual value** (also known as scrap value) of the asset – that is, how much is expected to be received for the asset at the end of its useful life, when it is sold or 'scrapped'.

straight-line method of depreciation a method of depreciation that allocates a fixed amount of cost to each reporting period

residual value an estimate of how much an asset will be sold for when it is disposed of at the end of its useful life

The amount of depreciation allocated each year under the straight-line method is called the depreciation expense and is calculated using the following formula.

$$\text{Depreciation expense} = \frac{\text{Cost} - \text{Residual value}}{\text{Estimated life}}$$



Depreciation of a vehicle can be allocated over its expected useful life.

EXAMPLE 22.3

Brunswick Blinds purchased a new delivery van. The following details are supplied.

Date of purchase	1 July 2028
Purchase cost	\$45 000
Estimated useful life	4 years
Estimated residual value	\$9000

$$\begin{aligned}\text{Depreciation expense} &= \frac{\text{Cost} - \text{Residual value}}{\text{Estimated life}} \\ &= \frac{\$45\,000 - \$9\,000}{4} \\ &= \frac{\$36\,000}{4} = \$9\,000 \text{ p.a.}\end{aligned}$$

\$9000 will be treated as an expense in each of the four years the van is under the control of the business.

The depreciation expense can also be expressed as a percentage of the asset's cost. To calculate the annual rate, the following formula is used.

$$\text{Annual depreciation rate} = \frac{\text{Depreciation p.a.}}{\text{Cost of asset}}$$

EXAMPLE 22.4

For Brunswick Blinds, the depreciation rate for their new delivery van is:

$$\begin{aligned}\text{Annual depreciation rate} &= \frac{\text{Depreciation p.a.}}{\text{Cost of asset}} \\ &= \frac{\$9\,000}{\$45\,000} = 20\% \text{ p.a.}\end{aligned}$$

Note that some practical exercises (and exam questions) will simply state that an asset has to be depreciated at a fixed percentage each period. For example, a computer costing \$2000 is to be depreciated at 30% p.a. In this scenario, you simply apply the fixed percentage to the cost of the asset: $30\% \times \$2000 = \$600$ depreciation for the year.

Also note that, in some cases, a business may not own an asset for the entire period. If your accounting period is 12 months and you purchase an asset halfway through the period, you won't allocate the entire year's depreciation. Depreciation should be calculated for the year and then divided by two, giving you six months' depreciation for the asset.

Always check the date of purchase and only allocate a full year's depreciation if the asset has been under the control of the entity for the full year. This approach satisfies the period assumption, and also complies with accrual accounting, as profit is defined as revenue earned less expenses incurred over the same period of time.

Depreciation and accounting reports

At the end of each accounting period, depreciation causes a twofold effect on the accounting reports of the firm.

First, it reduces the firm's profit each year, as it creates a depreciation expense. For example, Brunswick Blinds' profit would be reduced by the delivery van's depreciation expense of \$9000 each yearly accounting period. The allocation of depreciation increases expenses, which leads to a decrease in net profit and owner's equity.

Second, depreciation creates a negative asset in the balance sheet, known as **accumulated depreciation**. It represents the total depreciation written off the asset so far. The accumulated depreciation amount is deducted from the original cost of the asset in the firm's balance sheet.

Figure 22.1 shows how the balance sheets for Brunswick Blinds would appear over the van's expected four years of useful life.

accumulated depreciation
a negative asset; the total amount of depreciation allocated from the time a business acquired an asset until the present date

Figure 22.1 Balance sheet (extracts) as at 30 June

	2029 \$	2030 \$	2031 \$	2032 \$
<i>Non-current assets</i>				
Delivery van	45 000	45 000	45 000	45 000
Less: Accumulated depreciation	9 000	18 000	27 000	36 000
	36 000	27 000	18 000	9 000

The accumulated depreciation increases by \$9000 each year in the balance sheet.

Note that the original cost of an asset (or its agreed value at the time of contribution) is shown in the balance sheet throughout the asset's life. The accumulated depreciation is then deducted from the original cost. The amount that remains is known as the asset's **carrying value** (or book value).

The carrying value of an asset always includes the original estimate of its residual value, as well as any depreciation still to be written off. In Figure 22.1, after depreciation was allocated on 30 June 2029, the business still carries the cost of \$36 000 on its books for the delivery van.

carrying value the original cost of an asset less its accumulated depreciation at a particular date

Depreciation of a non-current asset is listed in the income statement as an expense, along with items such as wages, advertising, rent and so on.

For our Brunswick Blinds example, an extract from an income statement could look like Figure 22.2.

Figure 22.2 Income statement (extract) for year ended 30 June 2029

Gross profit		\$150 000
Less: Other expenses		
Wages	22 000	
Advertising	4 000	
Rent	75 000	
Depreciation of delivery van	9 000	110 000
Net profit		\$40 000



22.3 Managing non-current assets

Non-current assets are acquired for the purpose of generating revenue, so it's important that they are maintained well, protected from theft or abuse, and replaced if they are losing their productive capacity. Management therefore needs to monitor the business's assets and measure their performance in some way.

Asset registers

If a business has a large number of non-current assets, the owner may decide to use an additional accounting record known as an **asset register**. The register records the details of a non-current asset throughout its life in the business.

The details kept can vary from business to business, but a typical asset register may contain the following:

- original cost of the asset
- supplier's name (i.e. where the asset was purchased)
- registration number or serial number (if applicable)
- insurance details (if applicable)
- estimated residual value
- estimated useful life
- details of depreciation allocated throughout the asset's life.

Figure 22.3 shows the asset register created by Brunswick Blinds for its delivery van.

Figure 22.3 Asset register

Asset:	Delivery van	Model:	2028 Econovan	
Purchase cost:	\$45 000	New/Second-hand:	New	
Estimated life:	4 years	Estimated residual:	\$9000	
Supplier:	Mazda	Registration:	BOM-007	
		Insurance:	RACV – comprehensive	
		Depreciation method:	Straight-line method 20% p.a.	
		Location:	Brunswick Store	
Date	Details	Depreciation expense	Accumulated depreciation	Carrying value
1 Jul 2028	Purchase			\$45 000
30 Jun 2029	Depreciation	\$9 000	\$9 000	\$36 000
30 Jun 2030	Depreciation	\$9 000	\$18 000	\$27 000
30 Jun 2031	Depreciation	\$9 000	\$27 000	\$18 000
30 Jun 2032	Depreciation	\$9 000	\$36 000	\$9 000

All details relating to a non-current asset should be kept in an asset register.

A business with numerous non-current assets should maintain an asset register for each one. For example, if Brunswick Blinds owns three vehicles, it would keep three separate registers.

asset register a record of the details of a non-current asset throughout its life in the business

When preparing an income statement, the depreciation on each vehicle has already been calculated separately. The total depreciation is calculated by adding up the figures from the three asset registers. It can then be noted in the income statement for the business.

Similarly, when preparing the balance sheet, the figures in the three asset registers are added together and one total figure is then shown in the balance sheet.



It is common practice to insure valuable assets such as vehicles. However, it is important to note that annual costs such as insurance are NOT included as part of the cost of an asset and therefore are not considered when determining the amount of depreciation for a period.

If Brunswick Blinds purchased three delivery vans at the same time, and all three were going to be depreciated at the same rate, the balance sheet as at 30 June 2029 would show the following.

Non-current assets		
Vehicles	\$135 000	
Less: Accumulated depreciation	27 000	\$108 000

This is the preferred approach if a business has many similar types of assets (e.g. desktop computers), to avoid cluttering up the balance sheet by listing assets individually.

Financial indicators and non-current assets

The two key financial indicators used to measure the performance of a firm's assets are asset turnover and return on total assets.

Asset turnover

Asset turnover measures how effective assets have been in generating sales revenue for the business. It compares the amount of sales revenue earned in a period with the investment made in the assets of the business.

asset turnover a financial indicator that evaluates the effectiveness of assets in generating sales revenue

$$\text{Asset turnover} = \frac{\text{Net sales}}{\text{Average total assets}}$$

EXAMPLE 22.5

Ultimate VR Gaming Gear provides the following data.

Total sales for the year	\$275 000
Sales returns for the year	\$3 000
Total assets as at 1 January	\$66 000
Total assets as at 31 December	\$70 000

$$\text{Net sales} = \$275\,000 - \$3\,000 = \$272\,000$$

$$\text{Average assets} = \left(\frac{\$66\,000 + \$70\,000}{2} \right) = \$68\,000$$

$$\text{Asset turnover} = \left(\frac{\$272\,000}{\$68\,000} \right) = 4.0 \text{ times p.a.}$$

This means that sales represent a return of 400% on the investment in assets. In other words, the investment in assets has turned into sales four times over the last 12 months. A further interpretation is that for every dollar invested in assets, the business generated \$4 worth of sales.

.....
All assets should be evaluated in terms of their ability to generate sales for the business.



The more times a business can generate sales, the more likely it is to earn an overall profit. Therefore, if the trend in this indicator goes from 200% to 300%, and from 300% to 400%, the assets of the firm would be viewed as more productive and more able to generate sales.

This should always be one of the goals of management. If a business has idle assets, such as unsold inventory or unused machinery, its ability to generate sales revenue will decrease. The financial indicator would reflect this decline at the end of the period.

Return on total assets

The **return on total assets** compares the profit earned by the business with the amount invested in its assets.

The return on assets is calculated as follows.

$$\text{Return on assets} = \frac{\text{Net profit}}{\text{Average total assets}}$$

The difference between the return on assets and the asset turnover is that the net profit margin affects the final return on assets. Rather than comparing sales to assets, it is a comparison of *profit* to assets. The amount of the sales dollar consumed by expenses will therefore affect the return on assets result.

return on total assets
a financial indicator that compares net profit earned with the investment in total assets

EXAMPLE 22.6

Ultimate VR Gaming Gear provides additional data.

Net profit for the year	\$6 800
Total assets as at 1 January	\$66 000
Total assets as at 31 December	\$70 000

Therefore, return on assets would be:

$$\text{Return on assets} = \frac{\$6\,800}{\$68\,000} = 10\%$$

Many owners would expect a higher return than available elsewhere because of two main factors. These are:

- the extra financial risk taken by the owner by investing in a business
- the extra hours the owner works to try to make their business successful.

The trend in the indicator is also important. An owner may be pleased if the indicator moves from 10% to 12%, and then from 12% to 15%. These changes indicate that the business's assets are being used to generate a greater profit for every dollar the owner has invested in them. If the return on assets is decreasing, less profit is being earned; the owner should therefore investigate this trend and take corrective action.

The return on assets should be considered along with the other financial indicators you've learnt about. For example, problems may be identified if inventory turnover has slowed. Similarly, a slower accounts receivable turnover may ultimately affect the return on assets. Non-current assets that are older and in need of additional maintenance may also affect the return on assets.

Finally, if the net profit margin is falling, this may indicate poor control over expenses. If net profit falls, so too will the return on assets.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [22.1]** Non-current assets can come under the control of a business entity in one of two ways. If the business buys a new asset, the recorded value needs to include any additional costs incurred in preparing the asset to generate revenue. This is also done if the owner donates a second-hand asset as a capital contribution to the business; however, in this case, an estimated fair value is used as the asset's 'original' cost.
- [22.2]** Depreciation is the process of allocating the cost of a non-current asset over its useful life. It attempts to write off a portion of a non-current asset as an expense each accounting period. The straight-line method allocates depreciation at the same rate each year. Depreciation is treated as an expense in the income statement, reducing the firm's profit. It also creates a negative asset in the balance sheet, known as accumulated depreciation.
- [22.3]** Non-current assets must be monitored and managed in order to maximise their productive capacity. Businesses with many assets should use asset registers to record the details of assets throughout their lives. The two key financial indicators used to measure the performance of a firm's assets are asset turnover and return on total assets.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Depreciation of delivery van

Essendon Butchers purchases a second-hand delivery van on 1 July 2028 for \$12 000 cash. It is expected to be used for three years and then sold for approximately \$4800.

- a Calculate the annual depreciation expense to be charged on the van under the straight-line method of depreciation.
- b What is the percentage rate of depreciation per annum?
- c What would be the value of accumulated depreciation of the van as at 30 June 2029 and 30 June 2030?

2 Depreciation of computer

Natali Mikulic, the owner of Hawthorn Fashions, purchased a computer for the office on 1 April 2028. It cost the firm \$3000, plus an installation and set-up fee of \$1000, and is expected to be used by the business for two years. After that time, it will be scrapped for an estimated \$800.

- a Calculate the annual depreciation expense under the straight-line method of depreciation.
- b Calculate the annual depreciation expense as a percentage of the asset's cost.
- c What item relating to the computer would appear in the income statement for the year ended 31 March 2029?
- d What item relating to the computer would appear in the balance sheet as at 31 March 2029?
- e What is the carrying value of the computer as at 31 March 2029?

3 Depreciation of forklifts

On 1 October 2028, United Sports Wholesalers purchased four forklifts at a cost of \$15 000 each, plus GST of \$1500 each. The forklifts are expected to be used for five years, before being sold for about \$3000 each.

- a What is the yearly depreciation expense per forklift?
- b What is the total annual expense for depreciation of the forklifts?
- c Using Excel, design an asset register for one forklift and record depreciation, accumulated depreciation and the carrying value of the forklift from 1 October 2028 until 30 September 2031.
- d Prepare an extract from the balance sheet showing the original cost, accumulated depreciation and carrying value of the forklifts as at 30 September 2029, 2030 and 2031.



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4 Depreciation of vehicle: Part year

Fidget Factory bought a new Kia Sportage from Melbourne Kia on 1 July 2028. The business paid \$40 000 cash (excluding GST) for the vehicle, plus a dealer's delivery fee of \$2000. The owner expects to use the car for three years, before trading it in for approximately \$15 000. Insurance has been arranged with United Insurance at a cost of \$1500 for 12 months' cover.

- Calculate the yearly depreciation rate for the vehicle.
- Prepare an extract from the balance sheet showing all details of the vehicle as at 31 December 2028, 2029 and 2030.
- Design an asset register for the vehicle and record all details for the years 2028, 2029 and 2030.



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5 Depreciation of shop fittings: Part year

Laverton Laundry Supplies purchased new shop fittings on 1 April 2028 at a cost of \$22 000, plus \$2200 GST. The fittings are expected to last for eight years and then be scrapped completely – that is, no residual value is expected to be received at all. It also costs the business \$2000 to have the fittings installed in its shop. The accounting period ends on 31 December each year.

- Calculate the yearly depreciation expense for the shop fittings and the amount of depreciation to be expensed for the year ended 31 December 2028.
- Prepare an extract from the balance sheet showing all details of the shop fittings as at 31 December 2028, 2029 and 2030.



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6 Income statement and balance sheet

The following information relates to the business of CBD Solar for the year ended 30 November 2028.

Cash sales	\$72 000	Advertising	\$1 100
Cash at bank	1 200	Office equipment	6 000
Vehicles	30 000	GST received	7 200
Rent	15 000	GST paid	3 600
Loan from NAB	7 000	Capital – Mannix	29 500
Cost of sales	24 000	Assistant's wages	15 000
Interest on loan	1 200	Drawings	8 000
Inventory	20 000	Accounts payable	9 400

Additional information:

- The office equipment must be depreciated by \$600.
 - The vehicles must be depreciated by \$7000.
- Prepare an income statement for the year ended 30 November 2028 under the accrual method of accounting.
 - Prepare a classified balance sheet as at 30 November 2028.

7 Income statement and balance sheet

Sorrento Shoe Studio supplies the following information from its accounting records.

Sales	\$96 000	Capital – Feelgood	\$774 320
Assistant's wages	22 000	Repairs and maintenance	1 700
Cost of sales	38 000	Insurance	3 400
Inventory	21 500	Cash at bank	3 100
Loan from EZ Finance		GST receipts	9 600
(due 30/9/29)	5 600	Interest on loans	5 600
Office equipment	9 000	Cleaning expenses	4 500
Telephone bills	400	Stationery expenses	200
Premises	820 000	Mortgage on premises	55 000
Drawings	10 200	GST payments	4 520
Accumulated depreciation – office equipment	3 600		

The office equipment must be depreciated by 20% p.a. on cost.

- a Prepare an income statement for the year ended 31 December 2028.
- b Prepare a classified balance sheet as at 31 December 2028.

8 Income statement and balance sheet

The following information relates to the business of Liberty Prosthetics and Wheelchairs.

Sales	\$53 000	Vehicles	\$64 000
Insurance	1 200	Telephone expenses	640
Cost of sales	21 000	Stationery expense	650
Vehicle repairs	890	Capital – M Randi	69 760
Assistant's wages	22 550	Advertising	970
Accounts payable	1 320	Petrol expense	2 780
Office equipment	5 600	Drawings	10 000
Accumulated depreciation:		Interest on loan	400
– Office equipment	1 800	Bank overdraft	1 413
– Vehicles	24 000	Inventory loss	1 200
Inventory	22 000	GST paid	2 713
GST collected	5 300		

Additional information:

- Office equipment is to be depreciated 15% on cost.
- Vehicles are to be depreciated 25% on cost.

Using the relevant information from the above list, prepare an income statement for the year ended 31 December 2028 and a classified balance sheet as at 31 December 2028.



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9 Income statement and balance sheet

The owner of Bridgewater Boat Parts has supplied the following information.

Advertising	\$1 400	Bank overdraft	\$1 200
Drawings	6 500	Equipment	12 400
Office furniture	2 400	Sales	48 000
Cost of sales	16 830	Wages	18 200
Inventory	21 500	Cartage in	250
Insurance	890	Stationery expenses	600
Telephone bills	580	Rent	12 000
Accumulated depreciation:		Capital – Babic	27 362
– Equipment	4 960	Accounts payable	9 680
– Office furniture	720	GST collections	4 800
GST payments	3 172		

Additional information:

- Office furniture is to be depreciated 10% on cost.
- Equipment is to be depreciated 20% on cost.

Using the relevant information from the above list, prepare an income statement and a classified balance sheet at the end of the yearly period, 30 June 2028.



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10 Asset turnover

The owner of Carlton Cabinets reports that the assets of the business have increased from \$290 000 to \$330 000 over the past 12 months. In the current accounting period, which just concluded, the business generated total sales of \$420 000. The asset turnover achieved in the previous period was 1.15 times p.a.

- Calculate the asset turnover achieved in the most recent period.
- Taking into account last year's result, comment on the results achieved in asset turnover in the current period.



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11 Asset turnover

The following information has been provided by the owner of Brighton Swimwear, Melina Acosta.

Total assets as at	30 June 2028	\$320 000
	30 June 2029	\$340 000
	30 June 2030	\$380 000
Sales for the year ended	30 June 2029	\$570 000
	30 June 2030	\$575 000
Sales returns for the year	30 June 2029	\$5 000
Sales returns for the year	30 June 2030	\$9 000

- Calculate the asset turnover achieved by the business for the years ended 30 June 2029 and 30 June 2030.
- Comment on the results achieved over the two years. Do you think the business has improved or deteriorated in terms of its use of assets to generate revenue? Discuss.

12 Return on assets

Jasper Felix, owner of Newport Games & Sports, provides the following information for your use.

	31 December 2028	31 December 2029
Total assets	\$450 000	\$480 000
Net profit for the year		\$9 000

- a Calculate the return on assets for Felix's business for the year ended 31 December 2029.
- b Taking into account the returns available in the general money market, comment on whether Felix's return on assets would be acceptable.

13 Return on sale and return on assets

Consider the following financial data from Wyndham Costume Shop, which is owned and operated by Alannah Mitchell.

	2027	2028	2029	2030
Total sales		\$142 000	\$150 000	\$155 000
Sales returns		\$2 000	\$2 000	\$3 000
Net profit		\$30 000	\$32 000	\$40 000
Total assets	\$330 000	\$340 000	\$360 000	\$420 000

- a Calculate the following financial indicators for the years 2028, 2029 and 2030. Express each one as a percentage.
 - i Net profit margin
 - ii Asset turnover
 - iii Return on assets
- b Taking into account the trend in your answers for part a, comment on the performance of this business in relation to:
 - i net profit margin and profit performance
 - ii how effectively it uses its assets to generate sales
 - iii how effectively it uses its assets to produce a profit.



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CASE STUDY

Captain Snores is a small business that sells a range of bedroom furniture and accessories. The owner of the firm, Ryan Perez, has built the business up over several years. He believes it is successful because of the free delivery service he offers to all customers. Perez maintains a delivery vehicle in order to provide this service.

At the end of the previous period, the following report was prepared.

Assets	\$	Liabilities	\$	\$
Cash at bank	2 190	Accounts payable	3 200	
Accounts receivable	8 670	GST debt	2 200	5 400
Inventory	52 300	Owner's equity		
Delivery vehicle	28 000	Capital	65 430	
– Accumulated dep'n	(8 000)	Plus: Net profit	32 000	
Office furniture	6 400		430	
– Accumulated dep'n	(1 200)	Less: Drawings	14 470	82 960
	88 360			88 360

Perez provided the following summary of events in relation to the 2028 yearly period.

Cash sales	\$92 400	Cost of sales	\$72 900
Credit sales	61 900	Stationery expenses	540
Cartage inwards	2 430	Security expenses	1 200
GST receipts	9 240	GST payments	5 750
Inventory loss	1 250	Customs duty	860
Wages	25 400	Insurance	1 560
Advertising	1 200	Drawings	32 000
Electricity	980	Rent	35 500
Vehicle expenses	2 200	Telephone expenses	1 020
GST charged to accounts receivable	5 190	GST charged by accounts payable	2 120

Additional information:

- The delivery vehicle was originally purchased for \$28 000. It has an estimated useful life of four years and an estimated scrap value of \$12 000.
 - The office furniture was purchased for \$6 400 and has an estimated residual value of \$400. It is expected to be used in the business for 10 years.
- a** Calculate the amount of expense incurred for each of the following items.
 - i** Depreciation of vehicle
 - ii** Depreciation of office furniture
 - b** Prepare an income statement for the year ended 31 December 2028.
 - c** Prepare two extracts from the firm's balance sheet as at 31 December 2028. The first should include all non-current assets controlled by the business, including the relevant amounts for accumulated depreciation. The second extract should present the owner's equity section of the report.
 - d** Comment on the owner's level of drawings, in terms of the profit result for 2028. What potential problem might this create? Discuss.
 - e** For how many more years does Perez expect to use his two non-current assets? Explain how you determined these two figures.
 - f** What is the GST situation at the end of December 2028? Show all workings and explain how your final figure should be reported.

ETHICAL CONSIDERATIONS

Tanya Jeffries operates a small business selling a range of prints and posters. She is concerned about her return on assets, which has been decreasing in recent years. A lot of her inventory is produced by local artists and these items have become quite expensive to buy.

Recently, Jeffries was put in touch with an importer who can supply a range of products that might suit her shop. His prices are significantly lower than her current suppliers are charging, and Jeffries is tempted to buy the imported goods to help reduce her costs. She is sure that her profit can improve, which will increase her return on assets. However, she suspects that some of the importer's artworks are unlicensed copies of original pieces or are copyrighted artwork that he doesn't have the right to reproduce.

Jeffries has asked for your advice. Would she be making the correct decision if she chose to import the products? Discuss this issue, taking into account the financial, social and ethical considerations that Jeffries should consider.



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EXAM-STYLE QUESTIONS

Question 1 (5 marks)

The owner of Logan's Cleaning Products has provided the following information about a vehicle he recently purchased. The following payments were made on 1 February 2028. Logan uses a 12-month reporting period, which ends on 30 June each year.

- Cost price: \$33 000 (including GST)
- Dealer's delivery fee: \$2160
- Registration: \$900
- Insurance: \$2500

Logan anticipates that the vehicle will be used in his business for four years, before being sold for approximately \$12 000.

- Calculate** the depreciation expense in relation to the vehicle for the year ended 30 June 2028. Show all workings.
- Prepare** an extract from the balance sheet for Logan's business, showing clearly how the vehicle would be reported on 30 June 2029.

Question 2 (4 marks)

Consider the following statement: 'Depreciation cannot be verified and therefore should be excluded from the calculation of profit.'

Do you agree with this statement? **Explain** your answer fully, with reference to an accounting assumption.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 23

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Reducing balance method of depreciation

KEY TERMS

Reducing balance method of depreciation

This chapter introduces the second method of depreciation covered in the VCE Accounting Study Design: the reducing balance method. The theory behind why non-current assets should be depreciated doesn't change. The difference between the two methods is *how much* depreciation should be allocated each reporting period, which is determined by the revenue-earning pattern of each asset.

Learning objectives

By the end of this chapter, you will be able to:

- **describe** how the reducing balance method is applied to non-current assets [23.1]
- **compare** the straight-line and reducing balance methods of depreciation [23.2]
- **prepare** a graph to demonstrate the differences between the two methods [23.2]
- **explain** the effect that a change in depreciation may have on accounting reports [23.2]
- **explain** why the reducing balance method should be applied to some assets [23.2]
- **justify** the use of depreciation methods for a variety of assets [23.3]
- **explain** the link between accounting assumptions and qualitative characteristics in relation to allocating depreciation and changing depreciation methods [23.3]

PRIOR KNOWLEDGE

CHAPTER 1 Let's go accounting!

CHAPTER 20 Income statements for a trading business

CHAPTER 22 Accounting for non-current assets



Estimated time required: 1 week



23.1 Reducing balance depreciation



In Chapter 22, you learnt about the importance of allocating depreciation at the end of each accounting period. Part of the cost of a non-current asset should be written off against the revenue it generates. This involves estimating both the asset's useful life and its residual value at the end of that life. The recording of depreciation complies with the *accrual method of accounting* by matching revenue earned with expenses incurred for a given period of time. By doing so, it also complies with the *period assumption* and the qualitative characteristic of *relevance*.

Why is a second method necessary?

Not all non-current assets are the same. Some assets don't change much over time and generally have what is called a constant revenue-earning capacity. Assets such as office furniture, office equipment and shop fittings are just as efficient in earning revenue in their first year as in their second, third or fourth year. In other words, their ability to earn revenue doesn't really change over their useful lives.

Other assets don't have the same revenue-earning capacity over their useful life. Some assets are much more efficient when they are new, so their maximum earning capacity is usually in their early years of use. As the asset gets older, its efficiency – and therefore its revenue-earning ability – may diminish. Examples of such assets include motor vehicles and machinery. When they are new, they are very effective in earning revenue and rarely break down. In their latter years of use, however, breakdowns will occur more often and the assets will generate less revenue.

Having determined that different assets may have different revenue-earning patterns, it's logical to try to match an asset's depreciation with its revenue-earning pattern. If an asset is expected to have a constant revenue-earning pattern, it should have a constant amount of depreciation allocated. This is the essence of the *straight-line method of depreciation*. On the other hand, if an asset is expected to earn more revenue in its earlier years than in its last few years, the depreciation allocated should follow that trend. This is the feature of the **reducing balance method of depreciation**.

reducing balance method of depreciation a method of depreciation that allocates more depreciation in the early years of an asset's life and less depreciation in its later years

Calculating reducing balance depreciation

In order to understand the differences between the two methods of depreciation, consider the following details that relate to a vehicle purchased by Maggie's Hardware Store.

Date of purchase	1 July 2028
Vehicle cost	\$40 000, plus GST
Estimated useful life	4 years
Estimated residual value	\$8000
Reporting period ends	30 June each year

Using the formula for straight-line depreciation, the depreciation expense would be calculated as follows:

$$\text{Depreciation expense} = \frac{\text{Cost} - \text{Residual value}}{\text{Useful life}} = \frac{\$32\,000}{4} = \$8\,000 \text{ p.a.}$$

This means that the vehicle will be depreciated by \$8000 each year of its four-year useful life. The depreciation rate can also be expressed as a percentage, which would be 20% per annum ($\$8000/\$40\,000 = 20\%$). But is this the most appropriate way to depreciate a vehicle?

If the owner believes that the vehicle will be expected to be more productive in its earlier years of use, they may choose to apply the reducing balance method to this asset. The formula used to determine the percentage rate of depreciation is quite complex. The good news is that you don't need to know this formula in the VCE! When reducing balance depreciation is used, the percentage rate will be provided in the question material. You can work out an approximation of the depreciation rate by multiplying the percentage used under the straight-line method by 1.5. Using the above data as an example, the vehicle was being depreciated at the rate of 20% per annum under the straight-line method. Therefore, if we are going to apply reducing balance depreciation, the rate would be 30% (1.5×20).

Applying the depreciation rate

With the reducing balance method, the percentage rate is always applied to the *carrying value* of the asset. Of course, in the first year of an asset's use, when depreciation hasn't yet been allocated, the percentage will be applied to the cost of the asset. However, in subsequent years, the percentage must be applied to its carrying value. You do NOT need to take into account the estimate of the asset's residual value when applying the percentage rate under the reducing balance method. The following example, using the data stated above, demonstrates how the rate is applied.

Table 23.1 Calculation of depreciation under the reducing balance method

Year ended	Depreciation expense	Accumulated depreciation	Carrying value
30 June 2029	30% of \$40 000 = \$12 000	\$12 000	\$40 000 - \$12 000 = \$28 000
30 June 2030	30% of \$28 000 = \$8 400	\$12 000 + \$8 400 = \$20 400	\$40 000 - \$20 400 = \$19 600
30 June 2031	30% of \$19 600 = \$5 880	\$20 400 + \$5 880 = \$26 280	\$40 000 - \$26 280 = \$13 720
30 June 2032	30% of \$13 720 = \$4 116	\$26 280 + \$4 116 = \$30 396	\$40 000 - \$30 396 = \$9 604

The percentage rate is fixed but is applied to a diminishing carrying value.

As the accumulated depreciation value increases, carrying value will decrease. This means that depreciation expense will also decrease.

A few points to consider in relation to reducing balance depreciation:

- The percentage used to determine depreciation does NOT change during the asset's life. In the above example, 30% is used each year.
- The carrying value of the asset is determined in the usual way. The cost of the asset is reported in the balance sheet, along with its accumulated depreciation. The carrying value will therefore decrease each year.
- As the carrying value decreases, so too will the depreciation each year. Note in Table 23.1 that depreciation expense started at \$12 000 and then over the next three years decreased to \$8400, \$5880 and finally \$4116.
- A quick comparison of the data given in the table with the straight-line method shows that the reducing balance method has allocated more depreciation in 2029 and 2030, but less depreciation in 2031 and 2032.

Note that as approximation has been used to determine 30% depreciation under the reducing balance method, there is a discrepancy in the carrying value after four years of depreciation. The straight-line depreciation was based on a residual value of \$8000. However, after four years of reducing balance depreciation, the carrying value has only decreased to \$9600. This isn't a concern, as you aren't expected to calculate the exact rate for the reducing balance method. In theory, if the exact rate is applied to the reducing balance method, the same residual value should be reached at the end of an asset's useful life. For those interested, the rate required to depreciate the asset to \$8000 over four years is about 33% under the reducing balance method, as shown in Table 23.2.

Table 23.2 Calculation of depreciation under the reducing balance method at 33%

Year ended	Depreciation expense	Accumulated depreciation	Carrying value
30 June 2029	33% of \$40 000 = \$13 200	\$13 200	\$40 000 - \$13 200 = \$26 800
30 June 2030	33% of \$26 800 = \$8 844	\$13 200 + \$8 844 = \$22 044	\$40 000 - \$22 044 = \$17 956
30 June 2031	33% of \$17 956 = \$5 925	\$22 044 + \$5 925 = \$27 969	\$40 000 - \$27 969 = \$12 031
30 June 2032	33% of \$12 031 = \$3 970	\$27 969 + \$3 970 = \$31 939	\$40 000 - \$31 939 = \$8 061

Under reducing balance depreciation, the exact rate should result in the same residual value as the straight-line method after the four years of depreciation.

Using reducing balance at 33%, rather than the approximation value of 30%, shows that the accurate rate is between 33% and 34%. Always keep in mind that the percentage to be used will be stated in exam questions.

When calculating depreciation expense using the reducing balance method, you are likely to calculate odd amounts. That is, they may not always be exact dollar amounts. The calculation for 2031 in Table 23.2, for example, determined depreciation as \$5925.48. However, it's acceptable to simply record \$5925. The qualitative characteristic of *relevance* allows for cents to be left off or rounded to the nearest dollar, as they are insignificant when recording depreciation and are highly unlikely to affect management decision-making. Keep this in mind when calculating depreciation.





23.2 Comparing depreciation methods

You have seen that the straight-line method of depreciation allocates a fixed amount of depreciation every year of the asset's life, whereas the reducing balance method allocates more depreciation in an asset's early years of use than in its final years. Figure 23.1 is based on the original data used for the vehicle purchased by Maggie's Hardware Store. This graph is based on straight-line depreciation at 20% p.a., compared to reducing balance at 30%.

FIGURE 23.1 Comparison of depreciation under straight-line and reducing balance methods

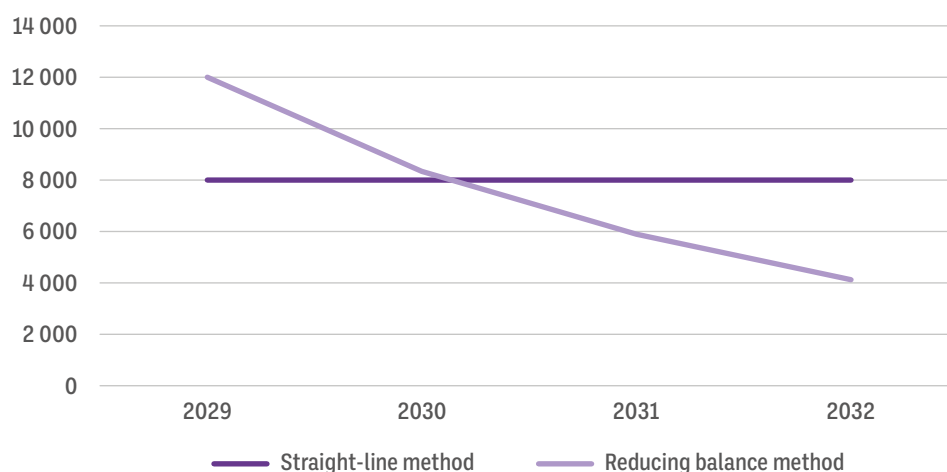


Figure 23.1 clearly demonstrates the different approach to depreciation under the two methods. In the first year of depreciation (2029), the reducing balance method has allocated significantly more depreciation. It can also be seen that in 2032, the reducing balance method allocates a much smaller amount of depreciation, compared to the straight-line method. Keep in mind that the only difference between the two methods of depreciation is the cost to be allocated each period. Regardless of the method being applied, always report the depreciation of the asset in the income statement as an expense and the accumulated depreciation in the balance sheet as a negative asset.



Depreciation and the balance sheet

The reporting of a non-current asset and its accumulated depreciation in the balance sheet isn't affected by the method of depreciation being used. It is essential to report the original cost price of the asset, regardless of how many years the asset has been used by the business. Table 23.3 shows the differences between the two methods in reporting accumulated depreciation over the first three years of the vehicle's life.

Table 23.3 Balance sheet presentation of non-current assets using the straight-line and reducing balance methods of depreciation

METHOD OF DEPRECIATION: STRAIGHT-LINE				
Balance sheet as at 30 June	2029	2030	2031	2032
Non-current assets				
Vehicle	40 000	40 000	40 000	40 000
Less: Accumulated depreciation	8 000	16 000	24 000	32 000
	32 000	24 000	16 000	8 000

METHOD OF DEPRECIATION: REDUCING BALANCE				
Balance sheet as at 30 June	2029	2030	2031	2032
Non-current assets				
Vehicle	40 000	40 000	40 000	40 000
Less: Accumulated depreciation	12 000	20 400	26 280	30 396
	28 000	19 600	13 720	9 604

It doesn't matter which method is selected to report depreciation of a non-current asset in a balance sheet. The only thing that changes is the values stated for accumulated depreciation.

23.3 Choosing a depreciation method



The selection of a depreciation method should be based on the general principle of the revenue-earning pattern of the asset. Keep in mind that the goal is to determine the most accurate profit figure under the *accrual basis of accounting*. The cost of an asset has to be allocated over several reporting periods, and *relevance* requires the expense to be recognised for the current reporting period. Therefore, as a general rule:

- If an asset is expected to earn more revenue in its early years, and less in its later years, the reducing balance method should be applied.
- If an asset is expected to generally have a consistent earning ability throughout its life, the straight-line method should be used.

Therefore, a business may use reducing balance depreciation for some of its assets, but straight-line depreciation for other assets, depending on their expected revenue-earning pattern. Some typical applications of this principle are shown below.

Non-current asset	Recommended depreciation method
Office furniture	Straight-line
Shop fittings	Straight-line
Display equipment	Straight-line
Vehicles	Reducing balance
Machinery	Reducing balance
Photocopiers	Reducing balance

The straight-line depreciation method is clearly appropriate for assets such as furniture and display equipment. However, the revenue-earning pattern of assets such as photocopiers and vehicles is usually quite different. These machines are often at their maximum earning ability in their first few years. The longer such assets are used, the more likely they are to break down, meaning their revenue-earning ability deteriorates over time. Therefore, reducing balance depreciation would be the correct choice for such assets.

Once a depreciation method is selected for a particular asset, it should be applied consistently from one reporting period to the next. Management should not be changing depreciation methods from year to year. The reason for this is that a change in depreciation method means a change in a key expense item: that of depreciation. As the amount of depreciation expense being allocated will change if a different method is used, there will be an impact on the net profit being reported. Therefore, management may have difficulty interpreting changes in profit if it changes its depreciation methods. Did the profit decrease because of poor expense control or simply because we changed the depreciation method? This is a dilemma for management, as it breaches the qualitative characteristic of *comparability*, which demands that consistent accounting methods are applied from period to period so that performance can be measured accurately. Changes in depreciation methods will cause changes in profit and therefore should be avoided wherever possible.





Practise and apply

23



REVISION: SUMMARY OF KEY CONTENT

- [23.1]** The reducing balance method of depreciation allocates more depreciation in the earlier years of an asset's life and less depreciation in its later years. It should be used for assets that become less useful over time in terms of generating revenue, such as vehicles and machinery.
- [23.2]** Depreciation under the straight-line method is at a constant rate across all years of an asset's life. However, if the reducing balance method is adopted, the amount of depreciation allocated each period decreases year by year. Over the life of an asset, the total amount depreciated is the same, regardless of which method is used but the amount allocated each period will vary. Therefore, there is an effect on the net profit each period, depending on which method of depreciation is selected.
- [23.3]** The depreciation method chosen should be based on satisfying the accrual basis of accounting, relevance and the period assumption. It should therefore take into consideration the predicted revenue-earning pattern of each particular non-current asset.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.



Workbook
p. 296



XL template

1 Depreciation: Comparing methods

Bellarine Stationery & Printing purchased a photocopier on 1 July 2028 for \$35 000, plus GST. The owner of the business is unsure which depreciation method to use. She has been advised that such an asset should be depreciated at the rate of 30% straight-line or 45% using the reducing balance method.

- a Complete the following tables to assist the owner with her decision.

METHOD OF DEPRECIATION: STRAIGHT-LINE

Year ended 30 June	Depreciation	Accumulated depreciation	Carrying value
2029			
2030			
2031			

METHOD OF DEPRECIATION: REDUCING BALANCE

Year ended 30 June	Depreciation	Accumulated depreciation	Carrying value
2029			
2030			
2031			

- b Which method of depreciation would you recommend for the photocopier? Explain your answer.



Workbook
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2 Depreciation: Comparing methods

Fairfield Furniture purchased a new delivery vehicle on 1 April 2028 at a cost of \$39 600 (including GST). The vehicle should be used for about five years before being sold for approximately \$14 000.

- a Complete the following tables for the two depreciation methods. Use the normal formula for the straight-line method and 18% for the reducing balance method.

METHOD OF DEPRECIATION: STRAIGHT-LINE

Year ended 31 March	Depreciation	Accumulated depreciation	Carrying value
2029			
2030			
2031			
2032			
2033			





METHOD OF DEPRECIATION: REDUCING BALANCE

Year ended 31 March	Depreciation	Accumulated depreciation	Carrying value
2029			
2030			
2031			
2032			
2033			

- b** Prepare a line graph to show the depreciation expense under the two different methods of depreciation for the five years of the asset's life.
- c** In what years does the reducing balance method allocate more depreciation compared to the straight-line method?
- d** In what years does the reducing balance method allocate less depreciation compared to the straight-line method?

3 Reducing balance depreciation

Doncaster Denim sells a range of fashionable jeans. On 1 November 2028, the business purchased new display equipment costing \$15 000, plus GST. The owner has decided to depreciate the equipment at 15% per annum using the reducing balance method. This business uses 31 October each year as the end of its reporting period.

- a** Calculate the depreciation expense to be allocated for the years ending 31 October 2029, 2030 and 2031.
- b** Prepare balance sheet extracts to show how the display equipment would be reported on 31 October 2029, 2030 and 2031.
- c** Is the reducing balance method the most appropriate method for depreciating display equipment? Refer to an accounting assumption in your answer.

4 Reducing balance and straight-line: Effect on profit

The Fun Palace is a small business that sells children's playground equipment. On 1 July 2028, the owner decided to buy a new vehicle so that he can offer free delivery of the larger inventory items that the business sells. The vehicle cost \$38 000, plus GST. The owner is trying to work out the different profit results if he allocates depreciation using reducing balance rather than the straight-line method. He has the choice of 20% straight-line method or 30% reducing balance. The reporting period for this business ends on 31 December each year.

- a** Calculate the depreciation expense to be allocated for the years ending 31 December 2028, 2029 and 2030 using the straight-line method.
- b** Calculate the depreciation expense to be allocated for the years ending 31 December 2028, 2029 and 2030 using the reducing balance method.
- c** State the effect on profit if the owner decides to use the reducing balance method for the years 2028, 2029 and 2030, rather than the straight-line method.



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5 Reducing balance and straight-line: Effect on profit

The management of Wholesale Traders decided to upgrade the office furniture for its office staff. New desks and ergonomic chairs were purchased at a total cost of \$26 400, including GST. The transaction took place on 1 October 2028. The accounting period for this business is 31 December each year. Acting on the advice of his accountant, the owner is considering straight-line depreciation at the rate of 10% p.a., or reducing balance depreciation at 15% p.a.

- Calculate the depreciation expense to be allocated for the years ending 31 December 2028, 2029 and 2030 using the straight-line method.
- Prepare balance sheet extracts to show how the office furniture would be reported at the end of each of the three years under the straight-line method.
- Calculate the depreciation expense to be allocated for the years ending 31 December 2028, 2029 and 2030 using the reducing balance method.
- Prepare balance sheet extracts to show how the office furniture would be reported at the end of each of the three years under the reducing balance method.
- The owner can't be bothered thinking about all these depreciation calculations. 'After all, doesn't it all work out the same at the end of the asset's life, and isn't it all based on estimates?' Is the owner's statement true? Comment on his statement, with reference to a qualitative characteristic to justify your answer.



Workbook
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EXAM-STYLE QUESTIONS

Question 1 (3 marks)

On 1 March 2028, a business bought machinery at a cost of \$16 500, which included GST. The reporting period for this business ends on 30 June each year. Management has decided to depreciate the asset at the rate of 20% p.a. using the reducing balance method.

Prepare an extract from the firm's balance sheet on 30 June 2029, showing clearly how the non-current asset machinery would be reported.

Question 2 (2 marks)

A business owner was advised to depreciate the business's vehicles using the reducing balance method.

Explain why the reducing balance method would be recommended as suitable for the depreciation of vehicles.



Watch selected exercises from this chapter being completed with step-by-step instructions and advice.

CHAPTER 24

15 16 17 18 19 20 21 22 23 24 25

Budgeting for a small business

KEY TERMS

Budget
Master budget
Budgeted cash flow statement
Cash surplus
Cash shortage
Variance
Favourable variance
Unfavourable variance
Schedule of collections
Schedule of payments
Budgeted income statement
Budgeted balance sheet

In this chapter, you will learn why budgeting is vital for a successful small business. You will consider possible variances in a budget and create a variety of budgeting reports.

Learning objectives

By the end of this chapter, you will be able to:

- **list** a variety of budgets prepared by small businesses [23.1]
- **identify** the information required to prepare a budgeted cash flow statement [23.2]
- **prepare** a formal budgeted cash flow statement to identify a cash surplus or deficit [23.2]
- **prepare** a budget variance report for both cash and profit, including variances in both dollar and percentage terms [23.3]
- **prepare** a report to management, commenting on significant budget variances [23.3]
- **prepare** schedules of collections from accounts receivable and schedules of payments to accounts payable [23.4]
- **identify** the information required to prepare a budgeted income statement [23.5]
- **prepare** a budgeted income statement to identify a budgeted profit or loss [23.5]
- **prepare** a budgeted balance sheet [23.6]

PRIOR KNOWLEDGE

CHAPTER 20 Income statements for a trading business

CHAPTER 21 Cash flow statements for a trading business



Estimated time required: 2 weeks





24.1 What is budgeting?

budget a financial plan that sets out the expected transactions for future accounting periods

A **budget** is simply a financial plan for the future. Governments prepare them, schools prepare them, some households have them – you may even have a personal budget.

In accounting, budgeting is the process of predicting future financial transactions to enable management to improve its decision-making. If management can draw up a budget to estimate what is likely to occur in the future, it will be better prepared for when it actually happens. Also, if the predicted events are unsatisfactory, management can try to change the situation and achieve a better outcome.

Another part of budgeting occurs when management decides to set a target of achievement for some time in the future. Examples are setting a sales target of \$75 000 for a quarter or trying to raise \$40 000 in cash by the end of six months.

Budgeting has a controlling role to play as well. If a business has a number of separate departments, each one can be given a budgeted amount to spend during each accounting period. This puts a ceiling on expenditure, ensuring that the firm doesn't overspend.

All of these examples have one thing in common: they all rely on estimating future financial transactions in order to plan and control the outcomes of management decision-making.

In larger businesses, budgets should involve a number of individuals working together to devise future plans.



Types of budgets

A business can prepare many different types of budgets. Depending on the firm's size, these may include the following.

- *Sales budgets* predict a future revenue target or market share (in both quantity and total revenue).
- *Purchases budgets* estimate the goods a trading firm requires to meet a sales target (in both quantity and cost).
- *Materials budgets* estimate the material requirements for the period if a firm manufactures goods rather than buying them from a wholesaler.
- *Labour budgets* predict the number of employees required and the total cost of labour expenses.
- *Expense budgets* estimate all the costs that are likely to be incurred in trying to meet the budgeted revenue for the next period.

Budgeted accounting reports

To create and manage budgets, businesses draw on information from budgeted accounting reports. These are reports that predict future financial transactions for the business, rather than reporting actual transactions that have occurred.

Businesses create three key budgeted accounting reports, which are versions of the main reports you have already studied.

- *Budgeted cash flow statements* are used to predict all the future cash inflows and outflows of the firm, with the final figure being an estimate of the balance of cash at bank.
- *Budgeted income statements* summarise all the estimates of future revenues and expenses for a particular period, with the end result being a budgeted net profit (or net loss).
- *Budgeted balance sheets* list estimates of the values of assets, liabilities and the future owner's equity in the business.

This chapter will concentrate on these budgeted reports. However, it's important to realise that when management is preparing a budget for a small business, the information it needs may in fact come from another type of budget.

All of these budgets connect to make up the **master budget** of the business. Master budgets have a degree of risk: an error in estimating one item in one budget may lead to a further error in another budget. However, keep in mind that a budget is only a plan; it isn't expected to be perfect. Management should think of budgeting as a starting point when planning its future decisions.

master budget the overall planning strategy of a business, which consists of many smaller budgets

24.2 Budgeted cash flow statements



Control over cash is a major objective for all businesses. An adequate cash flow is necessary for basic survival, to pay off loans and buy new assets. A business must plan ahead to anticipate its cash needs.

A **budgeted cash flow statement** is like a normal cash flow statement, except that it estimates *what is expected to occur* in the future, instead of reporting on *what has happened* in terms of cash flows.

The budgeted statement lists all the anticipated cash inflows and cash outflows under the usual three headings of operating, investing and financing activities. It predicts a future cash surplus (or deficit) for a period. This surplus (or deficit) is then added to the bank balance at the start of the budget period to produce an estimated bank balance in the future.

budgeted cash flow statement a report that shows estimates of cash receipts and cash payments, and an estimated cash balance, at a particular point in the future



Preparing a budgeted cash flow statement

Consider the following situation. Chris Chisholm owns Armadale Aeronautics, a small business that sells model aircraft kits and parts. She wants to purchase a new computer for the office at a cost of \$2000, plus GST. On 1 July 2028, the business had only \$400 cash at bank. Chisholm has supplied the following information about her business.

- 1 Last year, she earned cash sales of \$8000 (plus GST) during July. So far this year, her sales have been up by about 10% on last year's figures.
- 2 Chisholm purchases all her inventory on credit and expects to buy approximately \$4000 worth of goods during July (plus GST). Accounts payable due before the end of July amount to \$3400.
- 3 The monthly performance report of the firm shows the following regular expenses: rent \$1900 (plus GST of \$190), wages \$80, and van expenses \$200 (plus GST of \$20).
- 4 In addition to the above expenses, the annual insurance premium on Chisholm's delivery van is due on 14 July each year. This costs \$850 (plus GST of \$85).
- 5 The business has loan repayments of \$375 per month.
- 6 Chisholm usually withdraws \$250 per week for personal spending.

When preparing a budgeted cash flow statement, management should consider only cash inflows and outflows. The amount of goods purchased on credit (part of item 2) isn't a cash flow, so it's irrelevant to the budgeted cash flow statement. However, the amount expected to be paid to accounts payable is relevant, as it involves a movement of cash.

A budgeted cash flow statement can be prepared as shown in Figure 24.1.

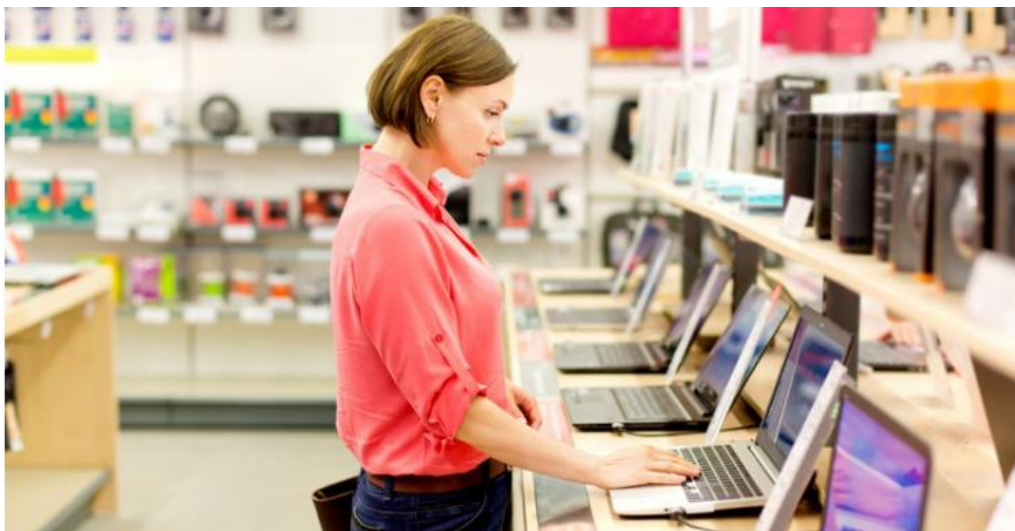
Figure 24.1 Budgeted cash flow statement

ARMADALE AERONAUTICS: BUDGETED CASH FLOW STATEMENT FOR MONTH ENDING 31 JULY 2028

	\$	\$
Cash flows from operating activities		
Cash sales (\$8000 + 10% increase)	8 800	
GST receipts	880	
Accounts payable	(3 400)	
Rent	(1 900)	
Wages	(800)	
Van expenses	(200)	
Insurance of van	(850)	
GST payments	(295)	
Net cash provided by operating activities		2 235
Cash flows from investing activities		
Nil		Nil
Cash flows from financing activities		
Loan repayments	(375)	
Drawings	(1 000)	
Net cash used in financing activities		(1 375)
Increase (decrease) in cash held		860
Bank balance 1 July 2028		400
Estimated bank balance 31 July 2028		\$1 260

Always remember that budgets are based on estimates and therefore cannot be verified.

Chisholm can use this statement to evaluate whether she can spend \$2000 (plus GST) on a new computer. As the statement predicts a balance of only \$1260 at the end



When planning to buy non-current assets, owners should check their budgeted cash flows to ensure they have ample cash for the future needs of the business.

of July, it appears she won't have enough cash available for the purchase. She may then decide to:

- wait until later to buy the computer
- borrow the money
- put in some additional capital
- cut back on drawings
- try to reduce her expenses.

If Chisholm decides to wait, she may extend the budget period to see what lies ahead. Figure 24.2 shows a budgeted cash flow statement prepared for a three-month period.

Figure 24.2 Quarterly budgeted cash flow statement

ARMADALE AERONAUTICS: BUDGETED CASH FLOW STATEMENT FOR QUARTER ENDING 30 SEPTEMBER 2028			
	July \$	August \$	September \$
Cash flows from operating activities			
Cash sales	8 800	9 000	9 000
GST receipts	880	900	900
Accounts payable	(3 400)	(4 000)	(4 000)
Rent	(1 900)	(1 900)	(1 900)
Wages	(800)	(800)	(800)
Van expenses	(200)	(220)	(220)
Insurance of van	(850)	–	–
GST payments	(295)	(210)	(210)
Net cash provided by operating activities	2 235	2 770	2 770
Cash flows from investing activities			
Nil	Nil	Nil	Nil
Cash flows from financing activities			
Loan repayments	(375)	(375)	(375)
Drawings	(1 000)	(1 000)	(1 000)
Net cash used in financing activities	(1 375)	(1 375)	(1 375)
Increase (decrease) in cash held	860	1 395	1 395
Bank balance 1st of month	400	1 260	2 655
Estimated bank balance end of month	1 260	2 655	4 050

Note that the balance at the end of July becomes the balance at the start of August.

Evaluating the budgeted cash flow statement

Once a budgeted cash flow statement is created, consider both the final results and the larger context of the business when evaluating it. It's not just about numbers – it's what the numbers mean and what they imply.

If you look at the quarterly budget for Armadale Aeronautics, it appears to indicate that there will be cash available by the end of August to buy the computer for \$2000, plus \$200 GST. However, this would leave only an estimated \$455 in the bank – and that's if the budget proves to be accurate! It would only take one unexpected payment to use up the available cash. It may be wise for Chisholm to have a buffer zone or safety margin, with a minimum amount of cash kept in the firm's bank account. Otherwise, the business may be forced to go into overdraft (if available), which costs money in terms of interest.

Also keep in mind that the longer the budget period, the less reliable the estimates will be. Note how in Figure 24.2 the estimated balance at the end of July becomes the opening balance for August. The final balance for August becomes the balance at the start of September. If the budget for July proves to be inaccurate, the budget for the following two months will be unreliable. For example, if the expected increase in sales doesn't take place in July, the predicted cash balances for August and September won't be accurate.

Much of the data used in a budgeted cash flow statement is based on past records and experience. Apart from this, a budget becomes a matter of opinion. Budgeting is basically prediction; it's one of the few areas in accounting where the information *isn't verifiable*. None of the business documents used can tell us exactly what will happen in the future. However, although the demands of *verifiability* can't be satisfied when preparing a budget, the quality of *relevance* is important. That is, all expected cash inflows and outflows should be reported if they are likely to occur.

The accuracy of a budget depends on the expertise of the person who prepares it and the predictability of the items included in it. Some industries – and some businesses – are fairly stable. Others are more volatile and subject to change.

Remember

A budget is a planning tool, and not a report based on fact.

Budgeted cash flow statements and decision-making

Once the statement is evaluated, the next step is making decisions in response to the result of the budget.

First, management must decide how much cash to maintain in the firm's normal bank account. Once this is decided, there are two possible future scenarios.

- 1 There is a surplus amount of cash available.
- 2 There is a shortage of cash available.



Cash surplus

A budgeted cash flow statement may predict that a **cash surplus** will be available above and beyond the firm's normal requirements. As the interest on a standard business account is either very low or non-existent, a decision should be made about what to do with the excess cash. There are a number of possibilities, including:

- pay off some liabilities
- invest internally by purchasing non-current assets
- withdraw some cash for personal use (although this may adversely affect the firm)
- invest the cash externally.

There are a number of things to consider if the cash is invested externally, such as interest rates, security, length of investment and access to the money. The highest interest rate may not be the best choice if it means the money is tied up and can't be withdrawn if a cash shortage occurs. It may be necessary to accept a lower rate of interest and invest the money 'at call', or at short-term notice (e.g. 30 days).

The key to investing such funds is flexibility, as the money should always be available to use within the business. A firm should always be cautious and only invest funds externally if the cash is clearly in excess of its needs.

cash surplus a situation in which a business is likely to have more cash than it needs at some time in the future

Cash shortages

The problem of a **cash shortage** isn't as easy to solve. If a budget predicts a shortage, the firm should take steps to improve the situation before this occurs. Possible actions may include:

- reducing the level of drawings
- contributing additional capital
- reducing the level of expenses
- postponing the payment of expenses
- postponing the purchase of additional assets
- generating additional revenue
- offering incentives to accounts receivable to encourage payment (e.g. discounts)
- borrowing money externally.

cash shortage a situation in which a business is likely to have insufficient cash at some time in the future

From what you learnt in Unit 1 about sources of finance for small business, you know that the length of any type of borrowing should match the purpose of the spending. If a business anticipates a short-term shortage of cash, the best solution may be a bank overdraft. Long-term projects usually require long-term finance (e.g. a loan over 10 years).

If a shortage is expected to continue for a longer period of time, the business must identify the causes, as it may indicate that a serious problem exists. If a business has insufficient capital or has purchased non-current assets on short-term finance, it may soon have a liquidity problem. Therefore, the budgeted cash flow statement is one part of the overall plan for determining where the business is heading and how it will be financed.



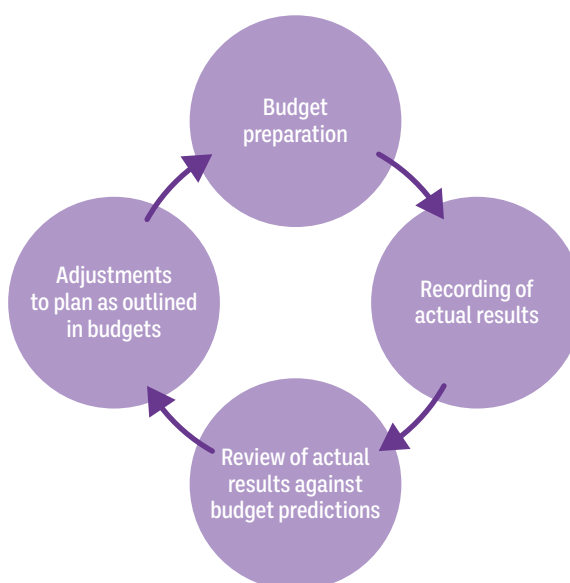
24.3 Budget variance reports

The budgeting process isn't complete when a budgeted cash flow statement has been drawn up and a predicted cash balance calculated. In fact, this is only the start of the budgeting process. The next step is to check the progress of the budget.

You saw in Figure 24.2 that, if the first month's estimates were wrong, the estimates for the following two months would also be wrong. Therefore, after the first month, the budget should be reviewed. If necessary, any adjustments can then be made to the budget for the following two months.

When a budget has been prepared on a month-by-month basis, this process of review should occur at the end of each month. If adjustments are needed, it's an opportunity to learn how to improve the accuracy of budgets in the future. Figure 24.3 shows how budgeting is a continuous process that is always under review.

Figure 24.3 The budgeting process



The budgeting process never really stops. Once a new month has commenced, it's time to start planning for the following month!

Variance

The budget review process can be done informally, but the preferred approach is to prepare a formal report. A **budget variance report** compares the budget estimates with the actual results achieved and highlights any differences between them. These differences are known as budget **variances** and may be either favourable or unfavourable.

A **favourable variance** occurs when the actual result is better than the budgeted result. If sales revenue was budgeted to be \$5000 and the actual result was \$6000, this would be referred to as a \$1000 favourable variance, or as a variance 20% above budget ($\$1000/\$5000 = 20\%$).

In terms of expenses, if the budgeted amount was \$400 and the actual amount paid was only \$300, this would also be seen as a favourable variance. This is because the result was better for the firm than expected – that is, \$100 or 25% ($\$100/\$400$) better than budget.

variance the difference between a budget estimate and an actual result

favourable variance when the actual result for a particular item is better than that estimated in a budget

An **unfavourable variance** is when the actual results are worse than were predicted in the budget. This occurs when revenue is less than predicted, or when expenses are greater than the budget estimates.

unfavourable variance
when the actual result for a particular item is worse than that estimated in a budget

The budget variance report allows management to review the budgeted cash flow statement. All variances are labelled with either a 'U' (for unfavourable) or an 'F' (for favourable).

The 'comments' section is very important; if reasons can be found for variances of either type, they should be noted for future reference when planning the next budget.

The budgeted cash flow statement prepared for Armadale Aeronautics in Figure 24.1 has been used to create the formal budget variance report shown in Figure 24.4.

Figure 24.4 Budget variance report

ARMADALE AERONAUTICS: BUDGETED VARIANCE REPORT FOR MONTH ENDING 31 JULY 2028					
	Budget	Actual	Variance		Comments
	\$	\$	\$	%	
Cash flows from operating activities					
Cash sales	8 800	8 200	600	6.8% U	Special promotion by competitor
GST receipts	880	820	60	6.8% U	
Accounts payable	(3 400)	(3 500)	100	2.9% U	
Rent	(1 900)	(1 900)	Nil		
Wages	(800)	(800)	Nil		
Van expenses	(200)	(160)	40	20.0% F	Fall in revenue
Insurance of van	(850)	(900)	50	5.9% U	Unexpected premium increase
GST payments	(295)	(296)	1	0.3% U	
Net cash provided by operating activities	2 235	1 490	745	33.3% U	
Cash flows from investing activities					
Nil	Nil				
Cash flows from financing activities					
Loan repayments	(375)	(400)	25	6.7% U	Increase in interest rates
Drawings	(1 000)	(800)	200	20.0% F	Lower sales
Net cash used in financing activities	(1 375)	(1 200)	175	12.7% F	
Increase (decrease) in cash held	860	290	570	66.3% U	
Bank balance 1 July 2028	400	400			
Estimated bank balance 31 July 2028	1 260	690	570	45.2% U	

Interpreting variance reports

The variance report in Figure 24.4 shows the impact of not achieving the sales target in July. Adding to this problem, more cash than expected was paid to accounts payable when sales were falling. The end result was that the bank balance at the end of July was about 45% below what was predicted. This is a clear case of a budget plan not reflecting the actual situation!

As a budget is based on estimates, variances are expected to occur and shouldn't necessarily create concern. However, significant variances require action. It's a matter of opinion when a variance becomes significant. In many cases, a variance of 10% or more may be seen as significant, whereas less than this may be considered insignificant. The problem with a rule like this is that some industries are more volatile than others, which makes it more difficult to prepare budgets for them.

When budgeting for a real business, management's emphasis is on what past experiences have taught it and how accurate the budget is normally. If budgets prove to be very accurate, management may investigate a variance of even 5%. On the other hand, management of an unpredictable business may tolerate all variances under 10% without further investigation. As with most budgeting processes, these sorts of decisions depend mostly on previous experience.



24.4 Collection and payment schedules

Businesses that offer credit to customers, or that buy inventory on credit terms, need to reflect the activities of accounts receivable and accounts payable in their budgeting. They can do this by creating schedules that predict when accounts will be paid.

Collection schedules

One of the most difficult items to predict accurately is the revenue that a business expects to earn in the future. The firm can take its past experiences into account, but circumstances can change and the future is never certain. However, even when the revenue figure has been estimated, there's a further complication: will the revenue be on a cash basis, or will customers take advantage of the firm's credit facility? The budgeted cash flow statement only shows actual cash flows. So, if credit sales occur, the firm must prepare a schedule to show when it expects credit sales to turn into cash receipts.

Consider the example of Commercial Cleaning Supplies. This trading business is preparing a budgeted cash flow statement for the quarter starting 1 July 2028. It reports that over the last three months it has achieved the following revenue (including 10% GST):

- April: \$40 000
- May: \$45 000
- June: \$48 000.

Based on past experience and extensive market research, management made the following estimates of revenue (including 10% GST) for the next three months:

- July: \$48 000
- August: \$50 000
- September: \$52 000.

A study of the firm’s past records indicates that, of the total revenue earned, approximately 60% was on a cash basis and 40% was on credit. When management looks at the information required for the budgeted cash flow statement of July, August and September, it needs estimates of the actual cash receipts resulting from the above revenue figures.

Revenue breakdown

First, break down the total revenue into cash and credit percentages, as shown in Figure 24.5.

Figure 24.5 Cash/credit sales analysis table

Month	Total sales	Cash sales	Credit sales
		60%	40%
July	\$48 000	\$28 800	\$19 200
August	50 000	30 000	20 000
September	52 000	31 200	20 800

This table provides the cash sales data required for the budgeted cash flow statement. As cash sales result is an immediate cash inflow, the figures under ‘Cash sales’ can go straight into the budgeted cash flow statement. However, the dollar amounts for credit sales still aren’t cash flows.

The firm’s history of accounts receivable shows that 70% of accounts are usually settled in the month after the invoice is issued, 20% in the second month after issue, and the remaining 10% during the third month after sales are charged. Using this data, management can prepare a **schedule of collections**, as shown in Figure 24.6.

schedule of collections
a table used by businesses that sell on credit to predict cash inflows from accounts receivable

Figure 24.6 Accounts receivable collections schedule

Month	Credit sales \$	Collections in:		
		July \$	August \$	September \$
April	16 000	1 600	–	–
May	18 000	3 600	1 800	–
June	19 200	13 440	3 840	1 920
July	19 200	–	13 440	3 840
August	20 000	–	–	14 000
September	20 800	–	–	–
Total cash received		18 640	19 080	19 760

Always check the ‘pattern of collections’ from accounts receivable. This will be different for each business. Read this type of question carefully before responding.

To explain the details of these figures, let’s examine two months in detail.

In April, total revenue was \$40 000. Credit sales are 40% of the total, so credit sales in the table are \$16 000. Of April’s credit sales, 70% would have been collected in May, 20% in June, and the remaining 10% is expected during July. Of these three months, only July is relevant to the budget period. So, 10% of April’s credit sales are expected to be collected during July (10% of \$16 000 = \$1600).

In June, credit sales were 40% of \$48 000, or \$19 200. Over the three-month staggered collection period, 70% (\$13 440) is expected to be collected in July, 20% (\$3 840) in August and 10% (\$1 920) in September. Adding all three collection figures gives the total credit sales for June. (September credit sales will be collected during October, November and December, so they are irrelevant to the cash flows for the September quarter.)

Updating the budgeted cash flow statement

By combining the information in Figures 24.5 and 24.6, the estimated business receipts would be shown in a budgeted cash flow statement such as Figure 24.7.

Figure 24.7 Budgeted cash flow statement (extract) using collection schedules data

COMMERCIAL CLEANING SUPPLIES: BUDGETED CASH FLOW STATEMENT FOR QUARTER ENDING 30 SEPTEMBER 2028

	July \$	Aug \$	Sept \$
Cash sales	26 182	27 273	28 364
GST receipts	2 618	2 727	2 836
Collections from accounts receivable	18 640	19 080	19 760
Total inflows	47 440	49 080	50 960

Make sure that you always break down cash sales into the revenue component (sales) and the GST component.

Note that cash sales have been divided by 11 to determine the GST component for each month. For example, in July, the estimated cash sales amount of \$28 800 (including GST) was divided by 11 to determine the GST of \$2618. Actual cash sales expected can be determined by deducting this \$2618 from the \$28 800 total: $\$28\,800 - \$2618 = \$26\,182$. (Always check whether the predictions for future transactions include GST.)

Payment schedules

If a business purchases inventory on credit, the budgeted cash flow statement must show the actual cash outflow to accounts payable, not the amount of credit purchases.

Just as a schedule was prepared to calculate the collections from accounts receivable, a **schedule of payments** can be used to find the cash expected to be paid to accounts payable.

Let's return to the example of Commercial Cleaning Supplies. This business purchases its cleaning products on credit. Accounts are usually settled in the month following purchase to take advantage of a 2% discount. Monthly purchases (including 10% GST) are expected to be as follows:

- June (actual): \$20 000
- July (estimated): \$22 000
- August (estimated): \$24 000
- September (estimated): \$25 000.

Figure 24.8 shows a schedule of payments to accounts payable.

Figure 24.8 Accounts payable payments schedule

Month	Credit purchases \$	Collections in:		
		July \$	August \$	September \$
June	20 000	19 600	–	–
July	22 000	–	21 560	–
August	24 000	–	–	23 520
September	25 000	–	–	–
Total payments		19 600	21 560	23 520

schedule of payments

a table used by businesses that purchase on credit to predict cash outflows to accounts payable

The figures shown as payments are the credit purchases for the previous month, minus the 2% discount for prompt payment. Therefore, the June purchases of \$20 000 are expected to be paid in July after 2% has been deducted: $\$20\,000 - \$400 = \$19\,600$. The payments listed in the schedule can then be entered straight into the budgeted cash flow statement of the business.

Payments to accounts payable can also be staggered over several months, as with credit sales. However, each business determines its own pattern of paying accounts payable. This means that the payments schedule is normally easier to predict than collections from accounts receivable.

24.5 Budgeted income statements



Earning a profit is a basic objective for most small business owners. To achieve this, they need to have information relating to the firm’s future earning potential. A second important report, the **budgeted income statement**, helps the business predict its future profit performance by examining predicted revenues and expenses over a given period of time.

A budgeted income statement is a prediction of a business’s future profit performance. As such, it forces management to consider future profits. If management isn’t satisfied with the predicted result (e.g. if a net loss is predicted), it should try to make changes that will improve the situation before the budget period commences. For example, it may review its predicted expenses for the budget period. Ideally, management should carry out such reviews regularly in order to set goals for the future and try to improve the profit of the business.

The format of the budgeted income statement is exactly the same as that of the standard income statement (see Chapter 20). The only difference is that the dollar values in the budgeted report are predictions, rather than historical results. The usual definition of profit is used in the budgeted income statement: budgeted profit equals revenues expected to be earned, minus the expenses expected to be incurred, during a given period.

budgeted income statement
a report that shows estimates of revenues and expenses over a period of time, and the expected net profit to be made

The differences between statements

It’s important to distinguish between the items relevant to a budgeted cash flow statement and those that are used to prepare a budgeted income statement. Figure 24.9 highlights the differences between the two types of reports.

Figure 24.9 A comparison of budgeted cash flow statements and budgeted income statements

Items in a budgeted income statement	Items in a budgeted cash flow statement
• Revenue earned • Expenses incurred • Credit sales • Bad debts • Inventory losses • Depreciation	• Revenue received • Expenses paid • Collections from accounts receivable • Payments to accounts payable/suppliers • Cash paid for new assets • Capital contributions by owner • Cash withdrawals by the owner • Cash from new loans • Cash paid for loan repayments

Questions on the differences between cash and profit are very common in VCE exams. Make sure you can explain, for example, how it’s possible for a business to have a high profit but no cash.

In summary, the budgeted income statement reports on future estimates of revenues and expenses. The budgeted cash flow statement, on the other hand, reports on all expected cash inflows and outflows, whether or not the items involve revenues and expenses.

Preparing a budgeted income statement

Let's use an extended example to demonstrate how to prepare a budgeted income statement and how it differs from a budgeted cash flow statement.

The owner of Moorabbin Mobiles provided the following information.

- Estimated sales for July are \$9000, with \$8000 of these sales expected to be collected during July. The remaining \$1000 is expected to be collected in August.
- Inventory to be purchased during July will cost about \$5000. It's expected that about \$4000 worth of inventory will be sold in July.
- Expenses expected in July:
 - rent: \$2000
 - advertising: \$500
 - part-time wages: \$600.
- Other payments expected in July:
 - cash drawings by the owner: \$900
 - loan repayments: \$800.

Given this information, a budgeted income statement can be prepared as shown in Figure 24.10.

Figure 24.10 Budgeted income statement

**MOORABBIN MOBILES:
BUDGETED INCOME STATEMENT FOR MONTH ENDING 31 JULY 2028**

Revenue	\$	\$
Sales		9 000
Less: Cost of sales		4 000
Gross profit		5 000
Less: Expenses		
Rent	2 000	
Advertising	500	
Part-time wages	500	3 000
Estimated net profit		2 000

Budgeted income statements follow the same format as a normal income statement. The only difference is that the numbers are predictions and not historical facts.

Some points to note in this statement:

- Sales expected to be earned during the month are reported, not just how much cash is expected to be received from customers.
- Inventory expected to be used during July is shown as 'Cost of sales' in this budget. It doesn't matter how much is paid for inventory – the amount expected to be used to earn the sales of \$9000 should be used as the estimate.
- The expenses of rent, advertising and wages are all reported in the usual fashion.
- Both loan repayments and drawings are excluded from the budgeted income statement. While these items would be reported in a budgeted cash flow statement, they don't relate to revenues and expenses. Loan repayments relate to liabilities, and drawings are reported as a reduction in owner's equity. As the income statement is attempting to predict profit performance, neither of these two cash payments is relevant. When preparing a budgeted income statement, *only revenue and expense items are considered*.

Budgeted income statements and variance reports

If a predicted net profit isn't achieved at the end of a budgeted period, management should ask why this occurred. Therefore, as with budgeted cash flow statements, management should prepare a variance report for all budgeted income statements in order to identify both problems and areas of success.

The format of the variance report for the budgeted income statement is basically the same as that shown earlier (see Figure 24.4 on page 391). Budgeted figures are reported, along with actual results, to identify all the variances for the period. As with budgeted cash flow statements, if a budgeted income statement is prepared monthly, the review process using the variance report should also occur at the end of each month.

The budget variance report for an income statement allows the business owner to review the profit performance of their business. All variances are labelled with a 'U' for unfavourable or an 'F' for favourable (as in Figure 24.11).

Figure 24.11 Budgeted income statement variance report

MOORABBIN MOBILES: BUDGETED VARIANCE REPORT FOR MONTH ENDING 31 JULY 2028				
Revenue	Budget	Actual	Variance	
	\$	\$	\$	%
Sales	9 000	10 000	1 000	11.1% F
Less: Cost of sales	4 000	4 400	400	10.0% U
Gross profit	5 000	5 600	600	12% F
Rent	2 000	2 000	Nil	–
Advertising	500	600	100	20% U
Part-time wages	500	550	50	10% U
Total expenses	3 000	3 150	150	5% U
Net profit for the month	\$2 000	\$2 450	\$450	22.5% F

This business owner would probably be pleased with the firm's performance in July. The variance report shows that the business performed even better than expected, with higher sales than predicted. This increased level of revenue caused an increase in some expenses, with the most significant increase being in cost of sales. However, the higher level of sales more than covered this increase in expenses, so the result was a positive profit for the owner.

As with all types of budgets, a variance report should be prepared for all budgeted income statements. The business owner can then use the results of the variance report in setting future budgets for the business. If the results aren't satisfactory, the owner may have to reduce expenses or look for new sources of revenue. As with all budgets, the business owner would be better prepared if a formal system of budgeting had been put in place.





24.6 Budgeted balance sheets

budgeted balance sheet

a report that shows estimated values for assets, liabilities and owner's equity at a particular point in time

A third type of budget is the **budgeted balance sheet**, which is a statement of a firm's predicted financial position at a particular date in the future. A budgeted balance sheet can be used to:

- report on the future situation of the firm's non-current assets (i.e. capital spending)
- examine the firm's future liquidity position
- evaluate the firm's gearing in the future
- show future details of the owner's equity in the business, including details of future profits and drawings.

The format of a budgeted balance sheet is virtually the same as that of a standard balance sheet. The only difference is that, in a budgeted balance sheet, the dollar values are based on estimates of future events rather than being a report based on historical events.

The budgeted balance sheet can be classified in the usual fashion to allow management to examine changes in liquidity. The estimated future current assets can be compared with the expected current liabilities. This should help management ensure that the future plans won't adversely affect the business. The results of liquidity analysis from a budgeted balance sheet should be read together with the budgeted cash flows to ensure that the firm will have enough liquidity to meet both its current and future needs.

Preparing a budgeted balance sheet

In order to prepare a budgeted balance sheet, you need to refer to the budgeted cash flows and the budgeted income statement. This is because there are important relationships between the different reports. For example, the budgeted cash flow statement determines the predicted bank balance at some time in the future. This will result in either a current asset or a current liability being reported in the budgeted balance sheet (depending on the cash balance). The budgeted income statement determines a budgeted profit figure, which will be added to the owner's capital in the budgeted balance sheet.

These examples show how a financial item in one budget may lead to another item in a different budget. A logical starting point is the latest historical balance sheet. This provides factual data about the firm's assets and liabilities. Management then uses the budget to predict what is likely to happen to the business in the future.

Let's consider the current balance sheet of Victoriana Vintage, a trading business that sells vintage furniture (see Figure 24.12).

Figure 24.12 Balance sheet

VICTORIANA VINTAGE: BALANCE SHEET AS AT 30 JUNE 2028

<i>Current assets</i>	\$	\$	<i>Current liabilities</i>	\$	\$
Accounts receivable	4 250		Bank overdraft	580	
Inventory	51 000	55 250	GST debt	200	
			Accounts payable	6 600	7 380
<i>Non-current assets</i>			<i>Owner's equity</i>		
Shop fittings	12 000		Capital	56 000	
Less: Accumulated depreciation	2 400	9 600	Plus: Net profit	3 470	
				59 470	
			Less: Drawings	2 000	57 470
Total assets		64 850	Total equities		64 850

Budgeted balance sheets still follow the accounting equation of assets = liabilities + owner's equity.

Additional information has been extracted from the budgeted cash flows and budgeted income statement already prepared for the business.

From the budgeted cash flows for July:

- Estimated balance at the end of July: \$608
- Collections from accounts receivable: \$6800
- Payments to accounts payable: \$5800
- Cash drawings by the owner: \$3000
- GST expected to be collected on cash sales: \$900
- GST expected to be paid: \$500

From the budgeted income statement for July:

- Budgeted net profit: \$3588
- Estimated credit sales: \$10 000
- Depreciation of fittings: \$200
- Cost of sales: \$9000

Other information:

- Management expects to have to buy about \$7000 of inventory (plus GST) during July. All purchases are made on credit.



Initial calculations

In order to prepare an accurate budgeted balance sheet, a number of calculations are required first. These depend on the information provided, but the basic objective is always to answer management's questions, such as:

- How much do we expect to be owed by accounts receivable on 31 July?
- How much do we expect to owe accounts payable at the end of July?
- What value do we report as the estimated inventory on hand?

The following calculations show one approach to finding the required answers.

THE AMOUNT OWING BY ACCOUNTS RECEIVABLE:

Balance as per previous balance sheet (30/6/28)	\$4 250	
<i>Plus:</i> Credit sales predicted for July (+ GST)	11 000	15 250
<i>Less:</i> Estimated collections in July		6 800
Estimated amount owing as at 31 July		\$8 450

THE AMOUNT OWING TO ACCOUNTS PAYABLE:

Balance as per previous balance sheet (30/6/28)	\$6 600	
<i>Plus:</i> Credit purchases predicted for July	7 700	14 300
<i>Less:</i> Estimated payments in July		5 800
Estimated amount owing as at 31 July		\$8 500

THE AMOUNT OF INVENTORY ON HAND ON 31 JULY:

Balance as per previous balance sheet (30/6/28)	\$51 000	
<i>Plus:</i> Credit purchases predicted for July	7 000	58 000
<i>Less:</i> Predicted cost of sales for July		9 000
Estimated amount of inventory as at 31 July		\$49 000

TO DETERMINE THE GST DEBT OR REFUND AS AT 31 JULY:

GST owing as at 30 June	\$200	
<i>Plus:</i> GST collected on cash sales	900	
<i>Plus:</i> GST charged on credit sales	1 000	2 100
<i>Less:</i> GST paid on expense	500	
<i>Less:</i> GST charged by accounts payable	700	1 200
GST owing as at 31 July		\$900

After these calculations are made, and the other information provided is considered, the budgeted balance sheet can be completed (Figure 24.13).

Figure 24.13 Budgeted balance sheet

VICTORIANA VINTAGE: BUDGETED BALANCE SHEET AS AT 31 JULY 2028					
<i>Current assets</i>	\$	\$	<i>Current liabilities</i>	\$	\$
Cash at bank	608		GST debt	900	
Accounts receivable	8 450		Accounts payable	8 500	9 400
Inventory	49 000	58 058			
<i>Non-current assets</i>			<i>Owner's equity</i>		
Shop fittings	12 000		Capital	57 470	
Less: Accumulated depreciation	2 600	9 400	Plus: Net profit	3 588	
				61 058	
			Less: Drawings	3 000	58 058
Total assets		67 458	Total equities		67 458

Evaluating the budgeted balance sheet

The accounting equation of assets = liabilities + owner's equity still holds true in a budgeted balance sheet. The budgeted balance provides the owner of the business with predictions of where the business might be in one month's time.

For Victoriana Vintage, if the owner's predictions come true, the bank balance will no longer be in overdraft. The amounts owing by accounts receivable, and to accounts payable, are expected to increase significantly. If the owner is worried about the small bank balance, they may decide to cut back on their personal drawings.

These are simple observations from the budgeted balance sheet shown in our example. In a real-world situation, budgeted reports provide a lot more information on which to base decisions, especially when they are read together.





Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [24.1]** Budgeting is the process of predicting future financial transactions to enable management to improve its decision-making. A business can prepare many different types of budgets, in areas such as sales, purchases, materials, labour and expenses. Budgeted accounting reports are used to predict future financial transactions for the business.
- [24.2]** While a cash flow statement reports on what has happened in terms of cash flows, a budgeted cash flow statement estimates what is expected to occur in the future. It lists all the anticipated cash inflows and cash outflows under the usual headings and predicts a future cash surplus (or deficit) for a period.
- [24.3]** Budgeted cash flow statements should be reviewed at the end of each reporting period. A budget variance report compares the budget estimates with the actual results achieved and highlights any differences between them. These differences are known as budget variances and may be either favourable or unfavourable.
- [24.4]** Businesses that offer credit to customers, or that buy inventory on credit terms, need to reflect the activities of accounts receivable and accounts payable in their budgeting. If there are credit sales, a collection schedule shows when credit sales are expected to turn into cash receipts. For credit purchases, a payment schedule predicts cash outflows to accounts payable.
- [24.5]** The budgeted income statement shows estimates of revenues and expenses over a period of time and the expected net profit to be made for that period. As with budgeted cash flow statements, a variance report should be prepared for all budgeted income statements in order to identify both problems and areas of success.
- [24.6]** The budgeted balance sheet shows estimated values for assets, liabilities and owner's equity at a particular point in time. Its format is the same as that of a standard balance sheet, except that the dollar values are based on estimates of future events. The information for the budgeted balance sheet is drawn from the budgeted cash flows and the budgeted income statement.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Budgeted cash flows for a month

David Fang, the owner of Peninsula Scuba Supplies, is concerned about the amount of cash the business has in the bank. On 1 August 2028, the balance of the account was \$850. Fang supplied the following estimates of the transactions he expects to have during August.

Credit sales	\$2 000	Cash sales	\$6 000	Wages	\$400
Advertising	600	Office expenses	1 200	Rent	2 000
Credit purchases	4 000	GST receipts	600	GST payments	380
Payments to accounts payable	3 600	Receipts from accounts receivable	1 000	Drawings	4 000

- Using the relevant information from the list provided, prepare a budgeted cash flow statement for Peninsula Scuba Supplies for the month of August 2028.
- Comment on the firm's cash position.
- Describe two practical steps that Fang could take to try to improve the situation predicted for August.

2 Budgeted cash flows for a quarter

Gayle Mathews is the proprietor of Donvale Trading. She wants to buy \$7000 worth of new equipment for the business. On 1 October 2028, the business only had \$3200 in the bank. Over the last few months, the business's sales have been around \$8000 per month. It only deals on a cash basis. Mathews is confident she can increase her revenue over the next few months to the following amounts: October \$9000, November \$9500 and December \$10 000.

The following transactions are expected to occur over the next quarter.

	October \$	November \$	December \$
Wages	3 000	3 200	3 200
Advertising	300	400	500
Cash purchases	2 000	2 200	2 400
Vehicle expenses	300	300	300
Drawings	2 200	2 200	2 400

In addition to the above transactions, Donvale Trading's GST transactions are expected to include the following.

	October \$	November \$	December \$
GST collections	900	950	1 000
GST payments	260	290	320

- Prepare a budgeted cash flow statement for Donvale Trading for the quarter ending 31 December 2028. Show the estimated bank balance at the end of each month.
- In which month, if any, should Mathews purchase the new equipment costing \$7000? Give reasons for your answer.
- Does your budgeted cash flow statement prepared in part **a** satisfy the requirement of *verifiability*? Explain your answer.



Workbook
p. 303



XL template



Workbook
p. 304



XL template



Workbook
p. 305



XL template

3 Budgeted cash flows for a quarter

The following information relates to Hobby HQ, a small business owned and operated by Adam Tieppo.

	July \$	August \$	September \$
Estimated sales (all cash)	6 500	6 500	7 000
GST receipts	650	650	700
Regular expenses:			
– Wages	1 200	1 500	1 500
– Cleaning	320	320	320
– Office expenses	100	100	100
– Cash purchases inventory	3 250	3 250	3 500
– GST payments	367	367	392

In addition to the above items, the firm's annual insurance premium of \$1350 (plus GST of \$135) is due on 16 August. Loan repayments of \$1600 per quarter are payable on 10 January, 10 April, 10 July and 10 October each year. Tieppo normally withdraws \$1600 per month for private use. The business has \$1600 in the bank on 30 June 2028.

- Prepare a budgeted cash flow statement for Hobby HQ for the three months ending 30 September 2028.
- Write a report to Tieppo commenting on the liquidity situation revealed by the budgeted cash flow statement prepared in part **a**. Your report should recommend any necessary action he should take.
- What is the firm's position expected to be in relation to GST at the end of the quarter ending 30 September 2028? What are the implications of this for planning future cash transactions?



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4 Schedule of collections: Accounts receivable

Scoresby Landscaping provides credit to its regular customers. Based on past experiences, about 75% of its total sales are on credit. Of these sales, approximately 60% of the accounts receivable pay in the month after the service was provided; the other 40% pay in the second month after the credit has been granted.

The following revenue data was made available by the management of the business.

Month	Total sales (including GST)
July	\$20 000 (actual)
August	\$22 000 (actual)
September	\$22 000 (estimated)
October	\$24 000 (estimated)
November	\$26 000 (estimated)

- Prepare a table to show the breakdown of sales revenue into cash and credit sales on a monthly basis (from July to November).
- Using the credit sales data from the table in part **a**, prepare a schedule of collections from accounts receivable for September, October and November.
- Prepare a budgeted cash flow statement extract, showing how the information derived from the tables would appear under the heading of 'Cash flows from operating activities' for September, October and November. (*Hint: Don't forget to separate cash sales from the GST expected to be collected; divide the cash sales by 11.*)

5 Schedule of collections and schedule of payments

The following sales information relates to the business trading as The Organic Nursery, owned by Orla McLynskey.

Month	Actual sales*	Month	Estimated sales*
January	\$40 000	April	\$35 000
February	37 000	May	30 000
March	35 000	June	25 000

*Note: All figures provided for sales include 10% GST.

Past revenue data shows that 70% of the total sales charged have been on a cash basis, with only 30% being made on credit. Customers granted credit usually pay as follows:

- 60% pay one month after the job is completed
- 30% pay two months after the invoice date
- 10% usually pay in the third month after the goods have been provided.

McLynskey also supplies the following information relating to the purchases of inventory for the business, which are usually made on a credit basis.

March	\$20 000 (actual)
April	\$18 000 (estimated)
May	\$16 000 (estimated)
June	\$14 000 (estimated)

Amounts owing to accounts payable are all settled in the month after purchase, to take advantage of a 5% discount.

- Prepare a table and calculate the dollar amounts of both cash and credit sales for the months from January to June.
- Prepare a schedule of collections from accounts receivable for the quarterly budget period of April to June.
- Calculate the amount of GST expected to be collected on cash sales during April, May and June.
- Draw up a schedule of payments to accounts payable showing clearly the actual cash to be paid to accounts payable in April, May and June.



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6 Budgeted cash flow statement

Joseph Zaita is the proprietor of JZ Music. He supplied the following information regarding his business.

Balance of bank account on 1 August 2028	\$2 300
Sales over the last two months, including GST, were:	
June	– Cash sales \$16 000
	– Credit sales \$18 000
July	– Cash sales \$18 000
	– Credit sales \$20 000

During August, all sales are expected to be 10% higher than the July figures. The usual trend for Zaita's business is that 80% of credit customers pay in the month after being invoiced, with the other 20% paying in the second month after being charged.

The business had the following purchases during July (including GST).

Cash	\$1 100
Credit	\$9 900

During August, Zaita expects to have cash purchases of \$1000 and credit purchases of \$10 000. It is his policy to pay accounts payable in the month after purchase.

The firm's regular payments include the following.

Advertising	\$1000 per month, plus GST
Wages	\$4000 per month
Drawings	\$1000 per month
Loan repayments	\$800 per month

The firm is also paying an annual rates bill of \$4800 by instalments, with \$1200 being payable on 10 February, 10 May, 10 August and 10 November.

During August, Zaita plans to buy some new office furniture at a cost of about \$2500, plus GST. On 27 August, he expects to pay a deposit of \$2000 on a new recording and sound system, costing \$20 000. The sound system should be available sometime during September. No GST has to be paid on the sound system during August.

- Prepare a budgeted cash flow statement for JZ Music for the month of August 2028.
- Comment on the cash position of the business, taking into account that it expects to pay for the remainder of the sound system in September.
- If Zaita decides not to pay cash for the sound system, what type of finance would you recommend as appropriate for such an asset? Give reasons for your answer.

7 Cash budget variance report

Jan Abbey prepares a budgeted cash flow statement for her business, Abbey's Fryers, on a regular basis. However, she is concerned that, even though her budget estimated a cash balance of \$2150 at the end of November, the bank statement she just received indicates something very different.

After looking at her cash records, Abbey found the following differences between her budget and the actual cash flows.

	Budget	Actual
	\$	\$
Cash flows from operating activities		
Cash sales	12 000	13 000
Collections from accounts receivable	6 000	2 400
GST receipts	1 200	1 300
Wages	(5 500)	(2 600)
Advertising	(800)	(400)
Rent	(2 400)	(2 400)
Cash purchases inventory	(6 600)	(6 800)
Office expenses	(400)	(420)
GST payments	(1 020)	(1 302)
Net cash provided by operating activities	2 480	2 778
Cash flows from investing activities		
Purchase of computer	–	(3 000)
Net cash used in investing activities	–	(3 000)
Cash flows from financing activities		
Loan repayments	(600)	(700)
Drawings	(1 200)	(1 800)
Net cash used in financing activities	(1 800)	(2 500)
Increase/decrease in cash held	680	(2 722)
Bank balance 1 November 2028	1 500	1 500
Bank balance 30 November 2028	2 180	(1 222)

- Prepare a budget variance report, including variances in dollar amounts and percentages, for Abbey's Fryers for November 2028.
- Write a report for Abbey, explaining why her business didn't achieve the projected cash figure. Include both positive and negative features of the budget in your report.
- Based on the events that occurred during November, comment on Abbey's approach to budgeting.



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8 Cash budget variance report

The following comparison of budgeted cash flows and actual cash flows has been prepared for Donaldson's Cleaning Products for the quarter ending 30 September 2028.

	Budget	Actual
	\$	\$
Cash flows from operating activities		
Cash sales	24 000	32 000
Collections from accounts receivable	12 000	14 500
GST receipts	2 400	3 200
Wages	(6 000)	(6 500)
Insurance	(800)	(840)
Cash purchases inventory	(14 000)	(16 400)
Postage & telephone	(400)	(380)
Cleaning	(1 200)	(1 200)
GST payments	(2 140)	(2 342)
Net cash provided by operating activities	13 860	22 038
Cash flows from investing activities		
Purchase of new equipment	(5 000)	(4 600)
Net cash used in investing activities	(5 000)	(4 600)
Cash flows from financing activities		
Loan from ABC Finance	5 000	
Drawings	(4 500)	(3 800)
Net cash used in financing activities	500	(3 800)

The business had \$500 in the bank on 1 July 2028.

- Prepare a budget variance report for the quarter ending 30 September 2028 to reveal the significant differences between the budgeted and actual data.
- What was the predicted cash balance on 30 September?
- What was the actual cash balance on 30 September?
- State and explain the main causes of the difference between the budgeted and actual bank balance.
- Do you think a quarterly period is appropriate for budgeted cash flow statements? Give reasons for your answer.



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9 Budgeted cash flows and income statement

David Santacroce's business, Scrambler, sells designer bags and satchels. The transactions listed below are those he expects to occur during the month of October 2028.

- Total sales are predicted to be \$16 000, plus GST. All sales are on credit. Half of the sales are expected to be collected during October, and the other half in November.
- The business applies a mark-up of 100% on all goods sold.
- Inventory at the start of October was \$30 500. Cash purchases of inventory should be about \$3000. GST of 10% will be payable on all purchases paid for during October.
- The monthly rent payment of \$2000 is expected to be paid on 1 October (plus \$200 GST).
- Wages for October are predicted to be \$2000.
- Santacroce has arranged for newspaper advertising during October at a cost of \$1400, plus GST. This will be paid in October.
- Santacroce intends to withdraw \$500 per week for personal use.
- A loan of \$10 000 from NAB is expected to be granted on 14 October.
- The balance of the firm's bank account on 1 October 2028 is \$2700.
- In the balance sheet as at 30 September, the owner's capital was reported as \$64 000.





- a Prepare a budgeted cash flow statement for Scrambler for the month of October 2028.
- b Prepare a budgeted income statement for October to determine a budgeted net profit figure.
- c Make a list of any items you have included in the budgeted cash flow statement that you did NOT include in the budgeted income statement.
- d Explain why some items are reported in a budgeted cash flow statement but not in a budgeted income statement.
- e Review the above items and identify those to be reported in a balance sheet. Prepare an extract from the budgeted balance sheet to show the current assets and owner's equity sections as at 31 October 2028.

10 From balance sheet to budgeted balance sheet

Lisa Gannon is the proprietor of Bayside Books. She provides the following accounting report.

BAYSIDE BOOKS: BALANCE SHEET AS AT 31 AUGUST 2028

Assets	\$	Liabilities	\$	\$
Accounts receivable	3 200	Bank overdraft	1 100	
Inventory	75 000	Accounts payable	2 900	
Equipment	26 800	GST liability	1 000	
Vehicle	30 000	Loan – TY Finance	24 000	29 000
		Owner's equity		
		Capital		106 000
	135 000			135 000

During September 2028, Gannon expects the following to occur.

- Of the accounts receivable at 31 August, \$3000 is expected to be collected in September, with the other \$200 expected to be received in October.
 - Credit sales to be earned in September should be about \$2500 (plus GST), while cash sales are expected to be \$7800 (plus GST). All credit customers are offered 30 days' credit, and all of them are expected to settle their accounts in October.
 - All accounts payable owed money at 31 August will be paid during September.
 - Gannon has decided to pay cash on delivery for all purchases from now on. In September, she anticipates buying inventory costing \$5400 (plus GST).
 - Cost of sales in September is estimated to be \$4500.
 - The usual monthly expenses paid in cash are: wages \$2500, petrol \$280 (plus GST) and advertising \$400 (plus GST).
 - The business pays its GST monthly. The GST liability from 31 August is due for payment on 28 September.
 - Gannon expects to repay \$5000 to TY Finance on 27 September, and she usually withdraws \$300 per week from the business.
- a Prepare a budgeted cash flow statement for Bayside Books for the month ending 30 September 2028.
 - b Write a brief comment on the liquidity of the business.
 - c Prepare a budgeted income statement for Bayside Books for the month ending 30 September 2028.
 - d Write a brief comment on the expected profit result of the business.
 - e Explain why the two budgets show different results for the budget period.
 - f Prepare a budgeted balance sheet as at 30 September 2028.



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11 From balance sheet to budgeted balance sheet

The following balance sheet relates to a small business trading under the name of Wizard's Wardrobe, owned by Megan Egan. This business applies a mark-up of 100% to all inventory sold.

WIZARD'S WARDROBE: BALANCE SHEET AS AT 31 MARCH 2028

Assets	\$	Liabilities	\$
Cash at bank	3 500	Accounts payable	2 700
Accounts receivable	4 400	GST debt	1 500
Inventory	70 800	Loan from R Biggs	3 500
Vehicle	16 800	Owner's equity	
		Capital – Egan	87 800
	95 500		95 500

According to the owner's plans, the following is expected to occur in April 2028.

- Sales to be earned during the month will be \$10 000, of which \$7500 will be on a cash basis (plus 10% GST). Sales charged to accounts receivable are usually received in the month following the sale.
- Accounts receivable as at 31 March are all expected to pay during April.
- Inventory worth \$6600 (including GST) is expected to be purchased on credit during April. Accounts payable will be paid \$2500 during April.
- New equipment will be purchased during April at a cost of \$2000 (plus GST), which will be paid in cash.
- Advertising costs for April will be \$500 (plus GST), all of which will be paid by EFT in April.
- On 18 April, R Biggs will be paid \$1100, which includes \$100 interest.
- Other expenses for April are expected to be wages \$2450 and petrol \$230 (plus GST).
- Egan expects to withdraw a total of \$1600 during April.
- The GST owing in the March balance sheet will also be paid during April.

- Prepare a budgeted cash flow statement for the month of April 2028.
- Prepare a budgeted income statement for the month of April 2028.
- Prepare a budgeted balance sheet as at 30 April 2028.
- Write a brief comment on the results revealed by your three budgets.



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12 Variance report: Income statement

The following comparison of budgeted and actual data has been prepared for Constantino's Cookware for the month ending 30 June 2028.

Revenue	Budget	Actual
	\$	\$
Sales	12 000	11 000
Less: Cost of sales	5 200	5 000
Gross profit	6 800	6 000
Less: Inventory loss	500	900
Adjusted gross profit	6 300	5 100
Less: Expenses		
Rent	1 350	1 350
Advertising	300	600
Insurance	150	150
Wages	600	1 000





- a Prepare an income statement variance report for the month ending 30 June 2028 to reveal the significant differences between the budgeted and actual data.
- b What was the predicted net profit for June?
- c What was the actual net profit for June?
- d Explain why the predicted result wasn't achieved in June 2028.

13 Variance report: Income statement

The owner of Pandora's Box is concerned about how his business is performing lately. His knowledge of accounting isn't strong, but he regularly prepares budgets and has offered the following for your consideration.

Revenue	\$	\$
Sales	12 000	
Bank loan	5 000	
GST collected	1 200	18 200
Less: Expenses		
Wages	5 000	
Cost of sales	4 000	
Office expenses	600	
Insurance	1 200	
GST paid	280	
Loan repayments	500	
Inventory loss	500	
Owner's drawings	12 000	24 080
Net profit		(5 880)

At the end of July 2028, the actual results reported by the owner were as follows.

Revenue	\$	\$
Sales	14 000	
Bank loan	5 000	
GST collected	1 400	20 400
Less: Expenses		
Wages	6 000	
Cost of sales	5 000	
Office expenses	500	
Insurance	1 200	
GST paid	270	
Loan repayments	500	
Inventory loss	800	
Owner's drawings	14 000	28 270
Net profit		(7 870)

- a It appears that this owner has included some irrelevant items in his reports. Redraft his budgeted income statement to accurately predict his budgeted net profit for July 2028.
- b Prepare an income statement variance report for Pandora's Box to reveal the actual result for July and all variances for the month.
- c Comment on the owner's concerns, given that both the budgeted and actual results for July indicated a net loss for the month. Explain why this occurred and describe the true situation.



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CASE STUDY

Johnny Fieschi is the owner of Astronomica, a business selling telescopes and astronomical charts, as well as binoculars and other optical devices. Fieschi is worried because, at the end of December 2027, there is only \$260 in the business bank account. His other concern is that he would like to purchase a new vehicle (costing about \$25 000) for the business but doesn't know when he will have the \$10 000 deposit required.

One of Fieschi's friends has advised him to prepare a forecast of his future transactions, but he is unsure how to do this. He has asked for your help and provides the following information about his business.

- The January–March quarter is Fieschi's busiest time of year. In 2027, he earned the following revenue: January \$12 000, February \$14 000 and March \$15 000. Business then slowed down a little in the next quarter, when he earned the following revenue: April \$14 000, May \$12 000 and June \$10 000. Fieschi is confident that revenue will be higher in the early part of 2028. He has already accepted orders for sales in January 2028 for a total of \$13 500, all of which are expected to be paid for in January.
 - For the months of February and March, Fieschi expects to earn sales about 10% higher than in the previous year, but in the quarter April–June he expects his revenue to be about 5% lower than in the same quarter last year.
 - Fieschi has tried various mark-ups over the years. He has realised that some of his products aren't available elsewhere, and therefore he currently works on a mark-up of 200% on all optical items sold. Given the specialist nature of the items sold by his business, Fieschi doesn't order his inventory unless he has a firm order for his products. He can then pay cash for all his purchases as he knows the goods are already sold.
 - The business employs two assistants who are each paid on Friday. One is employed full-time and is usually paid \$550 per week. The other assistant is employed on a casual basis. During the busiest months (January–March), the casual employee will probably be paid about \$500 per week. In the period April–June, his wages will drop back to about \$400 per week. *Note:* In 2028, there are four paydays in each month, with the exception of March, June, September and December, when there are five Fridays and therefore five paydays.
 - The firm has one van, which delivers all large orders to customers. Petrol expenses for the van are usually about \$200 per month, but in the January–March quarter this will go up to about \$240 per month. The van is due for a service in February and this will cost about \$320.
 - The insurance on the van is due on 2 March each year. It's expected to cost \$640 this year, plus GST. Registration of the vehicle is due on 11 June and should be about \$840, plus GST.
 - Fieschi advertises his business through Google Ads, at a cost of \$150 per month.
 - New equipment will have to be purchased during February at a cost of \$3800, plus GST.
 - Fieschi does his office work at home. He usually incurs office expenses for the business at around \$100 per month, plus GST.
 - Loan repayments of \$1500 are due on 15 February, 15 May, 15 August and 15 November.
 - Fieschi usually withdraws \$500 each Friday for personal use.
- a** A spreadsheet is recommended for this case study. Prepare a budgeted cash flow statement for Astronomica for the period January–June 2028. Your budget should show the anticipated cash balance at the end of each month. Keep a copy of the spreadsheet for use with part **c**.
- b** In which month will Fieschi be able to afford the \$10 000 deposit for a new vehicle? Give reasons for your answer.



- » c Fieschi has had second thoughts about the expected downturn in business in the April–June period. He is considering a new advertising strategy; it will cost him \$100 more each month (for April–June) but is expected to increase his revenue during this quarter by 8%. However, wages will increase by \$150 per week, and the extra sales will increase the amount of purchases required. Redraft your budget and note the changes in the estimated bank balances. Should Fieschi go ahead with this advertising plan? Give reasons for your answer.

EXAM-STYLE QUESTIONS

Question 1 (3 marks)

A business owner has just completed their budget plans for the next six months and it appears that the business will have excess cash for most of the budget period.

State three decisions the owner should consider in terms of what to do with the excess cash.

Question 2 (4 marks)

State and **explain** two reasons why a monthly budget period is preferred to a quarterly period when preparing a budgeted cash flow statement.



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Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



CHAPTER 25

15 16 17 18 19 20 21 22 23 24 25

Headstart: An introduction to double entry accounting

KEY TERMS

Double entry accounting
Ledger account
General ledger
Analysis chart

This chapter introduces the double entry process used in VCE Accounting Units 3 & 4, based on debit and credit entries. The general ledger is a recording system that consists of a number of accounts. Accounts are used to record data contained in the business documents introduced in Units 1 & 2. You will learn here about double entry recording for service-type businesses. In Year 12, you will tackle double entry accounting for businesses that buy and sell inventory.

Learning objectives

By the end of this chapter, you will be able to:

- **define** 'double entry accounting' [25.1]
- **state** the rules of double entry for the different types of accounts [25.1]
- **determine** when a debit entry or a credit entry is required in a variety of accounts [25.1]
- **prepare** an analysis chart showing debits and credits for a variety of transactions [25.1]
- **state** the rules of double entry for assets, liabilities, owner's equity, revenues and expenses [25.2]

PRIOR KNOWLEDGE

CHAPTER 3 Balance sheets for a small business



Estimated time required: 2 weeks



25.1 Double entry accounting and the accounting equation



In Units 1 and 2 of VCE Accounting, you have learnt that every transaction by a business affects at least two items in its balance sheet. This is the essence of **double entry accounting**: *two items are affected by every transaction*.

However, it's not practical to prepare a new balance sheet after every transaction. Instead, accountants prepare a balance sheet only at the end of each reporting period. Transactions that occur during that period are recorded in **ledger accounts**. These accounts are kept together and make up a record called the **general ledger**.

A ledger account is simply a financial record that relates to a particular area within the business. For example, the Wages account records details relating to a business's wages. When wages are paid in cash, the other half of the double entry would be recorded in the Cash at Bank account. If the business purchased a computer for cash, it would record the details in a Computer account and the Cash at Bank account.

For the purposes of the example shown in Figure 25.1, the Cash at Bank account had \$5000 in it at the start of July. This is known as the balance of the account on 1 July.

double entry accounting

a system in which two ledger entries, a debit and a credit, are made for each transaction

ledger account a financial record for all details of a particular item

general ledger a collection of ledger accounts in which double entry accounting is used

Figure 25.1 Sample ledger accounts

COMPUTER					
Date	Cross-reference	\$	Date	Cross-reference	\$
1 Jul	Cash at bank	2 000			
WAGES					
Date	Cross-reference	\$	Date	Cross-reference	\$
7 Jul	Cash at bank	600			
CASH AT BANK					
Date	Cross-reference	\$	Date	Cross-reference	\$
1 Jul	Balance	5 000	1 Jul	Computer	2 000
			7 Jul	Wages	600

The date should always be recorded for every transaction.

The cross-reference column states the name of the other account affected by a transaction. In this case, when wages are paid, it affects the Wages and Cash at Bank accounts.

Two cash payments are demonstrated here: one for the purchase of a computer and one for the payment of wages. Note that both transactions affect the Cash at Bank account.

Ledger accounts

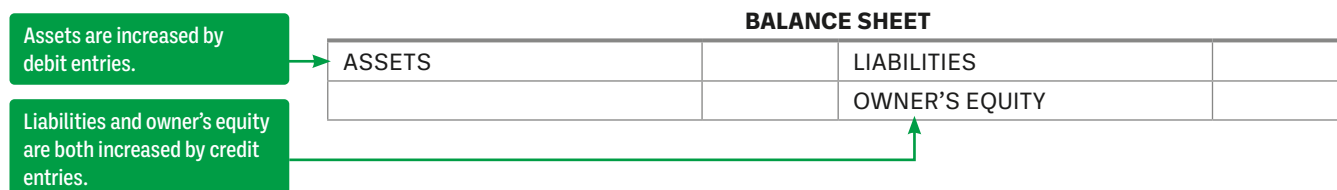
A ledger account entry has three parts, completed in the following order:

- 1 the date of the transaction
- 2 the name of the other account affected by the double entry (referred to as a cross-reference)
- 3 the actual dollar value of the transaction.

As Figure 25.1 shows, for each transaction, there is an entry on the left side of one account and a corresponding entry on the right side of another account. This is the nature of double entry accounting: one debit entry and one credit entry for each financial transaction. The debit is noted on the left side of a ledger account and the credit on the right side.

LEDGER ACCOUNT					
Date	Cross-reference	\$	Date	Cross-reference	\$
	DEBIT SIDE			CREDIT SIDE	

There are set rules as to whether an entry is a debit or a credit. The easiest way to learn these rules is to work from the basic format of a T-form balance sheet:



The format of the balance sheet shows the rules of double entry accounting. Assets appear on the left side of the report and are debit in nature. Therefore, assets will be increased by debit entries and decreased by credit entries. Liabilities and owner's equity are on the right side and are credit in nature. Therefore, liabilities and owner's equity accounts will usually have credit balances and are increased by credit entries and decreased by debit entries. Figure 25.2 provides a summary of these rules.

Figure 25.2 Rules for double entry recording (A, L, OE)

Account classification	Increased by	Decreased by
Assets	Debits	Credits
Liabilities	Credits	Debits
Owner's equity	Credits	Debits

Recording ledger entries

There is a simple, consistent process for determining the entries in ledger accounts. You are encouraged to follow these four steps until you get comfortable with this process:

- Step 1:** State the two ledger accounts affected by the financial transaction.
- Step 2:** Classify the accounts according to their balance sheet classifications (A, L or OE).
- Step 3:** State whether the account is being increased or decreased.
- Step 4:** By referring to the rules of debit and credit, state whether the accounts will have a debit or a credit entry.

You should follow these steps in sequence until you fully understand the rules of double entry. Always check that for every debit you have a credit entry of the same value.

EXAMPLE 25.1

A business purchases a second-hand vehicle from a private individual for cash. Therefore, no GST was paid.

- 1 Two ledger accounts affected: Vehicle and Cash at Bank
- 2 Balance sheet classifications: Asset and asset
- 3 Increase or decrease: Vehicle increases and Cash at Bank decreases
- 4 Debit or credit: Debit the Vehicle account and credit the Cash at Bank account.

There is one debit entry and one credit entry, so the rules of double entry are satisfied. The debit to the Vehicle account is required, because this account has to be increased. The business has paid cash for the vehicle, so the Cash at Bank account is decreased, and assets are decreased by credit entries.



The purchase of a second-hand vehicle is recorded as two entries in the accounting system.

EXAMPLE 25.2

A business takes out a loan. No GST is to be recorded.

- 1 Two ledger accounts are affected: Cash at Bank and Loan
- 2 Balance sheet classifications: Asset and liability
- 3 Increase or decrease: Cash at Bank increases and Loan increases
- 4 Debit or credit: Debit the Cash at Bank account and credit the Loan account.

The transaction increases both ledger accounts. The Cash at Bank account is increased because the business has received cash via the loan. The Loan account is increased because the business now has a present obligation to another entity. However, the transaction still creates one debit entry and one credit entry.

You should also get used to recording business transactions that include the GST.

EXAMPLE 25.3

A business buys a vehicle for \$30 000 cash, plus GST of \$3000. In this case, the transaction will affect three accounts. You can use the same approach to determine the debits and credits required.

- 1 Three ledger accounts affected: Vehicle, GST Liability and Cash at Bank
- 2 Balance sheet classifications: Asset, liability and asset
- 3 Increase or decrease: Vehicle increases, GST Liability decreases and Cash at Bank decreases
- 4 Debit or credit: Debit the Vehicle account, debit the GST Liability account, and credit the Cash at Bank account.

There are two debit entries being recorded here and only one credit entry. However, once amounts are included, the entries must balance out. The Vehicle account is debited \$30 000, GST Liability is debited \$3000, and Cash at Bank is credited \$33 000. The two debit entries therefore equal the same dollar amount as the credit entry to Cash at Bank.

Keep in mind that a business may have a GST liability or a GST refund. For the purposes of this introductory chapter, it has been assumed that each business has a GST liability. Both scenarios will be covered in Units 3 & 4 once you are familiar with the double entry system.

Analysis charts

analysis chart a table used to break a transaction down into debit and credit entries

Rather than constantly repeating these four steps, an **analysis chart** can be used for the double entry process. It provides an analysis of a financial transaction, which identifies the double entry for ledger accounts.

The analysis chart in Figure 25.3 shows how to determine the double entry for a variety of financial transactions. In Figure 25.4, the actual ledger accounts are prepared, showing the double entry for each transaction. Work through the analysis chart to check that you can make the correct double entry for each transaction.

Figure 25.3 Analysis chart

Transaction	Account names	Classification	Increase/Decrease	Debit/Credit
1 The owner contributed \$25 000 to commence business	Cash at bank Capital	Asset Owner's equity	Increase Increase	Debit Credit
2 The business took out a bank loan for \$10 000	Cash at bank Loan	Asset Liability	Increase Increase	Debit Credit
3 Purchased a computer for \$3000 cash, plus GST of \$300	Computer GST liability Cash at bank	Asset Liability Asset	Increase Decrease Decrease	Debit Debit Credit
4 Made a loan repayment of \$1000	Loan Cash at bank	Liability Asset	Decrease Decrease	Debit Credit
5 Bought tools for \$400 cash, plus GST of \$40	Tools GST liability Cash at bank	Asset Liability Asset	Increase Decrease Decrease	Debit Debit Credit
6 The owner contributed office furniture valued at \$500 to the business	Office furniture Capital	Asset Owner's equity	Increase Increase	Debit Credit

Notice in Figure 25.4 that dates are not used. Instead, the numbers where the date is usually recorded refer to the number of the transaction shown above in the analysis chart (Figure 25.3).

Note the entries that involve the GST. As there are two debits, the credit in the Cash at Bank account can be combined to show both accounts (e.g. Computer/GST Liability).

The Loan account is used to record all changes in the loan from the bank. When the loan was taken out, the amount owing increases and therefore the Loan account would have a credit entry. When a loan repayment is made, the amount owing on the loan decreases and therefore the account would have a debit entry.

Businesses of all sizes use double entry accounting.



EXAM-STYLE QUESTION

Johnny Page, the owner of JP Steam Cleaning, has just issued an invoice to one of his corporate customers for work completed this month. The invoice was for \$1210, including GST.

Explain how the issuing of the invoice would affect the three accounting reports prepared for his small business. (6 marks)

Sample answer

Income statement: The invoice would include a revenue item, being cleaning fees of \$1100, which would increase net profit for the period by \$1100.

Balance sheet: The invoice would affect three items in the balance sheet. Accounts receivable would increase by \$1210, the GST liability would increase by \$110, and owner's equity would increase by \$1100, due to profit being increased.

Cash flow statement: As an invoice has been issued, but not yet paid, there is no cash flow to be reported at this stage. Therefore, there is no effect on the cash flow statement.

Exam advice

This style of question is quite common in Accounting exams. The twofold effect of a transaction on the balance sheet is an integral part of the study design. However, you may also be asked to explain the effect of a transaction on all three reports. With this type of question, you should aim to include all relevant details, as outlined above. If profit is affected, state whether it is an increase or decrease and include the dollar amount. The effect on the balance sheet is always going to include at least two items. Make sure you consider both sides of the balance sheet. In regard to the above example, the issuing of an invoice doesn't affect cash flows. However, this doesn't mean you can ignore the cash flow statement and leave a blank space. Demonstrate your knowledge by stating that there is no effect on cash flows, and explain why. You now have a complete answer that will earn you full marks!



25.2 Double entry for revenues and expenses

Having applied the rules of double entry to the three classifications of A, L and OE, we can now expand them to include the other two types of ledger accounts: revenues and expenses.

- **Revenues (R)** usually cause an increase in assets, leading to an increase in owner's equity.
- **Expenses (E)** usually cause a decrease in assets, leading to a decrease in owner's equity.

As revenue increases owner's equity, revenue accounts are credit in nature and are increased by credit entries. Expenses have the opposite effect on owner's equity: they are debit in nature and are increased by debit entries.

Figure 25.5 shows the table in Figure 25.2 expanded to include revenues and expenses.

Figure 25.5 Expanded rules for double entry (A, L, OE, R, E)

Account classification	Increased by	Decreased by
Assets	Debits	Credits
Liabilities	Credits	Debits
Owner's equity	Credits	Debits
Revenues	Credits	Debits
Expenses	Debits	Credits

Some students prefer a different approach to that shown in Figure 25.5. Consider the alternative version set out in Figure 25.6, which shows the effect of debit and credit entries on each of the five elements of accounting.

Figure 25.6 Alternative table for learning the rules of double entry (A, L, OE, R, E)

Account classification	Debit entries	Credit entries
Assets	Increase	Decrease
Liabilities	Decrease	Increase
Owner's equity	Decrease	Increase
Revenues	Decrease	Increase
Expenses	Increase	Decrease

Study tip

Select whichever of these two tables setting out the rules of double entry you find most useful and make a copy. Then, whenever you are working on double entries, refer to it to check you are identifying the debits and credits correctly.

The steps for determining the double entry for a transaction can also be followed for transactions involving revenues and expenses. The analysis chart in Figure 25.7 has been created using the same procedures, but this time some of the transactions involve revenue and expense items. The transactions presented relate to the business trading as Olinda Office Cleaning.

Figure 25.7 Analysis chart (including revenue and expenses)

Transaction	Account names	Classification	Increase/Decrease	Debit/Credit
1 The owner contributed \$40 000 to start the business	Cash at bank	Asset	Increase	Debit
	Capital	Owner's equity	Increase	Credit
2 Bought cleaning equipment for \$1000 cash, plus GST of \$100	Equipment	Asset	Increase	Debit
	GST liability	Liability	Decrease	Debit
	Cash at bank	Asset	Decrease	Credit
3 Received cleaning fees of \$2000, plus GST of \$200	Cash at bank	Asset	Increase	Debit
	GST liability	Liability	Increase	Credit
	Cleaning fees	Revenue	Increase	Credit
4 Paid wages to assistant: \$500	Wages	Expense	Increase	Debit
	Cash at bank	Asset	Decrease	Credit
5 Charged a client \$600 for cleaning fees on credit, plus \$60 GST	Accounts receivable	Asset	Increase	Debit
	GST liability	Liability	Increase	Credit
	Cleaning fees	Revenue	Increase	Credit
6 Paid \$200 for advertising, plus \$20 GST	Advertising	Expense	Increase	Debit
	GST liability	Liability	Decrease	Debit
	Cash at bank	Asset	Decrease	Credit
7 Received \$200 from Accounts receivable	Cash at bank	Asset	Increase	Debit
	Accounts receivable	Asset	Decrease	Credit

Items 3 and 5 result in three accounts all being increased. This is possible! Just make sure that your total debits equal the total credits.

Figure 25.8 shows how the double entries in Figure 25.7 would be recorded in ledger accounts.

Figure 25.8 General ledger accounts

CASH AT BANK					
Date	Cross-reference	\$	Date	Cross-reference	\$
1	Capital	40 000	2	Equipment/GST liability	1 100
3	Cleaning fees/GST liability	2 200	4	Wages	500
7	Accounts receivable	200	6	Advertising/GST liability	220
CAPITAL					
Date	Cross-reference	\$	Date	Cross-reference	\$
			1	Cash at bank	40 000
EQUIPMENT					
Date	Cross-reference	\$	Date	Cross-reference	\$
2	Cash at bank	1 000			
CLEANING FEES					
Date	Cross-reference	\$	Date	Cross-reference	\$
			3	Cash at bank	2 000
			5	Accounts receivable	600
WAGES					
Date	Cross-reference	\$	Date	Cross-reference	\$
4	Cash at bank	500			
ADVERTISING					
Date	Cross-reference	\$	Date	Cross-reference	\$
6	Cash at bank	200			
ACCOUNTS RECEIVABLE					
Date	Cross-reference	\$	Date	Cross-reference	\$
5	Cleaning fees/GST liability	660	7	Cash at bank	200
GST LIABILITY					
Date	Cross-reference	\$	Date	Cross-reference	\$
2	Cash at bank	100	3	Cash at bank	200
6	Cash at bank	20	5	Accounts receivable	60

The Cash at Bank account is increased by debit entries and decreased by credit entries.

Revenue accounts are increased by credit entries.

Expense accounts are increased by debit entries.

Expense accounts are increased by debit entries.

When a business makes a payment that includes GST, the liability to the ATO is decreased by a debit entry.

When a business makes a sale, the liability to the ATO is increased by a credit entry.



You are strongly advised to practise the rules of double entry accounting before you start Unit 3 next year. This will give you a great headstart to your second year of studying accounting!

CHECK YOUR UNDERSTANDING

- 1 **Identify** a transaction that would bring about the following changes to a business's accounts:
 - a an increase in an asset account/an increase in a liability account
 - b an increase in an asset account/a decrease in another asset account
 - c a decrease in an asset account/a decrease in a liability account
 - d an increase in an asset account/an increase in an owner's equity account.
- 2 **Explain** how the rules of debit and credit for revenue and expense accounts can be traced back to their relationship with owner's equity.



Practise and apply



REVISION: SUMMARY OF KEY CONTENT

- [25.1]** Double entry accounting notes that two items are affected by every transaction, and so two accounts need to be updated – one with a debit and one with a credit. The transactions that occur during each reporting period are recorded in ledger accounts. These individual accounts, when combined, make up the general ledger.
- [25.1]** The three elements of a ledger entry are the date of the transaction, a cross-reference to the other account affected by the transaction and the dollar value of the transaction. Assets usually have debit balances, while liabilities and owner's equity usually have credit balances.
- [25.1]** Analysis charts provide an analysis of a financial transaction and can help you to determine the effects on ledger accounts.
- [25.2]** Expenses and revenues are also catered for in double entry accounting. Revenue accounts are increased by credit entries; expense accounts are increased by debit entries.



Exercises

This textbook is accompanied by a workbook. The exercises can be completed in the workbook or you can use the Excel spreadsheet templates included in the digital product.

1 Analysis chart: A, L, OE

Prepare an analysis chart (A, L, OE only) showing the double entries that result from the following transactions for Panozzo's Plumbing.

- The owner contributed cash to the business.
- Panozzo purchased equipment for cash, including GST.
- Borrowed money from NAB.
- The owner contributed a vehicle to the business.
- Made a repayment to NAB.

2 Analysis chart: All accounts

The following transactions are from the business of Casey Car Repairs.

- Paid advertising, including GST.
- Bought tools for cash, plus GST.
- Received cash for a smash repair, plus GST.
- Issued a quote to repair a Mazda 3, including a charge for GST.
- Bought new office furniture for cash, plus GST.
- Paid for advertising using the bank's EFT facility (including GST).
- Received cash for a smash repair, plus GST.
- Issued invoices to customers, including GST, for services provided.
- Sent an order form to supplier for goods required.
- Received money from accounts receivable for work done previously.

Prepare an analysis chart (all accounts) showing the double entry for each transaction.



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3 Analysis chart with dollar values

Michelle Lemire is the owner of Bundoora Furniture Repairs. She has asked for your assistance with her double entry accounting. She has provided the following summary of transactions relating to her business.

- Lemire banked \$100 000 cash in a business account to start her business.
- Paid the first month's rent: \$4000, plus GST of \$400.
- Bought tools for cash: \$5000, plus \$500 GST.
- Received \$4000 in repair fees on credit, plus \$400 GST.
- Paid for cleaning of the business \$300, plus GST of \$30.
- Borrowed cash from NAB: \$12 000.
- Banked repair fees received \$5000, plus \$500 GST.
- Paid wages to her casual assistant: \$640.
- Made an EFT payment for office equipment: \$660, including \$60 GST.
- Sent an invoice to a credit customer for repairs completed: \$2200, plus \$220 GST.
- Repaid NAB \$1000.
- Banked fees from cash clients: \$4500, plus \$450 GST.

Prepare an analysis chart for these transactions, including the double entries required for each item.



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4 Analysis chart with dollar values

Kellie Rutland owns and operates Carlton Hairdressing Salon. The business's transactions in November are listed below.

Nov 1	Rutland contributed capital of \$180 000 to commence the business.
4	Paid for advertising: \$1650, including GST of \$150.
7	Bought hairdressing supplies for cash: \$500 plus GST.
10	Bought equipment for cash for \$8000, plus GST.
13	Received a total of \$1600 plus GST of \$160 from cash clients.
16	Paid electricity expenses: \$100, plus \$10 GST.
19	Rutland paid insurance on her family home by EFT from her personal savings account: \$1200, plus \$120 GST.
22	Took out a loan from ACME Bank for \$5000, with 5% interest on the loan to be paid yearly.
25	Charged accounts receivable \$1200, plus GST of \$120.
28	Contributed two filing cabinets to the business, valued at \$200.
30	Collected \$500 from accounts receivable via EFT.

- a Prepare an analysis chart for items requiring a double entry in the books of Rutland's business.
- b Explain how Rutland can meet the demands of *verifiability* when recording transactions in a double entry accounting system.
- c Explain your treatment of the insurance on Rutland's family home. In your answer, refer to an accounting assumption.

5 Analysis of ledger accounts

The following accounts appeared in the general ledger of Accurate Accounting Services, a small business owned and operated by Scott Brasher.



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CASH AT BANK

		\$			\$
1 Apr	Capital	80 000	2 Apr	Furniture/GST liability	5 500
4 Apr	Accounting fees/ GST liability	5 500	3 Apr	Insurance/GST liability	2 200

CAPITAL - BRASHER

		\$			\$
			1 Apr	Cash at bank	80 000

FURNITURE

		\$			\$
2 Apr	Cash at bank	5 000			

GST LIABILITY

		\$			\$
2 Apr	Cash at bank	500	4 Apr	Cash at bank	500
3 Apr	Cash at bank	200	6 Apr	Accounts receivable	600

INSURANCE

		\$			\$
3 Apr	Cash at bank	2 000			

ACCOUNTING FEES REVENUE

		\$			\$
			4 Apr	Cash at bank	5 000
			6 Apr	Accounts receivable	6 000

ACCOUNTS RECEIVABLE

		\$			\$
6 Apr	Accounting fees/ GST liability	6 600			

- In chronological order, list the transactions that resulted in the double entries in these ledger accounts.
- Taking into account the GST Liability account shown above, does this business have a GST liability at the moment or is it due a GST refund from the ATO? Explain your answer.



6 Analysis of ledger accounts

Bill Shakespeare is the owner of Costumes 'R' Us, a small business that specialises in hiring costumes for amateur theatre productions.

CASH AT BANK

		\$			\$
1 May	Capital	150 000	2 May	Display equipment/ GST liability	33 000
4 May	Hiring fees/GST liability	2 200	3 May	Advertising/GST liability	660
6 May	Accounts receivable	940	7 May	Wages	500

CAPITAL - JOHNSON

		\$			\$
			1 May	Cash at bank	150 000

DISPLAY EQUIPMENT

		\$			\$
2 May	Cash at bank	30 000			

GST LIABILITY

		\$			\$
2 May	Cash at bank	3 000	4 May	Cash at bank	200
3 May	Cash at bank	60	5 May	Accounts receivable	100

ADVERTISING

		\$			\$
3 May	Cash at bank	600			

HIRING FEES

		\$			\$
			4 May	Cash at bank	2 000
			5 May	Accounts receivable	1 000

ACCOUNTS RECEIVABLE

		\$			\$
5 May	Hiring fees/GST liability	1 100	6 May	Cash at bank	940

WAGES

		\$			\$
7 May	Cash at bank	500			

- State the transactions that resulted in the double entries in the above ledger accounts.
- Consider the GST account shown. On 7 May, does this business owe GST to the ATO or would it be owed a refund? Explain your answer.
- Looking at the Accounts Receivable ledger account, how much do accounts receivable owe the business as at 7 May?
- Taking into account the entries in the Cash at Bank ledger account, calculate the following amounts:
 - the total amount of cash received from 1 May to 7 May
 - the total amount of cash payments from 1 May to 7 May
 - the amount of cash left in the bank account of this business as at 7 May 2028.

7 Preparation of ledger accounts

Refer to the analysis chart you prepared when answering Exercise 4. Using your chart as a guide, prepare the entries in the actual general ledger accounts. Remember to record the three parts of each entry: the date, the cross-reference and the dollar value.



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EXAM-STYLE QUESTIONS

Question 1 (5 marks)

George Lennon, the owner of Doncaster IT Repairs, has provided the following details of his recent transactions.

Apr 1	Bought equipment for cash: \$4400, including GST.
2	Charged accounts receivable for repairs completed: \$2400, plus GST.
3	Made an EFT to pay for insurance: \$748, including GST.
4	Received cash from cash customers: \$620, plus GST.
5	Paid for advertising in local newspaper: \$1650, which included GST.

Prepare the relevant entries from the above information in the GST Liability account for Doncaster IT Repairs.

Question 2 (3 marks)

The owner of Portsea Steam Cleaning, Georgia Wilson, has a GST liability of \$750 on 1 February 2028. During May, Wilson received cleaning fees of \$13 200, including GST. She also paid \$660 for expenses, including GST.

Complete the following table to show the overall effect of the above transactions on the accounting equation of her business.

	Increase / Decrease / No effect	\$
Assets		
Liabilities		
Owner's equity		

Question 3 (3 marks)

The following GST Liability account has been provided by a small business owner.

GST LIABILITY					
		\$			\$
9 Oct	Cash at bank	600	1 Oct	Cash at bank	400
			6 Oct	Accounts receivable	500

State the source document that would have been used for each of the three entries in the account.

Watch selected exercises from this chapter being completed with step-by-step instructions and advice.



Check your understanding

1.1

page 3

- 1 Explain how you think accounting will be relevant to your own life in the future.
- 2 Outline the basic steps involved in the accounting process.
- 3 Explain why accounting information is important for good decision-making.

1.2

page 4

- 1 Define the terms 'revenue' and 'expenses' and give an example of each.
- 2 Explain how profit is calculated for a business.
- 3 Suggest three possible assets for a business that sells mobile phones.

1.3

page 5

- 1 Using the information provided for JB Hi-Fi, calculate the dollar value of expenses for the business in the latest financial report.
- 2 Identify the value of owner's equity in JB Hi-Fi.
- 3 JB Hi-Fi is viewed as a highly successful business. Explain in detail why you think it has been so successful over so many years.

2.1

page 10

- 1 Define the term 'small business'.
- 2 List four features that distinguish a small business from other forms of business.
- 3 Name four businesses in your local area that you would describe as small businesses.

2.2

page 11

- 1 'I don't need to see an accountant. I know my business better than any outsider could!' Explain why you agree or disagree with this business owner's comment.
- 2 List five reasons why a small business owner should consult a qualified accountant.
- 3 Name an industry that you believe has experienced a growth in small businesses in recent years. Explain why you think this has happened.

2.3

page 12

- 1 Distinguish between financial data and financial information.
- 2 Assess the following statement: 'Management decision-making can only be as good as the information on which it is based.'
- 3 a List the main users of accounting information.
b Discuss whether all these users have the same needs, using examples.

2.4

page 13

- 1 Explain why accountants need to follow the qualitative characteristic of understandability.
- 2 Define the term 'faithful representation'.
- 3 Describe the link between the qualitative characteristics of faithful representation and verifiability.
- 4 'Accounting information is useless unless it is timely.' Discuss why you agree or disagree with this statement.

2.5

page 15

- 1 Explain the accounting entity assumption.
- 2 Shane Clarke earns income from three sources. He receives a salary as a full-time teacher, and he owns a clothing store and a furniture shop. Describe how the accounting entity assumption affects Clarke's situation.
- 3 Explain how the accounting entity assumption ties in with the qualitative characteristic of relevance.
- 4 Define the term 'accounting period'. Describe its purpose.
- 5 Discuss what accountants assume about the life of a business. Explain why they make this assumption.

3.1

page 22

- 1 Explain the purpose of a balance sheet.
- 2 Define the terms 'assets' and 'liabilities'.
- 3 State the accounting equation in two different forms.

3.2

page 23

- 1 Define the term 'owner's equity'.
- 2 List three assets that are likely to be reported in a balance sheet for an accountant.
- 3 Compare the T-form balance sheet with the narrative form. Explain which format you think shows financial information most clearly.

3.3

page 24

- 1 Discuss the advantages of preparing a classified balance sheet.
- 2 Distinguish between:
 - a current assets and non-current assets.
 - b current liabilities and non-current liabilities.
- 3 The owner of a hardware store has a loan from NAB. The total amount outstanding is \$32 000. The owner expects to repay \$18 000 within the next year and the remainder in the following 12 months. Suggest how this loan should be treated in a classified balance sheet.
- 4 Describe what working capital measures.

3.4

page 26

- 1 'Every transaction has a twofold effect on a balance sheet.' Describe what this statement means, using an example.
- 2 A balance sheet should faithfully represent the cost of assets. Explain how accountants ensure that this is achieved.
- 3 Explain why a delivery van should be reported as an asset. In your answer, refer to the definition of an asset.

4.1

page 35

- 1 Describe what is involved in a single entry accounting system.
- 2 Explain the purpose of a cash journal.

4.2

page 37

- 1 Explain why business documents are referred to as source documents.
- 2 Name three common business documents and describe the purpose of each.
- 3 Name the two source documents used for entries in the cash journals.

4.3

page 41

- 1 Explain the circumstances under which a credit note would be issued.
- 2 Describe the role of a delivery docket and explain why it doesn't usually include cost prices.
- 3 State the purpose of a statement of account.

4.4

page 43

- 1 'Computers are a vital part of accounting.' Explain why you agree or disagree with this statement.
- 2 Identify two advantages of using Excel to keep accounting records for a small business.
- 3 List the following processes in their correct order within an accounting system: documents, decision-making, accounting records, business transactions, analysis of reports, accounting reports.

5.1

page 53

- 1 List what you think are the main reasons why people go into small business.
- 2 Comment on the following statement made by a prospective small business owner: 'I'm going to invest in a mobile phone shop. Then I'll be able to sit back and rake in the profits!'
- 3 When individuals go into business, they often make sacrifices. Identify and describe some of these sacrifices.

- 1 a Define the terms 'trading firm', 'service firm' and 'manufacturing firm'.
b List four examples of each type of business.
- 2 Name two types of businesses that could be referred to as both trading and service firms. Explain your answer.

- 1 Name the three main forms of business ownership.
- 2 Describe two advantages and two disadvantages of each form of ownership.
- 3 For each of the following businesses, which form of business ownership would you recommend as the most suitable? Justify your answers.
 - a Lawn-mowing service
 - b Takeaway food shop
 - c Restaurant
 - d House builder
 - e Vehicle manufacturer

- 1 Define the term 'franchise' and explain in detail how this type of business operates.
- 2 Describe three advantages and three disadvantages of operating a business as part of a franchise operation.
- 3 You have just inherited \$500,000 and decided to buy into a franchise in your local area. Discuss in detail which franchise you would choose, giving reasons for your decision.

- 1 Identify what you think are the three most important characteristics of a successful business owner.
- 2 List and describe the most common causes of business failure.
- 3 Define the term 'feasibility study'. Discuss the purpose of such a study.
- 4 Referring to your local area, identify a business or industry that has closed in recent years. Name the business that was affected and outline why you think it, or its industry collapsed.

- 1 Briefly describe six types of investments available to a small business owner.
- 2 State one advantage and one disadvantage of the forms of investment described in Question 1.
- 3 Explain the main difference between an 'at call' savings account and a term deposit account.

- 1 Distinguish between speculative investments and investments for specific returns. List two examples of each type of investment.
- 2 Using the headings 'Speculative', 'Specific returns' and 'Both speculative and specific returns', place each of the eight different types of investments described in this chapter under the correct heading.
- 3 Visit your local bank and collect any available material on the different types of accounts available. Summarise this information in a table, including such details as name of account, minimum deposit, special conditions, bank fees, interest rate and any other relevant data.

6.3

page 69

- 1 Describe the usual relationship between the security of investments and the return on these investments, using an example.
- 2 Describe the return on investments ratio and outline its purpose.
- 3 Explain why an investment's rate of return after tax is a good measure of its value.

6.4

page 71

- 1 Distinguish between simple interest and compound interest.
- 2 'Superannuation uses compound interest to great effect.' Explain this statement fully.
- 3 'When investing, don't put all your eggs in one basket.' Explain the relevance of this statement to investing in the financial market.

6.5

page 74

- 1 Explain the meaning of the term 'registered capital' when referring to a company.
- 2 Distinguish between a share's par value and its market value.
- 3 Describe how dividend yield is calculated.
- 4 Explain the two ways shareholders hope to make money from their investment.

7.1

page 85

- 1 List four types of financial transactions where a business may receive cash.
- 2 List four types of financial transactions where a business may pay cash.

7.2

page 86

- 1 Name the two source documents used to make entries in the cash receipts journal.
- 2 Explain the main advantages of using multi-column cash receipts journals.
- 3 Explain the circumstances that need to exist for a business to benefit from using a multi-column cash receipts journal.

7.3

page 88

- 1 Describe the main advantages of using multi-column cash payments journals.
- 2 'A multi-column cash payments journal can be designed to suit all types of businesses.' Discuss why you agree or disagree with this statement.

7.4

page 90

- 1 Outline the purpose of the statement of receipts and payments.
- 2 Explain why items listed in the 'Sundries' column of a cash journal should not be listed as sundries in a statement of receipts and payments.
- 3 Explain why a statement of receipts and payments should indicate the length of the period in its heading.

7.5

page 92

- 1 Explain how one business may be entitled to a GST refund, while another business has a GST liability to the taxation office.
- 2 A business collected \$900 GST from its customers during June but paid \$700 GST to its suppliers during the same month. Describe how it should report this in its balance sheet as at 30 June.
- 3 A business owner reports that she received \$600 GST from customers during the last quarter but believes she is entitled to a tax refund from the government. Demonstrate how this is possible, using an example to prove your case.

7.6

page 94

- 1 Single entry accounting is suitable for some businesses, but not all. Describe a typical business, using an example from your local area, which would be suited to a single entry accounting system.
- 2 Describe the circumstances when a business owner may decide to change from single entry to a double entry accounting system.

- 1** Identify and describe the six qualitative characteristics that an accounting report must satisfy to provide valuable information.
- 2** Define the term 'revenue' and provide an example of revenue for each of the following businesses.
 - a** Pizza shop
 - b** Accountant
 - c** Car park
- 3** Define the term 'expenses' and give an example of expenses for each of the following businesses.
 - a** Hairdresser
 - b** Mechanic
 - c** Window cleaner

8.2

page 105

- 1** Explain what accountants mean by the term 'profit'.
- 2** Revenues usually cause an increase in the assets of a firm. State the two assets that could be increased when a business earns revenue.
- 3** Explain how two different items in a balance sheet may be affected by the creation of an expense.

8.3

page 107

- 1** List three reasons why profit may not equal the balance of a firm's bank account at the end of a period.
- 2** 'If a business earns a loss for a period, this means that it has no money in the bank.' Discuss why you agree or disagree with this statement.
- 3** A business earned a profit, but its owner's equity decreased. Investigate how this is possible.

9.1

page 121

- 1** Explain what is involved in a credit transaction.
- 2** State the source documents used to provide evidence of:
 - a** a cash purchase of goods.
 - b** a credit purchase of goods.
- 3** Distinguish between accounts receivable and accounts payable.

9.2

page 122

- 1** Describe the function of a purchases journal.
- 2** Explain why it is preferable for a business owner to maintain individual records for accounts payable.
- 3** Explain why the invoice numbers in a purchases journal don't run in sequence.

9.3

page 126

- 1** Explain why a firm that sells on credit should maintain individual accounts receivable records.
- 2** Name three tactics a business owner may use if accounts receivable have overdue accounts.
- 3** Explain in detail why all small businesses need a sales journal.

9.4

page 128

- 1** Describe how accounts receivable and accounts payable are classified in a balance sheet.
- 2** A business owner has cash sales of \$11 000 during a month. This amount includes GST received. During the same month, the business pays GST of \$400. Does this business have a GST liability or is it owed a GST refund? Calculate the dollar amount in your answer.
- 3** Clarify why business documents are important in relation to the reporting of GST.

10.1

page 138

- 1 Distinguish between internal and external sources of finance.
- 2 Name and describe two types of internal finance.
- 3 Name and describe two types of external finance.
- 4 List one advantage and one disadvantage of each type of finance you identified in Questions 2 and 3.

10.2

page 140

- 1 For each of the following assets, state the source of finance that a small business owner should use if they are running short of cash. (More than one source may be suitable for some items.)
 - a Trading inventory
 - b Office furniture
 - c Vehicles
 - d Payment of yearly insurance premium
 - e Shop premises
- 2 Explain the basic difference between a loan with a flat rate of interest and one with reducing balance interest.
- 3 A loan at a flat rate of 10% interest may cost much more in effective terms. Discuss what 'effective rate' of interest means. Explain why it is higher than the flat rate.

10.3

page 143

- 1 Define the term 'credit rating'.
- 2 Explain what a business owner could do to ensure a good credit rating.
- 3 List five types of information a bank may require from a business owner before approving a loan application.
- 4 Identify two accounting reports that a bank manager would be interested in when considering a loan application. Explain why they would be interested in these reports. **10.4**

page 144

- 1 Define the term 'gearing'.
- 2 Describe the debt ratio and explain how it is calculated.
- 3 Explain the relationship between gearing and risk.

10.5

page 145

- 1 Describe how the 'return on owner's investment' (ROI) is calculated. Explain the purpose of this ratio.
- 2 State four ways of evaluating whether or not an owner's ROI is satisfactory.
- 3 Explain the relationship between gearing and the owner's ROI. Use an example to clarify your answer.

11.1

page 154

- 1 Describe the basic purpose of a cash flow statement.
- 2 Identify what information can be gained from a cash flow statement that isn't available from other financial reports.
- 3 Explain the difference between profit and cash.

11.2

page 155

- 1 Distinguish between a statement of receipts and payments and a cash flow statement.
- 2 Identify the three classifications used in a cash flow statement. Provide two examples of items that would appear under each heading.
- 3 Classify the following items under the three classifications. If you don't think an item should be reported in a cash flow statement, state it as a 'non-cash item'.
 - a Cash purchases of materials
 - b Credit purchases of materials
 - c Delivery fees paid
 - d Repayment of a loan
 - e GST collected on cash sales
 - f Withdrawal of materials by the owner
 - g Cash sales to customers
 - h Cash purchase of office furniture
 - i Capital contribution by owner
 - j Credit sales made to customers
 - k Withdrawal of cash by the owner
 - l GST paid on cash expenses

- 1 Name one revenue item that should be reported in a cash flow statement and one that should not be reported in this statement.
- 2 Name two cash outflows that should be reported in a cash flow statement under the heading 'Cash flows from financing activities'.
- 3 The cash flows from a business's operating activities show a negative result of \$20,000. If you were this business owner, would you be concerned? Explain your answer fully.

11.4

page 160

- 1 Explain the advantage of preparing comparative cash flow statements for two consecutive reporting periods.
- 2 a A business has \$200 cash on hand, \$4000 in an investment account and a \$1200 bank overdraft. Calculate the amount of its cash held.
b Investing activities have been reported as \$60,000. Deduce what could have happened in this business to bring about such a result.

12.1

page 174

- 1 Explain why a business owner may use recommended retail prices when setting selling prices.
- 2 Explain what a 'percentage mark-up' is.
- 3 Discuss the type of business that uses a mark-up.

12.2

page 176

- 1 Define the term 'break-even point'.
- 2 Distinguish between fixed costs and variable costs, using an example to explain your answer.
- 3 Define the term 'contribution margin'.
- 4 Suggest two reasons why a business might vary the mark-up on its goods.

12.3

page 178

- 1 Describe how a fixed cost line looks when graphed.
- 2 Two different lines start at the coordinates (0, 0) when using break-even analysis. State the names of these two lines and explain why they start at (0, 0).
- 3 The intersecting point between two lines determines the break-even point. Identify the two lines that are used to determine this result.

13.1

page 191

- 1 Some business owners prepare their income statements using percentages rather than dollar amounts. Account for why they do this.
- 2 The use of graphs and charts may partly satisfy the qualitative characteristic of understandability. Explain how this is achieved.
- 3 Explain why it is useful to consider a trend in profit results, rather than the results of a single reporting period.

13.2

page 195

- 1 When evaluating a net profit result, explain in detail why it is important to consider the length of the accounting period.
- 2 State and describe three ways of evaluating an income statement.
- 3 Explain what the net profit margin measures.
- 4 Rate of return and the return on owner's investment are two evaluation tools. Contrast these evaluation tools.
- 5 An investor may earn 5% on investments in the money market. Propose why a business owner might expect to earn a higher return on their investment in a small business.

- 1 Define the term 'liquidity'. Explain how the working capital ratio helps to measure the liquidity of a business.
- 2 'A good business is one that doesn't borrow money. Borrowing is risky and owners should contribute all the capital they need.' Examine why you agree or disagree with this statement.
- 3 Non-financial indicators can provide useful information about business performance. If you were running a small business, identify which three non-financial indicators you would use to help evaluate performance. Explain why you have selected each indicator.
- 4 Consider the following statement, made by a small business proprietor: 'My business is unique, so industry averages are of little use to me when assessing performance.' Explain why you agree or disagree with this business owner.

- 1 Explain the aim of internal control.
- 2 State, and describe, three examples of internal control procedures.
- 3 Describe some control mechanisms that you have seen in place at each of these locations.
 - a A cinema
 - b A bookstore
 - c A car park

- 1 State six ways of ensuring that control is maintained over cash.
- 2 Make a list of security techniques or devices you have noticed in businesses in some shopping centres you have visited. State the name of the business and describe briefly the types of security measures being used.
- 3 The owner of Williamstown Plumbing doesn't believe that he needs to take security measures in relation to his business, as he isn't running a retail store. He stores his plumbing materials in the garage at home, and his tools are always in a locked toolbox in the back of his van. Assess this business decision.

- 1 Define the term 'twofold effect of transactions'.
- 2 Provide an example of a business transaction that affects a balance sheet by:
 - a increasing an asset and decreasing another asset.
 - b increasing an asset and increasing a liability.
 - c decreasing an asset and decreasing a liability.
 - d increasing an asset and increasing owner's equity.
- 3 A service business receives cash fees of \$1000 and GST of \$100, and it pays wages of \$400. Explain how these events affect the balance sheet.

- 1 Describe one benefit for a trading firm of paying cash on delivery (COD) for its inventory purchases.
- 2 Describe an advantage of buying inventory using a trade credit facility.
- 3 State the effect on a balance sheet when a trading business buys inventory for cash and pays GST.
- 4 Discuss whether your answer to Question 3 would change if the business purchased inventory on credit.

15.3

page 227

- 1 Explain how the qualitative characteristic of verifiability influences how assets are reported in a balance sheet.
- 2 Understandability demands that balance sheets are easy to understand for the average person. Explain the link between classified balance sheets and the qualitative characteristic of understandability.

16.1

page 233

- 1 Explain the basic difference between the operations of a service firm and a trading firm.
- 2 Distinguish between a sales invoice and a purchase invoice. Explain your answer using the names of trading firms.
- 3 Ace Computers buys in bulk from Oz Computer Suppliers. It sells a computer on credit to Brunswick Primary School. In relation to both purchase and sales invoices, explain whether Ace Computers would have original documents or copies of the two types of invoices.

16.2

page 236

- 1 Distinguish between a cash receipts journal for a service firm and one for a trading firm.
- 2 'A cash payments journal for a trading firm is basically the same as that used by a service business.' Explain why you agree or disagree with this statement.
- 3 A cash receipts journal may be a simple version or a multi-column version. Explain why a business manager would use the simple version of this journal.
- 4 Describe two benefits of using a multi-column cash journal.

16.3

page 241

- 1 Matthew Cooke opens a retail business selling furniture. Suggest headings that you recommend Cooke uses in his cash receipts journal and cash payments journal.
- 2 Jill Ryan is the new owner of a clothing store. Explain whether she will be able to use the same headings as those you suggested for Cooke's business in Question 1.
- 3 If a trading firm buys and sells on credit, describe the modifications that are necessary to its cash journals.
- 4 Recommend how often the manager of a trading firm should prepare a statement of receipts and payments, giving reasons for your answer.

17.1

page 250

- 1 Explain the purpose of a physical stocktake at the end of a period.
- 2 Describe the two processes involved in doing a physical stocktake.
- 3 Explain the role of inventory sheets.
- 4 Describe two methods of working out the cost price of inventory on hand.
- 5 State two benefits of having the cost price encoded on the price tags of goods.

- 1 Explain the Identified Cost method of inventory.
- 2 State two reasons why the management of a trading firm may adopt the First-In, First-Out (FIFO) method of assigning cost prices to inventory sold.
- 3 Explain what is involved in a perpetual inventory system.

- 1 Describe in detail the process of identifying an inventory loss.
- 2 List three reasons why an inventory loss may occur.
- 3 List two reasons why an inventory gain may occur.
- 4 Explain the twofold effect that an adjustment for an inventory loss has on a balance sheet.

- 1 Explain the purpose of a credit note.
- 2 State two reasons why a supplier may issue a credit note.
- 3 When a sales return takes place, explain how the cost price is determined under:
 - a Identified Cost.
 - b FIFO.

- 1 A memo may be used to note the details of three different events in relation to inventory. Describe these three events.
- 2 Explain the twofold effect on a balance sheet when an owner withdraws inventory.
- 3 Explain why, with reference to a qualitative characteristic of accounting, an office memo should be completed whenever an owner donates inventory items.

- 1 Distinguish between the terms 'gross profit' and 'adjusted gross profit' as applied to an income statement.
- 2 In an income statement, the item 'cost of sales' appears. Identify where the value for this item originates.
- 3 Describe how an inventory gain is treated in an income statement.

- 1 A business can have too much or too little inventory on hand. Outline the implications of each of these situations.
- 2 Some business owners try to practise just-in-time (JIT) ordering of inventory. Explain what this practice means.
- 3 Explain why inventory rotation is important for all trading businesses.
- 4 Refer to a variety of media (television, newspapers, magazines, etc.) and list six different examples of special promotions trading firms use to sell their inventory. Select the most effective promotion and the most ineffective one and explain why you have made these choices.

- 1 'All firms should strive to achieve an inventory turnover of 30 days or less.' Explain why you agree or disagree with this statement, using appropriate examples.
- 2 A business owner tells you: 'I'm not worried about inventory turnover. I like to have the biggest range of inventory possible. That way, I won't miss out on sales.' Discuss whether or not you agree with this owner.
- 3 Inventory turnover has a direct impact on the cash flows of a business. Explain fully how inventory turnover connects to cash flows.

- 1 Explain what is involved in a credit transaction.
- 2 Discuss what a settlement discount is. Explain why such discounts are offered.
- 3 Identify what each of the following notations mean when they are included on an invoice.
 - a 5/10
 - b 1/30
 - c n/60

19.2

page 292

- 1 Distinguish between accounts receivable and accounts payable.
- 2 Describe the function of a credit purchases journal.
- 3 Explain why a firm that sells on credit should maintain individual records for its accounts receivable.

19.3

page 297

- 1 Discuss what an accounts receivable schedule is. Explain why such a schedule is prepared.
- 2 An accounts receivable owes a trading business a total of \$300. It pays \$290 and is granted a discount of \$10. State the amounts that should be recorded in a receipts journal under each of the following columns: Amount banked, Discount expense, Accounts receivable.
- 3 GST charged by accounts payable during a given month was \$700. GST charged to accounts receivable during the same time was \$500. Explain whether this business has a GST debt or is due a refund.

19.4

page 300

- 1 The accounts receivable turnover in your business has changed from 32 days in one year to 47 days in the following year. Discuss whether you would be concerned about the change in this financial indicator.
- 2 A business owner was told that trade credit is free and therefore it should always be used. The accounts payable turnover for her business has increased from 25 days to 40 days over the past two years. State two possible responses from the suppliers of inventory to this business if this trend continues.
- 3 Evaluate the following statement: 'If you are going to sell on credit, bad debts will always happen, so be ready for them.'

20.1

page 315

- 1 Describe the basic difference between an income statement prepared for a service firm and one prepared for a trading business.
- 2 List three items that may appear in an income statement for a trading business that would not appear in a report for a service firm.
- 3 Explain the link between the income statement and the balance sheet.

20.2

page 318

- 1 Distinguish between the terms 'cost of sales' and 'cost of goods sold'.
- 2 List two expense items that may come under the heading 'Cost of goods sold' in an income statement.
- 3 List two expense items that would not be listed under 'Cost of goods sold' (i.e. items that would appear after the gross profit has been determined).

- 1 Explain why some accountants present financial information using graphs.
- 2 Discuss whether or not you think a pie chart that shows gross profit as a percentage of sales is valuable.
- 3 Explain why the net profit margin (i.e. net profit as a percentage of sales) may decrease over time.

20.4

page 323

- 1 Explain why it is advisable to consider a trend in profit results, rather than the results of a single accounting period.
- 2 Discuss how a budget may be used to assess business performance.
- 3 Define the term 'net profit margin'. Explain how it is determined.
- 4 Describe what is revealed by the financial indicator known as the return on owner's investment. Explain the purpose of calculating this percentage return.

21.1

page 335

- 1 Explain why an owner of a business would prepare a cash flow statement in addition to an income statement.
- 2 'Operating activities should include both cash and credit sales if they aim to measure business performance.' Explain why you agree or disagree with this statement.
- 3 Discuss whether all GST transactions are reported in a cash flow statement.

21.2

page 337

- 1 A business owner states: 'Cash flows from operating activities are all I worry about! They have to have a positive result!' Explain why you agree or disagree with this comment.
- 2 A cash flow statement reported net operating activities of \$60 000, but overall the business's bank account decreased by \$10 000. Outline how this result is possible.
- 3 Financing activities in a cash flow statement showed a net result for the year as negative \$30 000. However, the business owner is unconcerned. Explain why this may be the case.

21.3

page 338

- 1 In relation to a trading business, state one revenue item that should be reported in a cash flow statement and another revenue item that should not be reported in this statement.
- 2 For a trading business, state two expense items that should be reported in a cash flow statement and two expense items that should not be reported in this statement.
- 3 Explain the advantage of preparing comparative cash flow statements for two consecutive reporting periods.

22.1

page 355

- 1 Explain how, when a non-current asset is purchased, the requirement for verifiability can be satisfied.
- 2 'If a business owner buys an asset, all they need to do is record its cost price.' Explain why you agree or disagree with this statement.
- 3 a When an asset is contributed to a business by the owner, fair value is used to determine its value. Explain what this term means.
b Explain whether or not fair value satisfies the requirement for verifiability.

22.2

page 356

- 1 Discuss how depreciation helps to satisfy the demands of accrual accounting.
- 2 State the formula used to determine depreciation under the straight-line method.
- 3 Describe what is meant by the 'carrying value' of an asset. Explain how it is calculated.

22.3

page 360

- 1 Describe the purpose of an asset register.
- 2 'Asset turnover reflects how productive assets are.' Explain why you agree or disagree with this statement.
- 3 Consider the components of the return on assets and explain the factors that may cause this indicator to change from year to year.

23.1

page 373

- 1 Explain what is meant by the term 'reducing balance method of depreciation'.
- 2 Recall how depreciation is calculated under the reducing balance method.

23.2

page 376

- 1 Explain how the choice of depreciation method will affect the amount of depreciation allocated each reporting period over an asset's life.
- 2 If reducing balance depreciation were used instead of the straight-line method, explain the effect on the balance sheet in the first year of an asset's life.

23.3

page 377

- 1 Depreciation is an expense, regardless of which method is used. Explain whether it really matters which method is adopted by management.
- 2 State which method of depreciation you would recommend for the following non-current assets.
 - a Shop fittings
 - b Machinery
 - c Laptops
 - d Vehicles

24.1

page 384

- 1 Explain what accountants mean by the term 'budgeting'.
- 2 Discuss two reasons why a small business owner should prepare budgets regularly.
- 3 Outline the role budgeting can play in helping a firm to control its expenditure.
- 4 Name and briefly describe four types of budgets.

24.2

page 385

- 1 Describe the key steps involved in preparing a budgeted cash flow statement.
- 2 Explain the two possible outcomes of a budgeted cash flow statement.
- 3 If a business predicts it will have excess cash at bank in the future, suggest alternatives management should consider.
- 4 A firm has just completed its budgeted cash flow statement and estimates that it will have a serious cash shortage for the next three months. Make a list of the possible steps management could follow to remedy this situation.

24.3

page 390

- 1 Describe a budget variance report and explain its purpose.
- 2 Define the term 'variance'.
- 3 Distinguish between a favourable variance and an unfavourable variance.
- 4 Explain the following statement: 'Budgeting is a continuous process.'

24.4

page 392

- 1 Describe the purpose of a schedule of collections from accounts receivable.
- 2 Discuss the following statement by a small business owner: 'I only have two suppliers, so I don't need to do a schedule of payments to accounts payable.'
- 3 'Budgeted data is just guesswork, so it can't satisfy the demands of verifiability.' Discuss this statement, with reference to a qualitative characteristic that supports the budgeting process.

24.5

page 395

- 1** Explain the purpose of a budgeted income statement.
- 2** State three cash flow items that would not be included in a budgeted income statement.
- 3** A business owner has just prepared a budgeted income statement and is unhappy with the predicted result. Suggest two ways in which the owner may try to improve the profit performance of the business.

24.6

page 398

- 1** Explain the purpose of a budgeted balance sheet.
- 2** A budgeted balance sheet is said to have links to other budgets. Identify four items that could appear in a budgeted balance sheet and that are based on financial data reported in other budgets.
- 3** Explain how a business owner can determine the predicted GST of their business as part of the budgeting process.

25.1

page 415

- 1** Explain what is involved in the process of double entry accounting.
- 2** Distinguish between a ledger and an account.
- 3** State the three parts of an entry in a ledger account.
- 4** Describe how to determine the rules of debit and credit from the accounting equation.

25.2

page 420

- 1** Identify a transaction that would bring about the following changes to a business's accounts:
 - a** an increase in an asset account/
an increase in a liability account
 - b** an increase in an asset account/
a decrease in another asset account
 - c** a decrease in an asset account/
a decrease in a liability account
 - d** an increase in an asset account/
an increase in an owner's equity account.
- 2** Explain how the rules of debit and credit for revenue and expense accounts can be traced back to their relationship with owner's equity.

Selected solutions

UNIT 1

Chapter 3

- 2 Balance sheet \$70 800
- 3 Balance sheet \$29 730
- 6 Balance sheet \$872 000
- 7 Balance sheet \$51 300
- 8 Balance sheet 4 Aug \$41 200
- 9 Balance sheet 5 Sep \$14 500
- 10 Balance sheet 5 Oct \$60 400
- 11 Balance sheet 5 Apr \$33 600

Chapter 6

- 1a Interest rate: 15% p.a.
- 2a Interest rate: 6% p.a.
- 3a \$840 p.a.
- 4a 6.5% p.a.

Chapter 7

- 1 Bank balance \$13 146
- 2 Bank balance \$381
- 3 Bank balance (\$2341)
- 4 Bank balance \$24
- 5 Bank balance \$1161

Chapter 8

- 1 Net profit \$2650
- 2 Net loss (\$6980)
- 3 Bank balance \$5704
Net loss (\$1990)
- 4 Bank balance \$3954
Net profit \$3000
- 5 Bank balance (\$847)
Net profit \$680
- 6 Bank balance \$3190
Net profit \$2460
- CASE STUDY** Bank balance \$37 245
Net loss (\$950)

Chapter 9

- 1 Purchases journal \$7128
- 2 Purchases journal \$13 200
- 3 Sales journal \$6160
- 4 Sales journal \$2101
- 5 Sales journal \$3553
Purchases journal \$2222
- 6 Final balance \$1232
- 9 Purchases journal \$1650
Sales journal \$1947
- 10 Sales journal \$12 474
Purchases journal \$10 780

Chapter 11

- 1 Operating activities \$31 080
- 2 Operating activities \$11 200
- 3 Investing activities (\$4500)
- 4 Investing activities (\$9140)
- 5 Financing activities \$34 700
- 6 Financing activities \$20 150
- 7 Final balance (\$390)
- 8 Final balance \$34 980
- 9 Final balance \$3980
- 10 Final balance (\$4239)
- 11 Final balance \$5465
- 12 Final balance \$2248

Chapter 12

- 3 Break-even point 12
- 4 Break-even point 5
- 5 Break-even point 7
- 6 Break-even point 110
- 7 Break-even point 35
- 8 Break-even point 32
- CASE STUDY** Break-even point 264

Chapter 13

- 1 Net profit \$24 700
- 2 Net profit \$69 600
- 3 Net profit \$78 360
- 4 Net profit \$27 500
- CASE STUDY** Cash balance (\$12 039)
Net profit \$27 510

UNIT 2

Chapter 15

- 1 Balance sheet \$28 350
- 2 Balance sheet \$57 260
- 3 Balance sheet \$94 900
- 4 Balance sheet \$95 700
- 5 Balance sheet \$92 934

Chapter 16

- 1 Bank balance \$13 064
- 2 Bank balance \$3173
- 3 Bank balance (\$2898)
- 4 Bank balance \$193 305
- 5 Bank balance \$19 635
- 6 Bank balance \$2494

Chapter 17

- 1 Inventory \$41 430
- 3 Inventory \$21 669.25
- 4 Cost of sales (IC) \$3775
Cost of sales (FIFO) \$3720
- 5 Inventory \$25 152.40
- 6 Balance (IC) \$1700
Balance (FIFO) \$1760
- 7 Balance (IC) \$960
Balance (FIFO) \$960

Chapter 18

- 3 Standard model \$463
Deluxe model \$400
- 4 Junior sticks \$289
Senior sticks \$375

Chapter 19

- 2 Purchases journal \$2101
- 3 Purchases journal \$3630
- 4 Sales journal \$21 505
- 5 Sales journal \$6402
- 6 Sales journal \$2607
Purchases journal \$4081
- 7 Final balance \$918
- 10 Account receivable schedule \$776
Account payable schedule \$2550
- 11 Account receivable schedule \$18 349
Account payable schedule \$25 130

Chapter 20

- 1 Net profit \$24 700
- 2 Net profit \$8600
- 3 Net profit \$14 550
- 4 Net profit \$16 940
- 5 Net profit \$27 500
- 9 Net profit \$9000
- 10 Net profit \$20 640

Chapter 21

- 2 Operating activities \$4700
- 3 Operating activities \$44 980
- 4 Investing activities (\$3000)
- 5 Investing activities (\$19 300)
- 6 Financing activities \$11 120
- 7 Financing activities \$29 000
- 8 Bank balance \$12 610
- 9 Bank balance \$25 250
- 10 Bank balance \$25 182
- 11 Bank balance (\$7357)
- 12 Bank balance \$1325
- 13 Bank balance \$14 456

Chapter 22

- 3 Carrying value 2031 \$31 200
- 4 Carrying value 2030 \$19 500
- 5 Carrying value 2030 \$15 750
- 6 Net profit \$8100
- 7 Net profit \$18 400
- 8 Net loss (\$16 120)
- 9 Net loss (\$5470)

CASE STUDY Net profit \$2660

Chapter 23

- 1 Carrying value SLM \$3500
Carrying value RBM \$5823
- 2 Carrying value SLM \$14 000
Carrying value RBM \$13 346
- 3 Carrying value 2031 \$9211
- 5 Carrying value SLM \$18 600
Carrying value RBM \$16 039

Chapter 24

- 1 Bank balance (\$3730)
 - 2 Bank balance Dec \$8780
 - 3 Bank balance Sep (\$871)
 - 4 Collections Nov \$17 400
 - 5 Collections Jun \$9600
 - 6 Bank balance 31 Aug \$19 710
 - 7 Actual bank balance (\$1222)
 - 8 Actual bank balance \$14 183
 - 9 Bank balance \$10 460
Net profit \$2600
 - 10 Bank balance \$8808
 - 11 Bank balance \$3997
Net profit \$1720
- CASE STUDY** Bank balance Mar \$5051
Bank balance Jun \$7372

Glossary

accounting entity assumption a requirement that all relevant items be reported for a business entity, excluding any personal transactions of the owner and any other entity

accounting equation an equation that determines the format of a balance sheet:
assets = liabilities + owner's equity
($A = L + OE$)

accounting period the period of time over which revenues are compared with expenses in order to determine profit (or loss)

accounting standards rules and regulations that provide a framework of acceptable accounting procedures

accounts payable suppliers that a business owes money to after obtaining goods on credit

accounts payable schedule a listing of accounts payable and the amount owing to each

accounts payable turnover a financial indicator that shows the average time a business takes to settle its accounts with suppliers

accounts receivable customers that owe a business money because they obtained goods on credit

accounts receivable schedule a listing of accounts receivable and the amount owing from each

accounts receivable turnover a financial indicator that shows the average time taken by accounts receivable to settle their accounts

accrual basis assumption profit for a given period of time is determined by deducting expenses incurred from the revenue earned in that same period

accumulated depreciation a negative asset; the total amount of depreciation allocated from the time a business acquired an asset until the present date

adjusted gross profit sales revenue minus cost of goods sold and any adjustment for inventory loss (or plus any adjustment for an inventory gain)

All Ordinaries Index a measure of the overall trend in the Australian Securities Exchange on a particular day

analysis chart a table used to break a transaction down into debit and credit entries

asset register a record of the details of a non-current asset throughout its life in the business

asset turnover a financial indicator that evaluates the effectiveness of assets in generating sales revenue

assets present economic resources under the control of a business entity, with the potential to produce future economic benefits for the business

bad debt an accounts receivable that is written off as an uncollectable debt, possibly due to bankruptcy

balance sheet an accounting report that states the financial position of a business at a particular point in time

bank reconciliation checking the cash records kept by a business against the records kept by a bank

bank statement a summary of all the deposits and withdrawals from a bank account during the preceding period

benchmark a standard used to assess the performance of a business

break-even point the point at which a business's revenue is exactly equal to its total expenses

budget a financial plan that sets out the expected transactions for future accounting periods

budgeted balance sheet a report that shows estimated values for assets, liabilities and owner's equity at a particular point in time

budgeted cash flow statement a report that shows estimates of cash receipts and cash payments, and an estimated cash balance, at a particular point in the future

budgeted income statement a report that shows estimates of revenues and expenses over a period of time, and the expected net profit to be made

carrying value the original cost of an asset less its accumulated depreciation at a particular date

cartage the cost of transporting inventory to or from a business

cash flow statement an accounting report that states all cash inflows and outflows over a period

cash held the total of all cash and short-term investments, less any bank overdrafts

cash journal a multi-column record used to record the daily receipts or payments of cash

cash payments outflows of cash paid to individuals or businesses

cash payments journal a daily record of the details of all cash payments

cash receipts inflows of cash received from individuals or businesses

cash receipts journal a daily record of the details of all cash receipts

cash shortage a situation in which a business is likely to have insufficient cash at some time in the future

cash surplus a situation in which a business is likely to have more cash than it needs at some time in the future

COD (cash on delivery) when cash is paid for goods at the point of delivery, rather than paying later when an invoice is received

company a business owned by shareholders that is a distinct legal entity

comparability a qualitative characteristic of accounting that requires financial reports to be prepared using consistent accounting methods so that performance can be compared

compound interest interest that is paid both on the original investment and on the interest added to it

contribution margin the value that each unit sold contributes towards profit

cost of goods sold all expenses incurred in getting goods into the business ready for sale

cost of sales the cost price of inventory sold by a trading firm

credit note a business document confirming that goods have been returned and credit has been granted to the customer

credit rating an estimate of a person's or organisation's ability and likelihood to repay loans

credit transaction a transaction in which goods or services are provided now, but payment follows later

current assets assets expected or intended to be used up or turned into cash within the next 12 months

current liabilities economic obligations due to be settled or paid off within the next 12 months

data a collection of raw facts

debenture a form of investment in which the general public lends money to a company, with the funds secured by the company's assets

debt ratio a financial indicator comparing total liabilities to total assets

delivery docket a document that may come with goods when they are delivered

depreciation the process of allocating the cost of a non-current asset over its effective useful life

dividend a share of a company's profits paid to shareholders as a return on investment

dividend yield a ratio used to determine the percentage return that may be earned on particular shares

double entry accounting an accounting system in which two entries, a debit and a credit, are made for each transaction

effective rate of interest the 'real' cost of borrowing money, as compared to the flat rate of interest quoted

EFT payment a payment made online that transfers cash funds from one business to another

EFTPOS receipt a document created by an EFTPOS terminal when a customer has paid by credit card, debit card or gift card

EFTPOS terminal a machine rented by a business owner from a bank to make EFTPOS transactions

entity any business, organisation or individual that conducts financial transactions

ethics a set of moral principles

expenses decreases in assets or increases in liabilities that result in a decrease in owner's equity

external sources of finance funds borrowed from an individual or business that is external to the business seeking finance

fair value an estimate of the value of a non-current asset contributed to a business

faithful representation a qualitative characteristic of accounting that requires information being reported to be complete, without bias and free from error

favourable variance when the actual result for a particular item is better than that estimated in a budget

feasibility study an investigation into the potential problems and the probability of success or failure of a project such as establishing a small business

financing activities cash flows that relate to changes in the financial structure of a business

First-In, First-Out (FIFO) a system of recording inventory movements, based on the assumption that the first goods purchased are the first goods sold

fixed costs expenses that don't change, regardless of the volume of goods sold

flat rate interest interest applied to the principal amount borrowed over a fixed term

franchise a form of business in which the owner agrees to run the business as a member of a group, with all franchise members operating as similar businesses

franchisee a business owner who has agreed to be part of a franchise group

franchisor the parent business in a franchise group, which establishes the rules of the group and usually receives a fee from all members

gearing the dependence of a business on borrowed funds (liabilities)

general ledger a collection of ledger accounts in which double entry accounting is used

going concern assumption a business will continue to operate indefinitely and won't be wound up in the near future

government bonds a form of investment in which the general public lends money to a government body and receives a fixed rate of interest

gross profit sales revenue for a period less the cost of goods sold over that same period

GST liability an obligation to the Australian Taxation Office that exists because the GST collected by a business exceeds the GST it paid to its suppliers

GST refund a current asset that exists because a business has paid more GST to its suppliers than it has collected from its customers

Identified Cost an inventory system that allows the actual cost of each inventory item to be identified

income statement an accounting report that states revenues, expenses and the resulting profit or loss for a reporting period

incorporation the process of constituting a company as a legal corporation

industry average typical industry results, used to assess the performance of a business

information data put into a meaningful form for a particular use

internal control a system of procedures that protect the assets of a business and ensure the accuracy of its accounting system

internal sources of finance funds provided to a business by the owner, which may include the owner's capital plus any retained profits

inventory goods purchased by a trading firm for resale

inventory card a document used to record all movements of a particular line of inventory

inventory gain when the number of units revealed by a stocktake is greater than the quantity shown on an inventory card

inventory loss when the number of units revealed by a stocktake is less than the quantity shown on an inventory card

inventory sheet a document used to record details of all inventory on hand during a stocktake

inventory turnover a financial indicator that shows how many days it takes a business to turn its inventory into sales

investing contributing economic resources with the intention of making a monetary gain

investing activities cash flows that result from the purchase or sale of non-current assets for cash

invoice a business document used to provide evidence of a credit transaction

just-in-time ordering purchasing inventory so that it arrives just before the business runs out of inventory

lead time the time from when an order is made until the goods are delivered

leasing payment of a fee to use an asset that isn't actually owned by the business

ledger account a financial record for all details of a particular item

liabilities present obligations of a business entity to transfer economic resources to another entity

liquidity the ability of a business to meet its short-term obligations as they fall due

manufacturing firm a business that uses raw materials to make products, which it then sells

market price the current price at which a particular share is being traded

master budget the overall planning strategy of a business, which consists of many smaller budgets

multi-column journal a daily record subdivided into special columns to cater for frequent cash receipts and payments

narrative-form balance sheet an accounting report prepared as a vertical list down the page, highlighting the owner's equity in the business

net cash provided a net cash inflow reported for one of the areas of operating, investing or financing activities

net cash used a net cash outflow reported for one of the areas of operating, investing or financing activities

net profit sales revenue less all expenses incurred by a business

net profit margin the percentage of revenue left as profit after all expenses have been taken into account

net sales total sales for a period less sales returns

non-current assets assets of a long-term nature, usually under the control of the business entity for a period greater than 12 months

non-current liabilities obligations of a long-term nature, usually due for settlement or payment over a period greater than 12 months

online investment account a bank account accessible online that earns a higher rate of interest than a basic savings account

operating activities cash flows that relate to the day-to-day operations of a business

overdraft a bank account with a negative balance, used as a short-term source of finance

owner's equity the residual interest an owner has in a business after liabilities are deducted from assets

par value the original price at which a share was first issued

partnership a business co-owned by several individuals

percentage mark-up a percentage added to a product's cost price to determine the selling price

period assumption financial events are recorded and reported for a specific period of time, which allows valid comparisons of performance to be made

perpetual inventory system recording movements of inventory by maintaining continuous records throughout a period

private company a business owned by 2–50 shareholders, which is registered with 'Proprietary Limited' (Pty Ltd) in its name

profit the excess of revenues over expenses for a specific period of time

public company a business with at least five shareholders and 'Limited' (Ltd) in its name, which is limited only by the number of shares registered during its creation

purchase invoice a business document received by a trading firm from accounts payable when it purchases inventory on credit

purchase order a document used to confirm a request to a supplier to provide goods or services

purchases transactions involving a trading firm acquiring inventory for resale

purchases journal a daily record used to keep track of all credit purchases

purchases return a return of inventory items to the supplier

rate of return the percentage return earned on an investment over a specific period

rate of return on assets the return earned on the investment made in the assets of a business

receipt a document used to verify the receipt of cash by a business

recommended retail price a suggested retail price set by a supplier

reducing balance interest interest on a loan that is based on the amount currently owed

reducing balance method of depreciation a method of depreciation that allocates more depreciation in the early years of an asset's life and less depreciation in its later years

relevance a qualitative characteristic of accounting that requires all information that could influence decision-makers to be included in accounting reports

residual value an estimate of how much an asset will be sold for when it is disposed of at the end of its useful life

retained profits profits kept within a business rather than being withdrawn by the owner

return on owner's investment (ROI) the return earned on the funds invested by a business owner

return on total assets a financial indicator that compares net profit earned with the investment in total assets

revenue increases in assets or decreases in liabilities that result in an increase in owner's equity, achieved by providing goods or services to customers

sales the revenue a trading firm earns by providing goods to its customers

sales invoice a business document issued by a trading firm to accounts receivable when it sells inventory on credit

sales journal a daily record used to keep track of all credit sales

sales return the return of goods originally sold to accounts receivable on credit

schedule of collections a table used by businesses that sell on credit to predict cash inflows from accounts receivable

schedule of payments a table used by businesses that purchase on credit to predict cash outflows to accounts payable

semi-variable costs expenses that have both a variable and a fixed component

service firm a business that earns its revenue from providing services to its customers

share market a financial market that allows buyers and sellers to make bids to buy and sell shares at specific prices

shares an investment in a company which may entitle the owners (shareholders) to receive a dividend from the company if its performance results are satisfactory

simple interest a flat rate of interest paid upon the original investment

single entry accounting a simple accounting system in which one entry is made for each transaction

sole proprietorship a business owned by a single person

source documents business documents such as receipts and credit notes that are used as sources of financial information

speculation making an investment on the chance that its value will grow over time

statement of account a document that informs a business's customers of all their transactions over the previous month

statement of receipts and payments a summary of a firm's receipts and payments over a stated period of time

stockbroker a person who acts on behalf of an individual wanting to sell or buy shares

stocktake the process of physically counting the number of units of inventory on hand on a particular date

straight-line method of depreciation a method of depreciation that allocates a fixed amount of cost to each reporting period

subsidiary records additional accounting records used to keep track of accounts receivable or accounts payable

superannuation a long-term investment strategy, aimed primarily at ensuring that an individual will have sufficient cash to live comfortably in retirement

T-form balance sheet an accounting report showing assets on one side and liabilities and owner's equity on the other

term deposit a secure form of investment that returns a specific rate of interest on the condition that the cash is tied up for a fixed period

term loan a loan taken out for a fixed period of time, and due for repayment at a predetermined date

timeliness a qualitative characteristic of accounting that requires information to be presented in a timely manner so that it may influence decisions

total costs the total of fixed and variable costs at a specific level of sales

trade credit short-term credit usually made available by suppliers of materials or goods

trading firm a business that earns its revenue from buying and selling goods

trust a form of investment consisting of a fund of assets controlled by a trustee, who represents the individual investors

twofold effect (of transactions) where, for every transaction in a business, at least two items in the balance sheet are affected

understandability a qualitative characteristic of accounting that requires information to be presented clearly and concisely in an understandable fashion

unfavourable variance when the actual result for a particular item is worse than that estimated in a budget

unsecured notes an investment in which the general public lends money to a company, but the company's assets are not used as security

useful life an estimate of the time a business expects to use an asset to generate revenue

variable costs expenses that change directly in line with a change in sales volume

variance the difference between a budget estimate and an actual result

verifiability a qualitative characteristic of accounting that enables accounting information to be checked against business documents

working capital current assets less current liabilities at a particular point in time

working capital ratio a financial indicator used to measure liquidity, determined by dividing current assets by current liabilities

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